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Differentiation for Content Area Literacy: Middle School Teachers' Perceptions and Practices

Beth Ann Oswald
Walden University

Walden University

COLLEGE OF EDUCATION

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Beth Ann Oswald

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Review Committee
Dr. Maryann Leonard, Committee Chairperson, Education Faculty
Dr. James LaSpina, Committee Member, Education Faculty
Dr. Pamela Brown, University Reviewer, Education Faculty

Chief Academic Officer

Eric Riedel, Ph.D.

Walden University
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Beth A. Oswald

MEPD, University of Wisconsin, La Crosse, 2003

BA, Beloit College, 1995

Doctoral Study Submitted in Partial Fulfillment

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Abstract

Recent studies support the use of differentiated instruction (DI) to improve literacy in content area classrooms. At the same time, research has found that few teachers implement DI purposefully or consistently. Accordingly, a case study design was used to explore middle school content area teachers' understanding and implementation of DI for content literacy at a site where it is an integral component of the response to intervention (RTI) process. The conceptual framework for this study was principles of differentiation, as defined and discussed by Tomlinson. Research questions were framed to examine how middle school content area teachers defined and implemented DI for content literacy by asking what they know, do, and need to effectively implement or sustain DI. Data were collected from a purposeful sample of 7 middle school content area teachers through semistructured interviews, a focus group, and unobtrusive data in the form of lesson plans. Descriptive and pattern coding were used to analyze the interview and focus group data for overarching themes. Emergent themes were validated through member checking, triangulated with themes identified in the lesson plans, and interpreted against principles of differentiation. Results indicated all participants were implementing DI for content literacy to some extent. The data also revealed participants wanted to improve their instruction but believed they needed additional supports: time to plan and gather resources, opportunities to collaborate with colleagues, and professional development to learn strategies to better differentiate for content literacy. The findings helped inform a project that provides identified supports for teachers as they differentiate instruction to improve content literacy, resulting in positive social change.

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Dedication

I lovingly dedicate this work to my husband Don; my dad, Vern Bartelt; and my mom, Karen—who passed away during the completion of my doctoral coursework. This work is also dedicated to the memory of my grandma, Peg Ash, who would have been so proud of my academic accomplishments. She and Dad served as the ultimate cheerleaders as I worked toward and reached my life's goals. While Don's unwavering support and unconditional love sustained me through the doctoral process, I could not have achieved this lifelong goal without him.

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I am eternally grateful to my family for their support and the pride they displayed as I pursued my doctorate. To my husband Don, I love you even more than I thought

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Section 1: The Problem

Introduction

As a response to below-grade-level literacy scores for multiple subgroups of students, Southland School District and Southland Middle School (SMS) have called for the implementation of differentiated instruction (DI) in content area classrooms to support both content literacy and literacy in general. Although content area teachers at SMS understand they are to include differentiated content literacy instruction in their classrooms, some may implement it more effectively than others do, based on their knowledge and experience. Although research identifies DI as an effective intervention for meeting the needs of struggling readers (Allan & Goddard, 2010; Fuchs, Fuchs, & Stecker, 2010; O'Meara, 2011; Wixon, 2011), studies indicate differentiation is not consistently occurring at the level necessary to improve literacy scores (Fuchs et al., 2010; Tomlinson & Imbeau, 2012). Recent research has found that although most teachers believe DI is necessary to meet the needs of academically diverse students in their classrooms, few implement it effectively or with fidelity (Fuchs et al., 2010; Tomlinson & Imbeau, 2012).

Intervention strategies to help improve reading scores are not new to Southland. For the past 3 years, more than 50% of students at SMS (a pseudonym for the small suburban Wisconsin middle school that is the focus of this study) have scored in the "minimal" or "basic" ranges in reading on the Wisconsin Knowledge and Concepts Examination (WKCE) (Wisconsin Department of Public Instruction [WI DPI], 2012–2013, p. 4). Even with tiered interventions in place to address this issue, the majority of

SMS students struggle in reading. Tiers 2 and 3 intensive interventions are the responsibility of specialists outside the regular classroom environment. A recent district initiative has called on content area teachers to implement DI as part of Tier 1 universal interventions in their regular education classrooms to support struggling readers. In this study, I explored SMS content area teachers' understanding and implementation of differentiation for content literacy to identify what they know, do, and need to effectively implement or sustain DI in their classrooms.

Locally and throughout the United States, teachers have had limited success in transforming instruction to meet the needs of all learners, as students experiencing significant academic achievement gaps increase (Macartney, 2011; U.S. Census, 2012; Wisconsin's Information Network for Successful Schools [WINSS], 2005; 2012). The first two publicly available school report cards identified SMS as a school that "meets few expectations" in addressing the reading needs of students several subgroups, including those from specific racial and ethnic groups, English language learners, students with disabilities, and those living in poverty. Meanwhile, these subgroups of middle school students throughout the United States have shown similar achievement gaps on the eighth grade National Assessment of Educational Progress (NAEP) reading examinations (National Center for Education Statistics [NCES], 2011).

To ensure equitable access to education for all students, the No Child Left Behind (NCLB) Act (2002) and the Individuals with Disabilities Education Act (IDEA, 2004) promote the use of response to intervention (RTI) (Rinaldi, Averill, & Stuart, 2011). RTI is a tiered system of interventions that incorporates high-quality instruction matched to

students' needs, progress monitoring, and evaluating student progress to determine whether further interventions, such as special education services, are warranted (Rinaldi et al., 2011). In Tier 1, the universal tier of the RTI process, regular education teachers provide high-quality instruction for all students in their content area classrooms (Wisconsin RTI Center, 2011). DI is a key element in high-quality instruction, defined by the Wisconsin RTI Center (2011) as "curriculum and instruction that is engaging, differentiated, standards-based, data driven, research based, and culturally appropriate for the students being served" (p. 2). Current research also identifies DI as a critical component of the RTI process (Allan & Goddard, 2010; Fuchs et al., 2010; O'Meara, 2011; Wixon, 2011).

Although DI is widely discussed as an integral component of Tier 1 universal instruction, research shows that few teachers implement it effectively (Fuchs et al., 2010; Tomlinson & Imbeau, 2012). DI, if carried out with fidelity, has the potential to meet the needs of struggling learners. Therefore, this study explores SMS's content area teachers' understanding and implementation of differentiation for content literacy. The results of this study could be used to identify what teachers need to effectively implement DI to improve content literacy.

Definition of the Problem

As a response to below-grade-level literacy scores for multiple subgroups of students, Southland School District and SMS have called for the implementation of DI in content area classrooms as part of the universal tier of the RTI process. Although content

area teachers at SMS are aware they are to differentiate instruction for literacy, levels of background and experience in DI may lead some to use it more effectively than others do.

Southland is a small, suburban community of approximately 5,000 people in southern Wisconsin. SMS is the community's only middle school, with 424 students in Grades 6 through 8 (WI DPI, 2012–2013). White, non-Hispanic students composed 91.5% of the student population, whereas students of Hispanic descent made up 5.7%, black non-Hispanic students 2.1%, and Asian or Pacific Islanders 0.7% of the student body (WI DPI, 2012–2013). Economically disadvantaged students, those eligible for free or reduced lunch, made up 28.3% of SMS student population (WI DPI, 2012–2013). Students with disabilities accounted for 14.4% of all students, whereas English Language Learners (ELLs) were 3.1% of the population (WI DPI, 2012–2013).

In 2012, only 42% of students at SMS scored in the proficient or advanced ranges in reading on the WKCE. In addition, school report cards identified SMS as a school that "meets few expectations" in closing academic achievement gaps in reading (WI DPI, 2012–2013, p. 1). Groups experiencing achievement gaps in reading include students in "specific race/ethnicity groups, students with disabilities, economically disadvantaged students, and English language learners" (WI DPI, 2012–2013, p. 2). Data from WINNS (2005, 2012) shows the number of economically disadvantaged, racially/ethnically diverse, and ELLs at SMS has nearly doubled since 2005, the first year this data became publicly available online. This demographic trend, combined with the public nature of school report cards, challenged administration and educators to find effective solutions to help struggling readers and close these achievement gaps. As a result, Southland School

District established a new 5-year goal: a 20% increase in the number of students scoring proficient or above on the state reading test by 2018.

When Southland Community School District (SCSD) administration shared reading achievement data and the school report card scores at the opening convocation, it announced a "focus on highly effective instruction to increase K–12 student achievement in reading by having 20% more students achieving state proficiency targets by the end of the 2017–2018 school year, as measured by the state assessment" ([redacted] Community School District [redacted], 2013, p. 15). To reach this goal, the district introduced several systemic changes, including the release of the [redacted] *Multi-Level System of Support (MLSS, formerly response to intervention [RTI]) Student Servicing Handbook* ([redacted], 2013). The handbook outlines a three-tiered process for meeting all students' needs, beginning in the classroom with Tier 1, the universal tier, then moving into Tier 2, selected small-group interventions, and Tier 3, individualized or very small-group intensive interventions.

At SMS, the reading specialist and special educators currently provide students with Tier 2 and 3 reading interventions; these interventions are provided in addition to the instruction students receive in the classroom. For Tier 1, universal interventions, content area teachers are now expected to "provide students with the additional or differentiated instruction and time needed to meet learning targets" as part of their classroom instruction ([redacted], 2013, p. 12). Guidelines also exist at the state level. In its guiding document for RTI, the WI DPI (2010) asserts, "all students should receive high quality,

culturally responsive core academic and behavioral instruction that is differentiated for student need and aligned with the Common Core State Standards" (p. 10).

Nationally, educators at the middle and secondary levels are using DI as part of the RTI process to meet the needs of their increasingly diverse struggling students (Comber, 2011; Fuchs et al., 2010; Lopez, 2011). Federal policies outlined in NCLB (2002) and IDEA (2004) mandate that states take steps to close achievement gaps and improve student outcomes (Ferretti & Eisenman, 2010). RTI, a tiered system designed to provide all students with equitable access to general education through high-quality, scientifically based instruction and interventions, is the most common initiative being adopted by states to meet federal mandates (Stuart, Rinaldi, & Higgins-Averill, 2011). Castillo and Batsche (2012) cited a recent survey, Spectrum K12/CASE (2011), which found that 94% of U.S. schools were in the process of implementing RTI. Although RTI is nationally viewed as a way to meet students' varied academic needs, it is not without its disadvantages. For example, Fuchs et al. (2010) found few empirically validated protocols for skills development outside of early reading and math, and none in other content areas. As a result, educators at the middle and secondary levels frequently turn to DI to meet students' Tier 1 academic needs in the content area classroom (Fuchs et al., 2010). Because DI can be used in any content area, regardless of curriculum, this research-supported instructional practice can help teachers meet the needs of all students (Goddard, Neumerski, Goddard, Salloum, & Berebitsky, 2010).

Consistent with state guidelines and current research, the predominant component of Tier I interventions in Southland's *MLSS Handbook* ([redacted], 2013) is differentiation

within the regular classroom setting. Given the key role DI plays in the Tier 1 classroom setting, exploring middle school content area teachers' understanding and implementation of DI for content literacy is important. Identifying what content area teachers know about DI for content literacy, as well as how they use it in their classrooms, is the first step in determining what they need to effectively implement or sustain it. Therefore, this study focused on content area middle school teachers at SMS.

Rationale

Throughout the nation and at SMS achievement gaps exist in student literacy. As a result, content area teachers are expected to differentiate instruction for literacy. Research has identified DI to be an effective intervention for meeting students' literacy needs (Allan & Goddard, 2010; Fuchs et al., 2010; O'Meara, 2011; Wixon, 2011). However, studies indicate differentiation does not consistently occur at the level necessary to improve literacy scores (Fuchs et al., 2010; Tomlinson & Imbeau, 2012). Although most teachers believe DI is necessary to meet the needs of academically diverse students in their classrooms, few implement it effectively or with fidelity (Fuchs et al., 2010; Tomlinson & Imbeau, 2012). This study was designed to explore SMS content area teachers' understanding and implementation of differentiation for content literacy to identify what they know, do, and need to effectively implement or sustain DI in their classrooms.

Evidence of the Problem at the Local Level

Content area teachers at SMS are being asked to differentiate for literacy instruction to help close the achievement gaps in reading. The reauthorization of the

Elementary and Secondary Education Act (ESEA) as the NCLB Act made closing achievement gaps not only an educational priority but also a law. As part of the ESEA flexibility waiver, the WI DPI began publishing report cards for every school and district in the state in the fall of 2012. For the first time, data highlighting student test scores and the reading achievement gap at SMS were not only publicly available, but also widely published and publicized in local newspapers and online. Poor performance based on federal and state expectations, combined with the public nature of school report cards, have compelled administration at Southland to incorporate content area teachers in the process of literacy instruction through DI.

SMS scores on the most recent school report card found 5.2% of all students were advanced, 36.8% were proficient, 46% were basic, and 11.9% were minimal on the reading component of the 2012 WKCE (WI DPI, 2012-2013). In addition, the WKCE showed a significant reading achievement gap at SMS. On the 2012 WKCE, 18.2% of racially and ethnically diverse students scored in the proficient range, with none in the advanced range, whereas 44.2% of white, non-Hispanic students scored in the proficient and advanced ranges (WINSS, 2012). A total of 27.7% of students participating in the free and reduced lunch program scored in the proficient and advanced range, whereas 47.2% of full-priced lunch students scored in those ranges. Only 11.9% of students with disabilities scored in the proficient and advanced ranges compared with 47.2% of the students without disabilities. No ELLs scored in the proficient or advanced ranges; however, 43.2% of English proficient students did. This data reflect increases in the number of students in all subgroups, except students with disabilities, since 2005, the first

year such data became publicly available online (WINSS, 2005; 2012). The number of racially and ethnically diverse students increased by nearly 50%. The number of students receiving LEP accommodations increased 40%. The number of economically disadvantaged students grew by more than 50%. These demographic changes and the resulting test scores prompted district and school administration to initiate a systematic change in instructional practices across content areas to close the achievement gap and improve reading scores for all students. For content area teachers at SMS, this change comes with the expectation they will differentiate for content literacy in their classrooms; therefore, it is important to explore what these teachers know and do to understand what they need to implement DI effectively.

Evidence of the Problem Nationwide

Throughout the United States, middle and secondary school teachers are increasingly expected to use DI, as part of the RTI process, to address similar demographic shifts as the minority population continues to grow, and child poverty is increasing (Fuchs et al., 2010). By 2060, the U.S. Census Bureau (2012) predicts the Hispanic population will increase from 53.3 million to 128.8 million, growing to one in three U.S. residents, up from one in six. The black population is also expected to increase by 2060, from 41.2 million to 61.8 million (U.S. Census, 2012). Overall, the minority population is expected to grow from 116.2 million to 241.3 million whereas the white non-Hispanic population is projected to decrease, making the U.S. a majority-minority nation in 2043 (U.S. Census, 2012). Unfortunately, in the United States, poverty, and racial diversity often go hand in hand, resulting in lower literacy test scores for students

in these demographic categories (National Center for Education Statistics, 2011). The American Community Survey (ACS) found white non-Hispanic and Asian children had poverty rates below the U.S. average of 21.6%, the highest level of poverty recorded since the survey began in 2001 (Macartney, 2011). Children with black and Hispanic backgrounds had poverty rates of 38.2% and 32.3%, respectively. In 2010, an estimated 15.7 million U.S. children were living in poverty, up 1.1 million from 2009, more than one child in five.

Data from the reading component of the 2011 NAEP examination, also known as the Nation's Report Card, underscored the need for differentiated literacy instruction to meet the needs of struggling readers and close the achievement gap (National Center for Education Statistics, 2011). Forty-three percent of white students scored advanced and proficient in reading, whereas only 19% of Hispanic students and 15% of black students scored in that range. Forty-five percent of students not eligible for free or reduced lunch through the National School Lunch Program scored proficient or advanced, compared with 26% of those eligible for reduced-price lunch and 17% of those eligible for free lunch. Thirty-six percent of students not identified with a disability scored proficient or advanced in reading, whereas only 8% of students with disabilities scored within the proficient range; no eighth graders with disabilities scored in the advanced range. Thirty-five percent of English-proficient, non-ELL eighth graders scored proficient or advanced; only 3% of ELLs scored proficient, and none scored advanced in reading on the 2011 NAEP. Recent NAEP test data, combined with current demographic trends indicating many of these subgroups' populations are growing, warrants action on the part of

educators. Research shows that by differentiating instruction as part of the RTI process, middle and secondary teachers have the potential to meet the academic needs of their struggling students (Fuchs et al., 2010).

Evidence of the Problem From the Professional Literature

Growing numbers of middle and secondary content area teachers are expected to provide differentiated content literacy instruction to meet the needs of their students. According to Tomlinson (1999), DI is a process that incorporates the adaptation of content, process, and/or product, according to students' readiness, interests, and learning profiles through a range of instructional and management strategies. Teachers have been differentiating classroom instruction to meet students varied academic needs for more than 50 years (O'Meara, 2011) and using Tomlinson's model since 1995 (Allan & Goddard, 2010). Recently, DI has been identified by researchers as one of the keys to successful implementation of the RTI, or MLSS, process (Allan & Goddard, 2010; Fuchs et al., 2010; O'Meara, 2011; Wixon, 2011). In addition to current research, departments of education from Alabama to Wisconsin have included high-quality DI as a core tenet in their states' RTI, or MLSS, processes (Alabama Department of Education, 2009; WI DPI, 2010).

Despite recent attention from researchers and departments of education regarding the benefits of DI in meeting the needs of diverse learners, few teachers implement it effectively (Fuchs et al., 2010). Tomlinson found that although most teachers believe differentiation is necessary to meet the needs of academically diverse learners in their classrooms, "translating that perception into practice is daunting" (Tomlinson & Imbeau,

2012, para. 6). In fact, researchers assert that few teachers effectively use DI in their classrooms, "a fact undiminished by the occasional description of exemplary instructors" (Fuchs et al., 2010, p. 312). Research has revealed a number of factors that may prevent teachers from differentiating instruction in their classrooms, including the need to cover the standards, "the standardized test is not differentiated," and insufficient planning time (Tomlinson & Imbeau, 2012, para. 10). Another significant barrier is the lack of, and need for, preservice teacher training and ongoing in-service staff development in the area of DI (Dunn et al., 2010).

Although many research-based strategies have been tried to raise student performance in literacy on standardized tests at SMS, little progress has been made. The results of several recent experimental studies support the use of DI to improve literacy (Connor et al., 2011; Reis, McCoach, Little, Muller, & Burcu Kaniskan, 2011); however, these studies highlight different scenarios than the one unfolding at SMS. Teachers in the treatment group of the Connor et al. study received support through professional development (PD) and the use of software designed to identify individual students' literacy needs. Teachers in the treatment group of the Reis et al. study received PD prior to implementing differentiated literacy instruction in their classrooms, coaching during implementation, written materials that coincided with the training they received, and a set of tiered books for their classroom libraries. Both studies were conducted at the elementary level with grade level classroom teachers (Connor et al., 2011; Reis et al., 2011). Although these current studies support the use of differentiated literacy instruction at the elementary level, studies relating to adolescent literacy in content areas other than

reading language arts remain underrepresented (Faggella-Luby, Graner, Deshler, & Drew, 2012); this study may begin to help fill that gap.

Definitions

Content literacy instruction: Content literacy instruction is "the integration of content (or subject matter) instruction and communication skills instruction, with both occurring at the same time" (Misulis, 2009, p. 12).

Differentiation of instruction: Differentiation of instruction is a teacher's response to learners' needs guided by principles of differentiation such as respectful tasks, flexible grouping, and ongoing assessment and adjustment. Teachers can differentiate content, process, and/or product, according to students' readiness, interests, and learning profiles through a range of instructional and management strategies (Tomlinson, 1999).

High-quality instruction: "High quality instruction refers to curriculum and instruction that is engaging, differentiated, standards based, data driven, research based, and culturally appropriate for the students being served" (Wisconsin RTI Center, 2011, p. 2).

Multi-level system of support (*MLSS*): MLSS is a school-wide plan to provide systematically differing levels and intensity of supports based on student responsiveness to instruction and intervention (Wisconsin RTI Center, 2011, p. 3).

Response to intervention (*RTI*): RTI is a process for achieving higher levels of academic and behavioral success for all students (Wisconsin RTI Center, 2011, p. 3).

Significance

At SMS and across the United States, teachers are increasingly expected to differentiate instruction as part of the RTI process to meet the needs of their struggling readers. Such expectations are often the result of district and state initiatives, driven by federal policies. To ensure equitable education for all students and decrease the overrepresentation of diverse populations in special education programming, federal policies (NCLB, 2002; IDEA, 2004) are holding states accountable for documenting the processes used to close achievement gaps and improve student outcomes (Ferretti & Eisenman, 2010). Therefore, many states and school districts are implementing RTI (Allan & Goddard, 2010; Connor et al., 2011; Fuchs et al., 2010; O'Meara, 2011; Reis et al., 2011; Wixon, 2011). Educational specialists and special educators are trained as interventionists in the RTI process; content area educators, especially those in middle and secondary classrooms, do not have such clearly defined roles, nor do they have validated protocols for skill development in their content areas (Fuchs et al, 2010). As a result, DI is a "critically important" component of Tier 1, universal instruction, yet implementation is difficult, and often involves teachers taking a problem-solving approach to meet all students' needs (Dunn et al., 2010; Fuchs et al., 2010, p. 312; Tomlinson & Imbeau, 2012). Exploring middle school content area teachers' understanding and implementation of differentiation for content literacy could lead to the creation of a meaningful professional development model for differentiation based on teachers' needs. Across the United States, middle level educators may connect with the strengths and struggles of SMS teachers and benefit from any subsequent professional development in

differentiated literacy instruction created as part of this project study (Sargent, Smith, Hill, Morrison, & Stephen, 2010).

Purpose

The purpose of this project study was to explore middle school content area teachers' understanding and implementation of differentiation for content literacy to identify what they know, do, and need to effectively implement or sustain DI in their classrooms. States and school districts across the country report using DI as part of their tiered RTI processes to address achievement gaps and improve reading scores. Researchers (Allan & Goddard, 2010; Connor et al., 2011; Fuchs et al., 2010; O'Meara, 2011; Reis et al., 2011; Wixon, 2011), state departments of education (Alabama Department of Education, 2009; WI DPI, 2010), and school districts, including Southland ([redacted], 2013), have identified DI as a key component in the successful implementation of RTI, especially in Tier 1, universal classroom instruction. Recent experimental studies support the use of DI to improve literacy (Connor et al., 2011; Reis et al., 2011). Research has found DI is difficult to put into practice, however; as a result, few educators effectively use DI in their classrooms, or do so with fidelity (Fuchs et al., 2010; Tomlinson & Imbeau, 2012).

Guiding/Research Questions

The purpose of this study was to explore middle school content area teachers' understanding and implementation of differentiation for content literacy to identify what they know, do, and need to effectively implement or sustain DI in their classrooms. Merriam (2009) wrote that researchers often follow their purpose statements with

research questions (p. 60). These questions serve to guide the researcher's qualitative inquiry and provide a "focus for thinking about data collection and analysis" (Glesne, 2011, p. 39; Merriam, 2009). The overarching question for this study was: How do middle school content area teachers define and implement differentiated instruction for content literacy instruction? This question and the associated sub questions were used to guide this study:

1. How do middle school content area teachers define differentiated instruction for content literacy?

2. How do middle school content area teachers differentiate content literacy instruction for struggling readers in their classrooms?

3. What do content area teachers need to be able to effectively implement or sustain differentiation for content literacy in their classrooms?

Review of the Literature

This project study explored middle school content area teachers' understanding and implementation of differentiation for content literacy. The conceptual framework is based on principles of differentiation, as defined and discussed by Tomlinson (1999). Understanding how the implementation of DI affects how students learn and how teachers teach is also important, as recent research has found that although DI has the potential to improve student outcomes (Ernest, Thompson, Heckaman, Hull, & Yates, 2011; Johnson & Smith, 2011 Patterson, Conolly, & Ritter, 2009), teachers rarely implement it effectively (Moon, Tomlinson, & Callahan, 1995; Fuchs et al., 2010; Tomlinson et al., 2003) or with fidelity (Bailey & Williams-Black, 2008; Dee, 2011; Van

Hover, Hicks, & Washington, 2011). Therefore, studies on DI, including its effect on students and teachers were investigated. Given that recent research considers DI to be a vital component of both RTI and literacy instruction at the middle and secondary levels (Allan & Goddard, 2010; Connor et al., 2011; Fuchs et al., 2010; O'Meara, 2011; Reis et al., 2011; Wixon, 2011), this review includes research on differentiation as part of the RTI process, as well as the use of DI to improve literacy. Finally, as this study investigated how content area middle school teachers defined and implemented DI for literacy, research on content area literacy, including expectations outlined in the Common Core State Standards (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010), was also included in this review of the literature.

This literature review is the result of a broad search of electronic databases in the Walden Library, including ERIC, Education Research Complete, and SAGE Journals. Boolean searches for recent full-text, peer reviewed journal articles and research studies were conducted until saturation was reached using the following search terms: *differentiated instruction*, *differentiation*, *DI*, *response to intervention*, *RTI*, *academic diversity*, *diversity*, *literacy*, *content area literacy*, and *middle school*. Citations referenced in these articles and studies, as well as those found in dissertations held in the Walden library, contributed to the list of sources. Google Books and Google Scholar provided access to several books and articles referenced as well.

Conceptual Framework

The conceptual framework of this study is principles of differentiation. As academic diversity increases, at SMS and across the United States (Comber, 2011; Lopez, 2011), teachers are being asked to differentiate instruction to meet their students varied needs. Researchers advocate for the use of DI as an integral part of the RTI process, to address diverse students' needs (Allan & Goddard, 2010; O'Meara, 2011; Wixon, 2011), yet research also indicates "most teachers do little to adjust their instruction in ways that effectively reach out to academically diverse populations" (Tomlinson et al., 2003, p. 16). Tomlinson is the seminal figure in differentiated instruction; her research-based work has made her model of differentiation the standard in educational circles (Bell, 2011). Therefore, this study used Tomlinson's definition of, and model for, *differentiated instruction*. Based on a review of the literature, it is evident that Tomlinson's definition was foundational to other researchers' studies as well.

***Differentiation* defined.** Tomlinson (1999) defined *differentiated instruction* as a teacher's response to learners' needs guided by principles of differentiation such as respectful tasks, flexible grouping, and ongoing assessment and adjustment. Recent research on DI (Bailey & Williams-Black, 2008; Ernest & Thompson et al., 2011; Van Hover et al., 2011) addressed differentiation according to Tomlinson's (1999) "Key Principles of a Differentiated Classroom," which state:

- The teacher is clear about what matters in the content area.
- The teacher understands, appreciates, and builds upon student differences.
- Assessment and instruction are inseparable.

- The teacher adjusts content, process, and product in response to student readiness, interests, and learning profiles.
- All students participate in respectful work.
- Students and teachers are collaborators in learning.
- Goals are maximum growth and continued success.
- Flexibility is the hallmark of a differentiated classroom. (p. 48)

To put these principles into practice, Tomlinson (1999) advocated for differentiating the what, how, and why: "What is the teacher differentiating? How is she differentiating? Why is she differentiating?" (p. 48).

What relates to what the teacher is modifying (Tomlinson, 1999, p. 48). Researchers commonly use the terms *content*, *process*, and *product* when identifying areas of instruction teachers can modify to meet the needs of their students (Baecher, Artigliere, Patterson, & Spatzer, 2012; Bailey & Williams-Black, 2008; Ernest, Heckaman, Thompson, Hull, & Carter, 2011; Logan, 2011; Scigliano & Hipsky, 2010; Tomlinson, 1995, 1999; Van Hover et al., 2011). Content is what students are expected to learn and the materials used to facilitate that learning (Tomlinson, 1999). The term *process* relates to the activities the teacher provides to bring about student learning, and the term *product* is how students demonstrate that learning (Tomlinson, 1999).

How refers to how the teacher differentiates for student readiness, interest, or learning profile; it is a response to one or more student traits (Tomlinson, 1999, p. 48-49). Research supports educators' awareness of students' readiness, interests and learning profiles as they consider modifying learning experiences to best meet the needs of their

learners (Bailey & Williams-Black, 2008; Logan, 2011; Tomlinson, 1995, 1999, 2001; Van Hover et al., 2011). Considering these student traits is a proactive process, one that encourages teachers to develop a repertoire of instructional strategies, such as: tiered lessons, centers, and products; small group instruction; flexible grouping; varied text; literature circles; as well as a variety of options for teacher presentations (Tomlinson, 1999, 2001).

Why refers to teacher beliefs as to why differentiation is important (Tomlinson, 1999, p. 49). Although many factors prompt teachers to modify the learning experiences in their classrooms, Tomlinson (1999) identified three key reasons: "access to learning, motivation to learn, and efficiency of learning" (p. 49). To determine access to learning, teachers can give students formal or informal pretests to identify the specific content knowledge their learners possess and provide a starting point for learning (Sciglino & Hipsky, 2010). Rock, Gregg, Ellis, and Gable (2008) refer to this process as providing "cognitive access," or a way for all students to actively participate in the content being presented to them (p. 32). All students, from ELLs to students with disabilities, need to be able to access the content to participate fully in classroom learning experiences (Baecher et al., 2012; Rock et al., 2008). According to Tomlinson, motivation to learn and efficiency of learning are closely tied to access to learning; for example, learners are unmotivated if a topic is too difficult, or easy. Learners are more motivated about topics that connect with their interests, which helps make learning more efficient (Lauria, 2010; Jones, Yssel, & Grant, 2012; Roe, 2010; Tomlinson, 1999, 2003). Tomlinson and others (Bailey & Williams-Black, 2008; Buffum, Mattos, & Weber, 2010; Dunn et al., 2010;

Lauria, 2010; Sciglino & Hipsky, 2010) also advocate for increasing learning efficiency by allowing the learner to acquire content and share what they have learned through preferred modes, sometimes referred to as learning styles. Rock et al., however, urged educators to resist "the temptation to try to match instructional methods with students' preferred modalities" (p. 35) because meta-analytical research (Kavale, Hirshoren, & Forness, 1998) does not support it.

Differentiation and students. Differentiated instruction is, by definition, "a teacher's response to a learner's needs" (Tomlinson, 1999, p. 15). This response is proactive, rather than reactive, with the teacher making an assumption that students are different, then setting out to "assess, accommodate, and celebrate difference in creative ways for the benefit of all learners" (Tobin & McInnes, 2008). In 2009, 5% of children in the U.S. ages 5 to 17 years spoke a language other than English at home, and 13.1% of school-age children had educationally exceptional needs (EENs) (U.S. Department of Education [USDOE], NCES, 2012). Educational statistics do not include struggling learners who are not identified and do not qualify for special services, however. Though few recent research studies discuss the effect of differentiation on students, those that exist strongly support the use of DI, and highlight its benefits for all students (Ernest & Thompson et al., 2011; Johnson & Smith, 2011; Patterson et al., 2009)

Johnson and Smith's (2011) case study at Cheyenne Mountain Junior High (CMJH) in Colorado showed how differentiation, as a key component of RTI, kept state test scores high in times of changing demographics. At the time of the study, CMJH had 650 students in grades seven and eight. White students accounted for 81% of the student

population, “with 10% Latino, 5% Asian, 3% Black, and 1% Native American” (Johnson & Smith, 2011, p. 28). A demographic shift that brought in larger numbers of low SES and ELL students left teachers at CMJH concerned with how to meet the diverse needs of their students. As a result of a collective decision to change instruction to meet the needs of all learners, staff at CMJH began a six-year process of RTI implementation, with significant emphasis on DI in year two and exclusive focus on it in year three. Throughout the process, student achievement on the Colorado state assessment in reading and writing increased, and CMJH continued to be considered a high-performing school in spite of the dramatic shift in its demographics.

Patterson et al. (2009) described the experiences of two teachers and their students in a sixth-grade inclusion math class as they transitioned from traditional teaching methods to differentiated instruction. This small class of 18 students was composed mostly of struggling learners; approximately 89% were receiving accommodations for special needs, 28% spoke English as a second language, and 11% had been retained in the past. The class also had a significant percentage of low socioeconomic status (SES) students, with 67% receiving free or reduced meals. Even with two teachers in the classroom, students were still struggling with “traditional, lecture-heavy” instruction methods, where one teacher presented and demonstrated new concepts, lead the students through guided practice, then assigned independent work while the other teacher moved around the room and provided help where needed (Patterson et al., 2009, p. 48). The teachers realized they were not meeting the need of their diverse learners. As a result of this realization, the teachers restructured their class

into four groups so they could better differentiate instruction. These groups allowed the teachers to differentiate in a variety of ways: cooperative groups, peer-tutoring, games, small group instruction, computer-based learning, and other approaches that addressed students' preferred learning styles. As a result, 67% of students who had been in class all year (16 students) were on target to meet grade-level standards based on the Measures of Academic Progress (MAP) test, up from approximately 33% at the beginning of the year. Eighty-one percent of yearlong students made improvements on the MAP test. Additionally, in a teacher-provided survey, 87% of students reported they were more confident, learned more, and preferred DI to the traditional methods that were used at the start of the year. One student, Billy, who began the year either crying or sleeping in class, was quoted at the end of the year as having said, "I don't know how they did it, but all I know is math is easier and funner [*sic*] for me" (Patterson et al., 2009, p. 51).

Differentiated instruction need not take six years, or even one, to have a significant effect on student learning, nor must it be implemented by experienced educators, as evidenced by Ernest and Thompson, et al. (2011) in their mixed methods study of teacher education candidates' (TECs) experiences and subsequent student results as they applied differentiation strategies over a five-week period. The 35 TECs in the study represented rural, urban, and suburban placements and taught a variety of subjects in pre-K through high school settings. As part of their certification program, TECs were asked to include teaching strategies that incorporated the areas of instruction identified by Tomlinson (1999): content, process, and product, as well as the learning environment. TECs were also asked to provide pre and posttest data on student performance along with

reflections on student performance as it related to the DI strategies they employed. The TECs collected 366 scores, representing both pre and posttests for 129 students. Quantitative data collected showed the average pretest score, prior to students receiving differentiated instruction, was 49% (SD = 17.6), whereas the average posttest score, after differentiated instruction, was 80% (SD = 10.7); "a statistically significant and noteworthy change from pretest to posttest scores" which indicated a "strong positive effect" (Ernest & Thompson, et al., 2011, p. 37). The qualitative data for this study came from TEC's reflections on their lesson plans and in their journals. Whereas most TECs reflections focused largely on how DI led to their students' academic success, several also noted a positive effect on student behavior, interest, and motivation, including one candidate who wrote:

> The students started out the semester as if they did not care and was [*sic*] not about to learn or act interested with the content. However, as the semester went on and differentiated instruction plans were implemented, the progress of the students increased, they were more engaged and interested in what they were learning. (Ernest & Thompson, et al., 2011, p. 39)

In addition to increased student success, the implementation of DI contributed to TEC's feelings of success as teachers, as well as an increased sense of enjoyment in the classroom, prompting one candidate to write, "after this experience, all of my lessons will be differentiated in the future" (Ernest & Thompson, et al., 2011, p. 38).

Differentiation and teachers. Educators have used Tomlinson's model of DI since 1995 (Allan & Goddard, 2010). Several recent studies found that teachers who

differentiated instruction had positive effects on their students' achievement, behavior, interest level, and motivation (Ernest & Thompson, et al., 2011; Johnson & Smith, 2011; Patterson et al., 2009). Current research also supports teachers' use of DI as an integral part of RTI processes being implemented in schools across the nation (Allan & Goddard, 2010; Fuchs et al., 2010; Hoover, & Love, 2011; Jenkins, Schiller, Blackorby, Thayer, & Tilly, 2013; Johnson, & Smith, 2011; Jones et al., 2012; Sansosti, Noltemeyer, & Goss, 2010; Wixon, 2011). Yet evidence suggests few teachers effectively use DI in their classrooms (Moon et al., 1995; Fuchs et al., 2010; Tomlinson et al., 2003), "a fact undiminished by the occasional description of exemplary instructors" (Fuchs et al., 2010, p. 312). The following research serves to both support and refute the aforementioned statement as it predominantly includes case studies involving small numbers of participants, some of whom were successful at differentiating instruction effectively, while others struggled or were still learning.

A case study by Van Hover et al. (2011) sought to understand how one high school world history teacher made sense of DI. The participant, Lucy, was a fourth-year teacher in a district that expected teachers to differentiate instruction. To encourage differentiation, the district provided numerous professional development opportunities relating to DI, including a presentation by Carol Ann Tomlinson. Lucy had also learned about DI as part of her preservice teacher preparation. Over the course of two years, Van Hover et al. conducted 54 classroom observations and four semistructured interviews. Other data collected included documents Lucy produced such as unit plans and e-mails, as well as "a reflective research journal kept by the first author" (Van Hover et al., 2011,

p. 39). The study found that Lucy understood the concepts of differentiated instruction and used many of Tomlinson's strategies. Lucy did not purposely set out to differentiate her instruction, however, "but rather in thinking about what worked best for her students, she 'poached' or 'rented' strategies and ideas she felt would work" (Van Hover et al., 2011, p. 47).

Bailey and Williams-Black's (2008) study began with a survey sent to a purposeful sample of 24 classroom teachers across four states. Fourteen teachers responded, and of those, only three described "classroom happenings" that showed they differentiated for content, process, and/or product (Bailey & Williams-Black, 2008, p. 138). Those three teachers were observed and interviewed, and work samples including lesson plans and instructional materials were collected. Bailey and Williams-Black found that although all three teachers differentiated for the process, and two differentiated for the content, none differentiated for the products students produced.

Patterson et al. (2009) described the experiences of two teachers as they implemented DI in their sixth grade mathematics inclusion class. The case study followed a mathematics and inclusion teacher as they moved from traditional, lecture driven teaching methods to more differentiated methods of instruction in their small class of 18 students—most of whom were struggling learners. The study did not address the teachers' background or experience with DI; however, the research found the teachers did employ several instructional strategies espoused by Tomlinson (1999) such as small-group instruction and learning styles.

Current research shows that although some teachers are differentiating instruction to some extent, few are doing so purposefully, consistently, or according to more than a few of the general principals of differentiation. Yet 100% of teacher candidates at a recent education job fair were asked how they differentiated instruction to meet the needs of students (Van Hover et al., 2011). Several studies (Ernest & Heckaman, et al., 2011; Ernest & Thompson, et al., 2011) indicated that preservice teachers, or teacher education candidates (TECs), were guided by faculty to include instructional strategies based on Tomlinson's differentiated instruction model into their lessons as part of their certification process. The studies by Ernest et al. (2009, 2011) were conducted over short periods of time, however. They were conducted over five weeks with no follow up to see if the candidates continued using differentiation strategies in the future. Dee's (2011) examination of 107 lesson plans of 10 preservice teachers in both graduate and undergraduate education programs found "little if any" evidence of differentiation (p. 67). One preservice teacher stated, ''I…don't think I have the bank of knowledge, ideas and resources to draw from in order to differentiate'' (Dee, 2011, p. 67). Dee posits that the data indicate a lack of preservice teacher preparation in the area of differentiation.

Differentiation and RTI. DI is widely recognized as a key component of the RTI process (Al Otaiba, Connor, Folsom, Greulich, Meadows, & Zhi, 2011; Allan & Goddard, 2010; Fuchs et al., 2010; Hoover, & Love, 2011; Jenkins et al., 2013; Johnson, & Smith, 2011; Jones et al., 2012; Sansosti et al., 2010; Wixon, 2011). RTI began as an alternative to the traditional discrepancy model for identifying students with educationally exceptional needs (EEN) following the reauthorization of the Individuals

with Disabilities Act (IDEA, 2004) (Wixson, 2011). RTI provides a preventative, problem-solving approach designed to meet the needs of all struggling learners "through increasingly differentiated and intensified assessment and instruction" (Mellard, McKnight, & Jordan, 2010; Rinaldi et al., 2011; Wixson, 2011, p. 503). DI, implemented as part of the RTI process, is anticipated to reduce the number of students over-referred for special education programming – students who come from multi-culturally diverse or low-income families, as well as those for whom English is their second language (ESL) (De Pry & Cheesman, 2010; Wixson, 2011).

RTI is a multi-tiered system of supports that begins with school-wide academic screenings to determine which students may benefit from additional academic interventions. In Tier 1, also known as the core or universal tier, content area teachers are expected to differentiate instruction to meet their students' needs within the regular education classroom (Jenkins et al., 2013; Jones et al., 2012). Tier 2 generally refers to supplemental instruction for the "estimated 15 percent of students for whom the core curriculum is insufficient to ensure their learning progress [*sic*] at a rate and level commensurate with their classmates" (Mellard et al., 2010, p. 218). Tier 3, commonly known as the intensive tier, includes students for whom targeted supplemental instruction has not been successful. Tier 3 involves "very intense, specialized, and often individualized interventions" for the estimated five to seven percent of students who have not responded adequately to secondary interventions (Mellard et al., 2010, p. 218).

At SMS, general education content area teachers are expected to provide Tier 1 reading instruction, whereas the reading specialist and special educators conduct Tier 2

and 3 reading interventions. As part of their certification, reading specialists and special educators have likely received training in key components of RTI: student assessment, individualized instruction, differentiation, and the use of progress monitoring tools (Murawski & Hughes, 2009). Researchers have found that general educators often lack the "training and time needed to provide intensive strategies, collect assessment data, and ensure differentiated instruction and cross-curricular connections" (Murawski & Hughes, 2009, p. 273). The lack of validated protocols for middle and secondary content area skill development adds to the challenges facing content area educators as they work to meet RTI expectations in their classrooms (Fuchs et al, 2010). Additionally, little research or resources exist for RTI in middle and secondary education as most studies focus on elementary settings (Fuchs et al., 2010; Johnson & Smith, 2011; Vaughn et al., 2010). As a result, DI is viewed as a "critically important" component of the RTI process (Fuchs et al, 2010, p. 312).

Differentiation and literacy instruction. The International Reading Association (IRA, 2010) asserts that differentiation, as part of the RTI process, is "essential" to meet the "needs of all students, especially those from different cultural and linguistic backgrounds" (p. 3). The IRA (2010) further states: "The boundaries between differentiation and intervention are permeable and not clear-cut. Instruction or intervention must be flexible enough to respond to evidence from student performance and teaching interactions. It should not be constrained by institutional procedures that emphasize uniformity" (p. 3). Several recent studies support the link between literary success and DI identified by the IRA (Connor et al., 2011; Reis et al., 2011).

Connor et al. (2011) conducted an experimental study of 33 teachers and their 448 third grade students. The study compared two randomly selected groups of students and teachers based on two different forms of literacy instruction. One group of students received vocabulary instruction based on teacher-designed lessons developed as part of a teacher study group model of professional development; these lessons were, by design, not differentiated. The other group of students received differentiated reading instruction provided by teachers participating in professional development in DI combined with the use of software to help identify levels of student support. Both groups of teachers were general educators, who provided these interventions during their scheduled 90-minute block of literacy instruction using the existing curriculum, Open Court Reading. Connor et al. found that students in the DI "condition demonstrated greater gains in reading comprehension overall than did students in the vocabulary condition" (p. 206). As a result of their findings, along with those of several other recent studies, the researchers found RTI initiatives that call for differentiated classroom instruction "are likely appropriate" (Connor et al., 2011, p. 206).

A larger experimental study, conducted by Reis et al. (2011), also found positive correlations between differentiated reading instruction and students' reading scores. This study spanned five months and included 63 teachers and 1,102 students in second to fifth grade from five elementary schools across five states. Teachers and students in the randomly selected treatment group provided differentiated, enriched reading instruction using school-wide enrichment model-reading (SEM-R) for an hour of their literacy instruction. Teachers in the treatment group received six hours of professional

development prior to implementation, a collection of tiered books for their classroom libraries, written information on SEM-R, and professional development coaches assigned to work with them throughout the intervention. Teachers in the control group continued using their regularly scheduled reading lessons during that hour of instruction. Reis et al. found that the use of DI and enrichment teaching methods "resulted in higher reading fluency and comprehension in some students" (p. 492). Most notably, reading scores were "statistically significantly higher" in the treatment group for high-poverty urban students in this study (Reis et al., 2011, p. 493). These results prompted the Reis et al. to suggest further research on the benefits of DI on urban students and those in poverty, as well as further studies extending to urban middle schools.

Although recent research (Connor et al., 2011; Reis et al., 2011) supports the use of differentiation in reading instruction and the IRA (2010) finds DI to be an "essential" (p. 3) component in meeting all students reading needs, Tomlinson recently reiterated that effective implementation "is hard to do" (Bell, 2011). In discussing the links between differentiation and literacy instruction, Tomlinson (2009) identified four key principles that are integral to both: "students differ as learners" (p. 28); "teachers must study their students to teach them well" (p. 29); "effective teachers teach up" (p. 29); and "responding to student readiness, interest, and learning profile enhances student success" (p. 31). Given the high stakes expectations placed on educators to improve literacy in the content area classroom, these principles can provide educators with practical guidelines to help them address what may seem to be a monumental task.

Content Literacy Instruction

As students move from elementary to middle-secondary school settings, they also "transition from *learning to read* to *reading to learn*," a transition that is especially challenging for struggling readers (Lee & Spratley, 2010, p. 2). The current focus on disciplinary literacy, with its emphasis on "specialized strategies, routines, skills, language, or practices inherent in certain content areas that are not generalizable to other domains," does little to help struggling adolescent readers' improve (Faggella-Luby et al., 2012, p. 69; Wendt, 2013). In reviewing over 150 articles on reading and writing strategies for struggling adolescents, Faggella-Luby et al. found that only 12 involved discipline-specific strategies; of those, only one involved a content area outside the realm of language arts. Therefore, Faggella-Luby et al. recommend general literacy instruction strategies for adolescents who struggle with reading and writing, "routines, skills, language, and practices that can be applied universally to content area learning and are by definition generalizable to other domains" (p. 69). Therefore, this study will define content literacy instruction as "the integration of content (or subject matter) instruction and communication skills instruction, with both occurring at the same time" (Misulis, 2009, p. 12).

The Common Core State Standards (CCSS) for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects for grades 6-12 also support literacy skills that can be universally applied across content areas, such as: "inquiry, critical thinking, and the evaluation of evidence" (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010;

Wendt, 2013, p. 41). In Wisconsin, the DPI (2011) states that the CCSS for "reading, writing, speaking, listening and critical thinking must be integrated into each discipline across all grades so that all students gradually build knowledge and skills toward college and career readiness" (p. 23).

With national and state expectations for content area literacy, one would assume teachers were widely incorporating it in the classroom. In fact, a common narrative among educators is, "all teachers are teachers reading," (Jewett, 2013, p. 23). This is not the case, however, as few content area teachers use content literacy strategies in their secondary classrooms (Adams & Pegg, 2012). One reason for the lack of content area literacy implementation may be that middle and high school teachers have traditionally focused on their academic content areas, rather than the skills students need to understand that content (McCoss-Yergian & Krepps, 2010). Another possible reason for the lack of content area literacy implementation is that it is perceived as the English teacher's job (McCoss-Yergian & Krepps, 2010). Although content literacy has been part of preservice and in-service teacher training for several decades, teachers often pursue such coursework solely because it is required (Adams & Pegg, 2012; Spitler, 2011-2012).

Content area literacy strategies should not be viewed as additional instruction, over and above ones academic content area; rather these strategies should be considered as part of how teachers share academic content with their students. Misulis (2013) stated that content area literacy could be broken down into four manageable instructional strategies, or "instructional tools," to enhance students' skills within content areas: "vocabulary, comprehension, study strategies, and writing" (p. 13). These instructional

tools can be stored in the teacher's toolbox until their use is warranted to differentiate for students' needs. Misulis concluded with this mindful thought:

> If it is possible to use instructional strategies that help students learn subject matter more effectively while equipping them with tools that can contribute to their future independent learning of subject matter, and if this can be done manageably, then—in this age of accountability and assessment—can we really afford not to do so? (p. 18)

Implications

At SMS and throughout the United States, teachers are expected to differentiate instruction for content area literacy to help improve the skills and raise the scores of their academically diverse students who are struggling in reading. Recent studies have found that differentiated literacy instruction, as part of the RTI process, has the potential to improve struggling students' reading scores (Al Otaiba et al., 2011; Johnson & Smith, 2011), yet few educators implement it effectively (Fuchs et al., 2010; Moon et al., 1995; Tomlinson et al., 2003) or with fidelity (Bailey & Williams-Black, 2008; Dee, 2011; Van Hover et al., 2011).

Meeting students' literacy needs has far-reaching implications, as it imperative not only for measuring individual student, school, statewide and national success but the long-term success of our society as a whole. In 2010, only 38% of Grade 11 students met college and career ready benchmarks in reading (ACT). Such a statistic that cannot be ignored if we want all students to be college and career ready by the time they graduate high school. Consequently, this study explored middle school content area teachers'

understanding and implementation of differentiation for content literacy. The findings of this study led to a project involving the creation of a professional development model of differentiation for content literacy instruction. This grassroots approach to professional development could be the impetus for social change, providing meaningful supports for teachers as they work to meet the literacy needs of all students.

Summary

As a response to below grade level literacy scores for multiple subgroups of students at Southland Middle School, administration expects teachers to differentiate content literacy instruction in their classrooms as part of the universal tier of the RTI process. Although content area teachers are aware they are to differentiate for content literacy, individual levels of implementation may vary according to teacher knowledge and experience. To understand the key factors involved in the successful implementation of differentiation for content literacy instruction, Section 1 of this paper focused on the role of DI, both in and of itself and as a component of the RTI process and successful literacy instruction, in meeting the needs of academically diverse learners. Exploring what content area middle school teachers know about DI for content literacy, as well as what they do to implement it in their classrooms, could help identify what they need for effective, sustained implementation.

DI is a key element of RTI (Al Otaiba et al., 2011; Allan & Goddard, 2010; Fuchs et al., 2010; Hoover, & Love, 2011; Jenkins et al., 2013; Johnson, & Smith, 2011; Jones et al., 2012; Sansosti et al., 2010; Wixon, 2011), and is considered to be an important factor in successful literacy instruction (Connor et al., 2011; IRA, 2010; Reis et al.,

2011). Current studies (Ernest & Thompson, et al., 2011; Johnson & Smith, 2011; Patterson et al., 2009) support the use of DI as a means of improving students' academic performance, motivation, and behavior. Yet scholarly research (Fuchs et al., 2010; Moon et al., 1995; Murawski & Hughes, 2009; Tomlinson et al., 2003) and recent studies (Bailey & Williams-Black, 2008; Dee, 2011; Van Hover et al., 2011) note that few educators differentiate instruction with any consistency. The evidence supporting the use of DI to meet the literacy needs of diverse learners within the RTI process, coupled with findings that few teachers do so with fidelity, will serve to guide this project study.

Section 2 addresses the research methodology I used in conducting this study. Section 3 describes the project stemming from the data, as well as the research supporting it. My reflections on the project, including implications, applications, and directions for future research, are found in Section 4.

Section 2: The Methodology

Introduction

The purpose of this qualitative case study was to explore middle school content area teachers' understanding and implementation of differentiation for content literacy to identify what they know, do, and need to effectively implement or sustain DI in their classrooms. This section discussed the research design, participant selection including measures for ethical protection, data collection, the role of the researcher, data analysis procedures, and evidence of quality for this proposed study.

Qualitative Research Design and Approach

Qualitative research involves the exploration of a problem and the development of a "detailed understanding of a central phenomenon" (Creswell, 2012, p. 16). Within the qualitative tradition, the researcher used an intrinsic case study design. Intrinsic case studies, although not intended to be generalizable to broader populations, afford researchers the opportunity to learn more about an "individual, group, event, or organization" (Hancock & Algozzine, 2011, p. 36). An intrinsic case study design helped me develop a deeper understanding of middle school content area teachers' views on differentiated literacy instruction as they work to improve the scores of their struggling readers. Merriam (2009) has concluded, "that the single most defining characteristic of case study research lies in delimiting the object of study, the case" (p. 40). The case can be any phenomenon that occurs within a bounded context: a particular person, group, program, process, institution, or event (Hancock & Algozzine, 2011; Hatch, 2002;

Glesne, 2011; Merriam, 2009; Stake, 1995). For this study, the case is content area teachers implementing differentiated literacy instruction.

Yin (2009) has asserted that case study research has a distinct advantage over other research methods when it is based on questions that seek to answer "how" or "why" "about a contemporary set of events over which the investigator has little or no control" (p. 13). A case study design will help me explore how middle school content area teachers define *DI* for content literacy and how those definitions align with research-based best practices, as well as how teachers differentiate content literacy instruction for struggling readers in their classrooms.

In considering which research designs would align with my research problem, I initially considered a cross-sectional survey research design. Cross-sectional survey research designs are quantitative approaches that involve administering a survey to a sample population to learn about participants' "current attitudes, beliefs, opinions, or practices" (Creswell, 2012, p. 377). Cross-sectional survey research designs are desirable because they are easy to do (Fink, 2009). In addition, because cross-sectional surveys describe things from one specific point in time, they can be the impetus for change if the results of the survey reveal change is warranted (Fink, 2009). Although cross-sectional surveys clearly have their benefits, they are not without limitations.

One of the most significant limitations to cross-sectional survey research is that, due to the snapshot-like nature of cross-sectional surveys, the information collected can quickly become outdated if collected during a time of change for the participants (Fink, 2009). Given the current situation at SMS is one of change, with emerging expectations

for the implementation of differentiated literacy instruction in teachers' content area classrooms, the data collected as part of a cross-sectional survey design may be outdated by the time it is analyzed. Although I initially thought a survey design would be a good way to determine whether teachers were implementing differentiated literacy in their classrooms, I soon realized quantitative, closed-ended survey questions would not provide me with the meaningful data I desire. Case studies, on the other hand, involve extensive data collection from a variety of sources, interviews, observations, emails, audiovisual materials, and documents for example (Creswell, 2012; Merriam, 2009). This data, when triangulated, provides case study researchers with "many more variables of interest than data points" (Yin, 2009, p. 18).

Another concern that arose when considering a cross-sectional survey design was the small size of the population for my study, or group of individuals with "one characteristic that distinguishes them from other groups" (Creswell, 2012, p. 381). At SMS, only 14 teachers teach in content areas addressed in the CCSS literacy standards; therefore, the sample size randomly selected for a cross-sectional survey from that target population would be too small to be representative of the entire population. Nonresponse error would further affect the results, making it more difficult to draw valid inferences from the data (Creswell, 2012). Qualitative case studies, on the other hand, are appropriate when a limited number of participants are available (Creswell, 2009).

Having rejected the use of a quantitative cross-sectional survey design, I studied other research designs and concluded that a qualitative case study design best fit my purposes. An intrinsic case study design can help me develop a deeper understanding of

middle school content area teachers' understanding and implementation of differentiated literacy instruction as they work to improve the scores of their struggling readers (Hancock & Algozzine, 2011). In this study, the case is the phenomenon of content area middle school teachers implementing differentiated literacy instruction. A case study design can help me learn not only *if* middle school content area teachers are differentiating content literacy instruction, but also *how* they define DI for content literacy, *how* their definitions align with research-based best practices, and *how* they differentiate content literacy instruction in their classrooms (Yin, 2009). The extensive data collection involved in conducting case study research will help me generate rich, thick descriptions of the phenomenon I am studying (Creswell, 2012; Merriam, 2009). To generate thick descriptions, I will need to accurately and fully describe the participants so the reader can "visualize the sample" and their demographic and psychological characteristics, while maintaining anonymity (Ponterotto, 2009, p. 546). Demographic descriptions could include gender, age, level of education, years of teaching, and content area taught. Psychological characteristics could include experience with, and feelings relating to, DI and content area literacy, concerns over implementing DI for content literacy, and levels of perceived preparedness to do so. Thick descriptions also require the researcher to present adequate "voice" of the participants by including quotes or excerpts from interviews or focus groups in the results section of the study (Ponterotto, 2009, p. 547). The data I collect will help inform the project component of my study; it may also provide consumers of my research with the ability to make connections to their experiences, a concept known as transferability (Merriam, 2009).

Purposeful Sampling and Participant Criteria

The site where this study took place was a suburban Wisconsin middle school currently in the process of implementing DI for content literacy as part of the RTI process. To understand middle school content area teachers' views on differentiation for content literacy instruction, I used purposeful sampling (Creswell, 2012; Merriam, 2009). To be included in the sample, teachers had to meet the following criteria: they had to be full-time, core teachers at SMS who teach in areas delineated by the Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects. Fourteen teachers at SMS met these criteria: four reading/English language arts teachers, two Spanish language arts teachers, three science teachers, two social studies teachers, as well as one teacher each in the areas technology, art, and family and consumer education. I offered participation in the study, via email, to all 14 teachers who met these criteria. Participants came from the pool of SMS teachers who volunteered to participate by responding to my email. The optimum number of participants for this study would have been 13 teachers spanning all content areas and grade levels at SMS; this was not likely to happen, however. A minimum sample size of seven participants from three different content areas would have provided "reasonable coverage of the phenomenon," as half the content areas would be included in the study (Patton, 2002, p. 246). Ultimately, the study included seven participants from five different content areas.

I am currently employed as a teacher at the research site. Glesne (2011) stated that many researchers are drawn to "backyard research," or conducting studies in their

institutions (p. 41). Doing backyard research has both benefits and drawbacks. Backyard research can be an attractive option due to easy access to the site and pre-established rapport with participants, both of which can save the researcher time (Glesne, 2011). Conversely, backyard studies can also be problematic, as the researcher already has an established role at the site and it may be difficult for participants to view the researcher as the researcher rather than a colleague.

In the case study, the participants were my coworkers. I have been a professional educator at SMS for 20 years and take my role as a professional very seriously. I am currently a member of the seventh-grade professional learning community (PLC), the K–12 social studies committee, the positive behavioral intervention and supports (PBIS) committee, and the PLC committee. In the past, I have served as the district social studies department chair, was a member of the faculty representative committee, the curriculum coordinator's committee, the scheduling committee, the evaluation pilot committee, and the Wisconsin Model Academic Standards Committee. My professional pursuits continue outside the district as well. In addition to pursuing my EdD in teacher leadership, I am a member of the Wisconsin Teachers of the Year Council, an advisory group to the Department of Public Instruction (DPI). I also serve on the Smithsonian's Educator Advisory Committee and was a 2014 National Teacher Fellow for the Hope Street Group (HSG). HSG supports teacher leaders as they engage their peers in crafting solutions to educational challenges. Additionally, I have conducted professional development at the building, district, state, and national levels. Even though I am a professional educator who holds no supervisory role over her colleagues, and differentiated literacy instruction

is not a sensitive topic, I had to be clear as to what my role as researcher entails and how I would protect my participants and their confidentiality. An informed consent agreement that clearly outlined participant expectations as well as my role as the researcher helped ensure there was no confusion for participants as they entered into the research bargain (Hatch, 2002).

I obtained permissions to conduct this study from the necessary gatekeepers: the district administrator and the building principal (Creswell, 2012; Glesne, 2011; Hatch, 2002). Both the building principal and district administrator electronically signed copies of a Letter of Cooperation from a Community Research Partner to ensure they had a full understanding of the research occurring at SMS.

IRB approval was acquired on February 24, 2015. Walden University's approval number for this study is 02-24-15-0161570**;** it expired on February 23, 2016. After gaining IRB approval and beginning my study, I also acquired written consent from "the ultimate gatekeepers," my participants (Hatch, 2002, p. 51). I sent an email to all core content area teachers at SMS, inviting them to participate in the study. The email included a cover letter and an informed consent form that described the purpose of the study, outlined my role as researcher, explained participant rights and expectations, and provided assurances for confidentiality. I purposefully selected participants from those who replied to the email with the words, "I consent." I am the only person who knows the participants' identities; pseudonyms were used to maintain confidentiality. I assured participants that their responses were confidential and would not be discussed with

others. All data collected was either stored in a locked cabinet or on a personal, password-protected computer.

Prior to beginning my research, I completed an online course on the ethical protection of participants entitled, "Protecting Human Research Participants." As a result, I received a certificate of completion from the National Institutes of Health (NIH) Office of Extramural Research. As my study focused on the experiences of teachers it did not involve any contact with students. Therefore, there were no concerns relating to students' rights. Teachers' participation in this study was not likely to pose any significant risks beyond what they would encounter in daily life. Minor risks included fatigue, stress, or agitation due to the added responsibility of participating in a study. Participation was voluntary, and participants could stop at any time. Participating in this study would not pose a risk to the safety or wellbeing of participants, and may have its benefits. A potential benefit to participating in this study is the knowledge that participants are contributing to the literature on differentiated literacy instruction. Additionally, the data collected in this study may help to inform a project on differentiated literacy instruction that could ultimately serve to benefit students who are struggling readers.

Data Collection

Three sources of data were collected as part of this project study. First, I conducted semistructured interviews with the seven participants who consented to participate in the study. In addition to the interviews, I collected unobtrusive data in the form of lesson plans from the participants. A follow-up focus group with all seven

participants provided additional insight into the topics previously covered in the interviews.

For semistructured interviews, I had a well thought out protocol design and interview questions in place (Creswell, 2012). Once I gained all necessary consent and permissions, I began collecting my data through semistructured interviews, which allowed participants' unique thoughts, views, and perceptions to be heard and documented (Creswell, 2012; Merriam, 2009). Interviews were scheduled as soon as participants responded with their consent to the informed consent email. I conducted one interview with each participant. Interviews occurred between March 17 and April 6, 2015. To provide the participants with a familiar, comfortable setting, these interviews took place in the participants' classrooms during noninstructional time (Creswell, 2012). Interviews lasted an average of 45 minutes. I used an interview protocol (Appendix B) to record information about the interview such as the time, date, and location of the interview. The following are examples of questions found in the interview protocol: What three words or phrases come to mind when you think about differentiated instruction? How do you help all students acquire and understand the major concepts and vocabulary in your curriculum? How has your training prepared you to address the needs of struggling readers? I collected most participants' lesson plans at the start of the interview; some participants did not have them ready at the time of the interview, and provided them later. I audiotaped each interview using a standard cassette recorder, per the initial transcriptionist's request. This transcriptionist signed a confidentiality agreement prior to gaining access to the interview recordings. Unfortunately, my initial transcriptionist

encountered a family emergency and could not transcribe the interviews. As a result, I hired an online transcription service, Automatic Sync Technologies (AST). AST provided a letter ensuring confidentiality would be maintained. To be able to provide AST with the necessary electronic copies of the interviews, I used an online application, Audacity, to turn the audiocassette recordings into MP3s, which degraded the sound quality. As a result, I had to extensively proof and revise the transcripts against the recordings to ensure accurate transcription. I used member checking, or respondent validation, to validate my findings and ensure they were accurate and representative of the participants' perceptions (Creswell, 2012; Hatch, 2002; Merriam, 2009). Member checking provided participants with the opportunity to comment on a summary of the research findings from both the interview and focus group, respectively, which related to their own statements. Per the agreement outlined in the Participant Consent Form, participants were given one week to reply with any disagreements with the findings. All participants agreed with the findings, therefore no adjustments were necessary. All digital data, including audio recordings and Word documents, will be kept on a secure, password-protected computer for five years, the minimum time required by the university, then deleted; hard copies of interview transcripts and coding will be shredded.

After the interviews were completed, I conducted a focus group on April 14, 2015. Focus groups, when used as a follow up to interviews, "can be a valuable source for research triangulation" (Hatch, 2002, p. 133). A focus group can also provide further insight into the topics previously communicated in the interviews. Teachers who participated in the interviews were invited to participate in the focus group. An online

scheduling application, Doodle, was used to find a time and date that would work for all participants. All seven participants participated in the focus group, which included teachers from different content areas. This number fell within the recommended number of focus group participants, "the six to 12 range," so there were enough participants to keep the discussion going (Hatch, 2002, p. 135). As with the interviews, I used a protocol (Appendix C) to guide the focus group and document pertinent information. Focus group prompts included in the protocol include: When you hear "differentiated instruction for content literacy" what comes to mind for you? Share with me a strategy that you feel really helped you to differentiate for content literacy in your classroom. How would you characterize the district's efforts to provide PD and support to its teachers for differentiation for content literacy? The focus group took place in a conference room at the site, during non-instructional time. The focus group lasted one hour, although one participant had to leave after 40 minutes due to childcare needs. I audiotaped the focus group. As with the interview cassette tapes, I reformatted the data using Audacity and sent it to AST as an MP3. AST provided a letter of confidentiality. Once the data was transcribed, I proofed the transcript against the recordings to ensure accurate transcription. All digital data, including audio recordings and Word documents, will be kept on a secure, password-protected computer for five years, the minimum time required by the university, then deleted; hard copies of focus group transcripts and coding will be shredded.

I also collected unobtrusive data in the form of lesson plans provided by participants (Creswell, 2012; Hatch, 2002). Participants were informed of this request as

part of the research bargain outlined in the informed consent agreement (Hatch, 2002). All teachers at SMS are expected to "prepare and submit lesson plans to their building principal" ([redacted] *Faculty Handbook*, 2014). Lesson plans were scheduled to be collected at the beginning of each participant interview. Several participants needed additional time to provide their lesson plans, however. Lesson plans were catalogued according to participant pseudonyms and kept in a locked cabinet or password-protected computer to maintain participant confidentiality. Lesson plans and coding documents will be destroyed—deleted or shredded—after five years, per university expectations for data integrity and confidentiality.

I created an organized system to keep track of the data I collected, along with my emerging understandings. I used a binder with sections for each participant for hard copies of data such as lesson plans, interview protocols, transcripts, reflective journaling, and a research log. The research log served as a way to keep track of the data I collected; it included a record of the times and dates data was collected, the data collection method used, and participant pseudonyms (Hatch, 2002). A reflective journal provided me with a place to document and monitor my personal reactions to what I discovered through my research (Hatch, 2002, p. 88). Journal entries can help researchers self-assess their "biases when interpreting data and…constructing the story of the research, which can become a part of the final report" (Hatch, 2002, p. 88). Participant data was only identifiable to me, as it was catalogued according to participants' pseudonyms in the form of numbers. All hard copy data was stored in a locked cabinet when not in use. Transcribed interviews and other Word documents, like those I created as part of the

coding process, are being kept in a folder on the desktop of my personal, password-protected computer. All documents relating to data collected during this study, both digital and hardcopy versions, will be destroyed after five years.

Role of the Researcher

During data collection, I was mindful of the importance of my role as the researcher. I have been a teacher at the site for the past 20 years, so I needed to ensure that, in my researcher's role, I developed "a level of self-consciousness" that had me continuously aware of my actions and their consequences (Glesne, 2011, p. 60). In this role, my job was to record the participants' perceptions by asking probing questions to ensure their views were accurately documented. Although I have attended and presented at numerous professional development opportunities relating to DI and content area reading over the course of my career, as a qualitative researcher, my role was not that of an expert or authority on those topics, rather, it was to listen and learn (Glesne, 2011). As I collected my data, I was mindful not to interject my thoughts or beliefs into the interviews or focus group. I kept a reflective journal to help me self-assess any biases I may have had as I collected and interpreted the data (Hatch, 2002, p. 88). Although I am a colleague of the participants in this study, I have not held, do not currently hold, and do not anticipate holding any supervisory role over them. I was very conscientious of the need to maintain the necessary degree of critical distance in my role as researcher.

Data Analysis

As soon as possible after each audio recording of the interviews and focus group, I reviewed the audiotapes, turned them into MP3 files, and sent them to an online

transcription service where the data was transcribed into a Word document. This service has provided a letter of confidentiality. I proofed and revised the transcripts against the recordings to ensure accuracy. The audio recordings are currently being securely stored on a private, password-protected computer. Recordings will be destroyed after five years. I then read and reread each transcript to get a general sense of the material before I began the coding process (Creswell, 2012).

Saldana (2009) divides coding methods into two cycles. For my first cycle of coding, I used descriptive coding, an elemental method of coding identified by Saldana as "appropriate for virtually all qualitative studies, but particularly for beginning qualitative researchers learning how to code data" (Descriptive coding, para. 2). In this cycle, I highlighted key words and phrases found in the interview transcripts. I then hand coded the text data by looking at the highlighted passages from the transcripts and summarizing the topic of each passage with a word or phrase (Saldana, 2009, Descriptive coding, para. 1). I handwrote the codes in the margins of hard copy print outs of each interview transcript. My home office provided me with a large private space to spread out my data and do my first cycle analysis. In reviewing all seven of the interview transcripts, as well as that of the focus group, a number of topics arose. These topics provided me with an "index of the data's contents" (Saldana, 2009, Descriptive coding, para. 6). Codes, and the passages connected to them, were transferred to individual documents for member checking, and to a matrix for further, second cycle coding.

Second cycle coding methods help researchers make sense of first cycle codes by providing them with ways to reorganize and reanalyze the data (Saldana, 2009, Second

cycle coding methods, para. 2). I used pattern coding for my second cycle of coding. Miles and Huberman (as cited in Saldana, 2009) have stated that pattern coding is a type of "meta-code," grouping previously identified "summaries into a smaller number of sets, themes, or constructs" (Pattern coding, para. 1). This process helped me develop major themes or patterns of action from my data. Merriam (2009) has referred to themes, patterns, findings, or answers to research questions as "categories" (p. 178). As initial categories emerged, I transferred them, and the corresponding data, to a matrix in a Word document on my computer (Saldana, 2009). This enabled me to more easily move data around and later incorporate it into my findings. The ability to color code and move data and emerging second cycle coding categories around in the matrix helped me "to analyze their commonality and to create a pattern code" (Saldana, 2009, Pattern coding, para. 3). The use of a matrix during this cycle of coding helped me develop categories that incorporated multiple participant views and data sources. Additionally, the matrix allowed me to pull together a lot of data into a more manageable form. Sharing the matrix with my chair, and brainstorming potential pattern codes was also beneficial (Saldana, 2009). Data that did not correlate with other findings helped me identify discrepant cases. The inclusion of discrepant or negative cases increased the validity, or trustworthiness of the data and reduced reporting bias (Glesne, 2011, p. 49; Merriam, 2009, p. 219).

By collecting unobtrusive data in the form of participant submitted lesson plans, I further ensured my study's trustworthiness, or validity. Lesson plans contributed to the context of my study by providing additional data beyond that collected in the interviews and focus group (Hatch, 2002). Lesson plans were to be collected at the start of each

interview, as noted in the participant consent form, however some participants needed additional time. All participants provided lesson plans. To code this unobtrusive data, I used descriptive coding. This coding method is appropriate for a variety of qualitative data forms including interviews, documents, and artifacts, therefore I used a descriptive coding method with participant's lesson plans as well as the interview and focus group data (Saldana, 2009, Descriptive coding, para. 2). I hand coded this data, comparing the practices participants reported in their lesson plans to DI practices identified in Tomlinson's (1999) definition for differentiation of instruction (Appendix D). The descriptive codes identified in the lesson plans, incorporated with interview and focus group data already in the matrix, contributed to the emerging theme: what teachers do to differentiate for content literacy. Lesson plans provided by the participants, when compared to teacher reported practices in the interviews and focus group, added to the triangulation of data.

The triangulation process, a rigorous process of constant comparison between the three data sources, helped me identify recurring patterns in the data. During this process, three themes or patterns initially emerged from the data: what do teachers know about DI for content literacy; what do teachers do to differentiate for content literacy; and what supports teachers need to differentiate for content literacy. Data contributing to these themes was transferred to a matrix. Further analysis of these initial patterns resulted in the development of the categories: knowledge, practices, teacher perceptions, and supports. These categories are discussed in the findings, below.

Research Findings

To improve student performance in literacy, content area teachers at SMS are being asked to differentiate instruction as part of the universal tier of the RTI process. Recent studies support the use of DI to improve literacy (Connor et al., 2011; Reis et al., 2011). Yet research also indicates DI is difficult to put into practice; as a result, few educators effectively use DI in their classrooms, or do so with fidelity (Fuchs et al., 2010; Tomlinson & Imbeau, 2012). The purpose of this project study was to explore middle school content area teachers' understanding and implementation of differentiation for content literacy to identify what they know, do, and need to effectively implement or sustain DI in their classrooms. The following questions guided the research:

1. How do middle school content area teachers define differentiated instruction for content literacy?

2. How do middle school content area teachers differentiate content literacy instruction for struggling readers in their classrooms?

3. What do content area teachers need to be able to effectively implement or sustain differentiation for content literacy in their classrooms?

After analyzing the data from the interviews, focus group, and lesson plans, I identified four core categories relating to participants' experiences with differentiation for content literacy: knowledge, practices, teacher perceptions, and supports. Analysis included an initial cycle of descriptive coding, which involved summarizing passages from the interviews and focus group with key words or phrases. Descriptive coding was also used with participant submitted lesson plans. Lesson plans were coded according to

practices identified in Tomlinson's (1999) definition for differentiation of instruction (Appendix D). Analysis continued with a second cycle of coding, pattern coding. Recurring patterns of data were placed in a matrix where I could move them around to help me identify patterns or categories. The resulting categories are discussed, below.

The core category, knowledge, relates to the guiding research question, "How do middle school content area teachers define differentiated instruction for content literacy?" It addresses not only what participants know, but also how they came to know it (Yin, 2009). Data that contributed to the development of this category included participant definitions of DI for content literacy, as well as participant reported training and professional development in that area.

Two core categories emerged through data analysis in relation to the guiding research question, "How do middle school content area teachers differentiate content literacy instruction for struggling readers in their classrooms?" These categories are practices and teacher perceptions. The category, practices, includes participant reported data describing what they do to differentiate content literacy in their classrooms. The category, teacher perceptions, includes participants' perceptions of efficacy in differentiating for content literacy to meet the needs of their students.

The final category, supports, addresses the guiding research question, "What do content area teachers need to be able to effectively implement or sustain differentiation for content literacy in their classrooms?" While all participants reported differentiating some classroom practices for content literacy, they also perceived a desire for improvement. The category, supports, includes participant reported data relating to what

they believed they needed to move them toward differentiating for content literacy with fidelity.

The four categories, including findings and analysis are presented below. A summary of the findings, discussion of the evidence of quality for the study, and conclusion statement complete Section 2.

Knowledge

Two categories emerged from participants' responses relating to their knowledge of DI for content literacy: definitions, and training and professional development. These categories address what participants know about DI for content literacy and how they came to know this information, respectively.

Definitions. Three subcategories emerged from participants' definitions of DI for content literacy: who benefits from DI for content literacy, how do teachers provide DI for content literacy, and why DI for content literacy is necessary. Together, with little exception, this data resulted in a definition consistent to that of Tomlinson (Appendix D). These subcategories and participant responses, as well as an overarching definition, are discussed below.

Who benefits from DI for content literacy? In the subcategory, who benefits from DI for content literacy, all participants' definitions but one indicated that differentiation for content literacy applies to all learners. Participants believed DI benefitted the entire range of students in their classrooms, from struggling learners, including students with special educational needs, to those who have been identified as gifted and talented. A veteran teacher who was in his first year at the site, stated that DI

for content literacy applied to students with special needs. Clearly, most participants had an understanding that the intent of DI is to meet the needs of all learners. Although the more narrow view shared by one participant, that DI was something teachers did for special education students exclusively, may be a reflection of practices and expectations at his previous school.

How do teachers provide DI for content literacy? Participants cited a number of DI practices as part of their definitions of differentiated instruction for content literacy, which they provided during their interviews, and elaborated on in the focus group. Responses included differentiating according to students' levels of interest and learning styles as well as considering whether material was appropriate for students at varying levels of readiness. Participants' definitions also included practices that allowed for student choice, which, according to Tomlinson, helps address varying levels of student readiness and interest (1999, p. 92). Participants noted making accommodations to meet their student's needs. They also discussed modifying and extending student work to address the needs of both struggling and advanced learners. Participants included a number of "instructional and management strategies" identified by Tomlinson (1999, p. 15) in their definitions as well, such as: grouping students, leveled texts and varied resources, and tiered assignments, notes, and assessments. Several participants pointed out the need to make sure learning objectives were clear for their students; this is important, according to Tomlinson, because "it is crucial…for teachers to articulate what's essential for learners to recall, understand, and be able to do" (1999, p. 9). Additionally they acknowledged providing struggling students with extra time to

complete their work, an important component of a differentiated classroom according to Tomlinson (1999). Only one definition included a concept that Tomlinson (2001) has stated "is not" differentiated instruction, and that was "individualized instruction" (p. 2). Although that participant did not elaborate on the concept of individualized instruction, it is commonly used to describe an approach espoused in the 1970s where teachers provided a personalized learning experience for each of the individuals in their classrooms, resulting in "exhausted" teachers and "fragmented" learning (Tomlinson, 2001, p. 2).

Why is DI for content literacy necessary? One component of participants' definitions that arose during the interviews and the focus group was a belief that DI for content literacy was "necessary" to meet the needs of the students in their classrooms. Unlike other aspects of participants' definitions, this response arose naturally, not as answers to a specific prompt. They felt DI was a necessary component in meeting students' needs to ensure they were all learning. In the focus group, one participant addressed the importance of "finding common ground for your students but at the same time allowing kids to access information and learn skills in different ways that work for them." This statement prompted others to point out that what is best for one student is not always what is best for another, rather it is based on what individual students need to do their best learning. Based on their comments, all participants clearly understood the importance of differentiating for content literacy to address the needs of all learners.

Discussion of teacher definitions. In analyzing participant data relating to their responses when asked to define differentiated instruction for content literacy, key themes

emerged. First, DI for content literacy benefits all learners, from those with special needs to those with gifts and talents. Second, teachers used a variety of instructional and management strategies to address students' interest levels, learning styles, and readiness. And lastly, participants believed that differentiation for content literacy is necessary to ensure all students are learning at a level that is best for them. With these commonalities in mind, a working definition of DI for content literacy based on participant data would be: teachers differentiate instruction for content literacy by addressing student interest levels, learning styles, and readiness, through a variety of instructional and management strategies, to ensure all students are learning at their best levels. Data indicated participants' were aware of the core components of Tomlinson's definition of DI (Appendix D). The next category addresses how participants gained their knowledge of differentiation for content literacy.

Training and professional development. Participants stated they gained their knowledge of DI and content literacy in a variety of ways: formal training through preservice education and graduate coursework, self-selected workshops and conferences, collaboration with colleagues, independent reading, and district and building professional development. Although they indicated learning about both DI and content literacy, the two concepts were generally taught or presented in isolation.

In both their interviews and the focus group, participants largely agreed their preservice teacher preparation and graduate coursework had not adequately prepared them to differentiate for content literacy. One participant, in her third year of teaching, acknowledged that college did not prepare her for the challenges of differentiating

instruction in the classroom. Several focus group members, who attended the same college as undergraduates, stated they had one class dealing with exceptional children, but they felt it focused largely on cultural diversity. Another stated DI was a "buzz word" in college 15–16 years ago. Three participants stated they had no training in DI during their preservice education. The most senior participant noted that there was no talk of DI when she was in college, so she had to learn it all on her own. Most stated they received minimal training in DI in their preservice and graduate coursework. Only one felt her preservice education was "sufficient for a new teacher."

Several participants discussed workshops they believed provided them with useful information to be able to differentiate for content literacy. One participant gained valuable information from a gifted and talented workshop, where she learned to design lessons for gifted learners and modify down rather than design for the middle and have to modify both up and down. She also attended a conference where she learned to use a reading workshop format to differentiate instruction in her language arts classroom. In their interviews, three participants indicated they attended an Association for Supervision and Curriculum Development (ASCD) training on Reading Strategies for the Content Areas; all three participants report still using the strategies from the binder provided. One participant stated he liked the strategies he acquired at the ACSD workshop, and used them frequently. Another included a graphic organizer from the ASCD training as part of the lesson plan she provided as part of this study. It should be noted that although the graphic organizer she submitted, and its use in the lesson plan, addressed content literacy,

neither was differentiated. One participant described attending workshops or conferences, in general, as "hit or miss."

Data indicated that collaboration with colleagues and independent reading contributed to participants' knowledge of DI for content literacy. Two participants reported working with the reading specialist and the English language arts teachers, who they found to be proficient in differentiating instruction for content literacy. Another reported that independent reading was her preferred method of learning about DI for content literacy, stating it was often how she learned the best.

Participant comments relating to district or building led training revealed a lack of PD in DI. Although district goals and mandates include differentiating instruction for content literacy as part of the universal tier of RTI for all content area teachers, data revealed little if any district or building led training or PD in DI in the past 10 years. In discussing building or district professional development, all participants who had been in the district the longest stated that any PD for DI had occurred approximately 10 years ago. A participant with three years in the district noted that if there was any PD on DI since she had been there, it wasn't impactful enough to be memorable. Another participant remembered hearing of some sort of teacher-led PD option that related to DI at some point, but he had not participated in it. A veteran teacher stated, that teachers in the building had to learn to differentiate "on their own, through trial and error." As for any link between DI and content literacy instruction, one participant thought there had been a little training on differentiation in the content literacy PD related to vocabulary.

Contrary to the data on PD for DI, participants' comments indicated they all believed they benefitted from the district's recent building level PD for content literacy. They found the building level content literacy PD that occurred monthly over the past two years to be very valuable. They especially liked the vocabulary strategies presented at the PD sessions, stating they were easy to integrate into the content areas and were something all teachers could implement using the vocabulary from their own curriculum. Participants also liked that the building level PD on content literacy incorporated work samples from colleagues in the building. One participant commented that although the recent PD provided many useful literacy strategies, they were not differentiated to meet the needs of all learners. Others shared this sentiment with their colleagues during the focus group.

Summary of knowledge. Data indicated participants' definitions of DI for content literacy were consistent with that of Tomlinson (1999), the seminal expert in the field of DI. Although participants could define DI in terms similar to Tomlinson (1999), results showed that participants had varying levels of formal training and often gained their knowledge of DI through self-selected means such as workshops, conferences, collaborating with colleagues, and independent reading. They reported gaining knowledge on content literacy through the aforementioned methods, and more recently from building level PD presented as a response to district mandates. They were positive about the recent building level literacy PD, but stated the majority of strategies presented were not differentiated, but one-size-fits-all. Veteran teachers who participated in this study stated the most recent district or building PD on DI occurred 10 years ago.

Therefore, although the data indicated that participants understood what DI for content literacy should be, the level and amount of training, PD, or support they received to prepare for and sustain implementation varied greatly. As a result of these findings, one could ask, to what extent participants differentiate for content literacy in their classrooms? The next category includes an analysis of participant reported practices relating to DI for content literacy, non-differentiated practices, and participant concerns about the efficacy of such practices.

Practices

An analysis of participant reported practices revealed three subcategories: DI for content literacy, universal instruction, and concerns about current practices. Participants shared many practices they utilized in their classrooms, as well as concerns about the efficacy of these practices.

DI for content literacy. Analysis of participant reported practices and lesson plans indicated participants addressed criteria found in Tomlinson's (1999) definition of differentiated instruction (Appendix D). Tomlinson's (1999) definition states that teachers can differentiate for the areas of content, process, and/or product according to student's readiness, interests, and/or learning profile using a variety of "instructional and management strategies" (p. 15). Analysis included identifying participant reported instructional and management strategies. Once identified, these practices were aligned within the areas of potential differentiation as identified by Tomlinson: content, process, product, readiness, interests, and learning profile. Table 1 illustrates the findings from the alignment process.

Table 1

Participant Reported Practices in Differentiated Instruction for Content Literacy

Content	Process	Product
Leveled texts	Frontloading (vocabulary/concepts)	Tiered work
Visuals	Grouping	Tiered assessments
Anchor charts	Partners	Discussion/ conferring/ questioning
Posters	Teacher read aloud	
Word walls	Student volunteers read aloud	Differentiated projects
Lots of resources/books	Auditory (books on tape)	Answer orally if needed, "Tell me…"
	Independent reading/work	
	Adult help (in learning lab, with teacher or co-teacher, with educational assistant)	
	Stations	
Readiness	Interests	Learning profile
Data-driven reading placement	Choice	Movement/kinesthetic
Pretests	Lots of resources/books for kids	Visuals
Exit/entry slips	Inquiry	Grouping
Bell work		Partners
		Auditory
		Learning styles
		Independent reading/work

Data analysis indicated that participants were using a variety of DI practices in their classrooms to differentiate content literacy for the areas of content, process, and product, to meet students' levels of readiness, interests, and learning profiles. The data did not indicate the extent to which these practices were being used, however. The next subcategory, universal instruction, discusses findings related to teacher reported practices that did not align with best practices for DI.

Universal instruction. Although participants reported differentiating instruction for content literacy, data from the interviews, focus group, and lesson plans indicated they were also doing much universal instruction. "Universal" was a term used by several participants to describe one-size-fits-all instruction, or instruction that is not differentiated. One participant described universal assignments as "something that all kids can access on some level." Most participants reported providing students with universal assignments and classwork, then grading according to students levels of ability and engagement. Differentiating on the spot for daily assignments or providing assignments at a universal level and allowing students to do more or less than what is average was reported. One participant described using her perceptions of her students' abilities to determine the level of work that was acceptable. Another described what he called "modifying after:" telling his students to do what they could and he'd take it from there. All participants reported positive feelings toward the universal, nondifferentiated vocabulary strategies provided at the recent building level PD on content literacy, as they could be easily implemented in their classrooms.

In the focus group, several participants reflected on the concept of universal, or one-size-fits-all instruction. One focus group member stated, “I have to teach everything that I think needs to be kept together and then attempt to differentiate afterwards.” In response, another admitted she felt guilty moving ahead for the students who understood the concepts being taught, while others were left behind. Leaving students behind during universal instruction is not the only practice participants were concerned about, however. They also had concerns about the processes involved in differentiating instruction, as seen in the findings in the next subcategory, below.

Concerns about current practices. The focus group provided participants an opportunity to discuss their concerns about their current practices while differentiating for content literacy. Common areas of concern included student anonymity and students making choices that are not appropriate for them.

Participants expressed concerns about how to provide students with tiered assignments, assessments, and readings in a confidential manner. One stated that it was difficult to hand out differentiated assignments while maintaining student anonymity. Others responded with numerous strategies to hide levels of difference in materials from the students. They all conceded that students would always catch them. The data from this focus group conversation indicated that providing students with tiered texts and assignments anonymously was an area of concern among participants.

Another concern that arose in the focus group was, when given choices, students don’t always choose what is best for their level of readiness or learning profile. One focus group member stated that, “kids don't always necessarily…match themselves well,” and

acknowledged that doing so was a skill that he felt would require a great amount of time and encouragement to teach. A veteran educator shared that, when given choices in the classroom, students often gravitated toward areas of weakness. Findings show that participants, even veteran teachers, struggled with how to comfortably and accurately provide materials that would best fit their students' needs.

Summary of practices. Data collected through participant interviews, lesson plans and the focus group data led to the following findings. First, all participants were differentiating content literacy instruction according to best practices identified in the literature to some extent. Second, all participants were also doing much universal, or one-size-fits-all instruction, even though most agreed that DI was best practice for meeting all students' needs. Finally, they acknowledged concerns about the process of differentiation: how to differentiate for student readiness or learning profile in a manner that maintained students' anonymity and accurately addressed students' personal learning styles. The following category includes an analysis of participant data as it relates to teachers' perceptions of efficacy in differentiating for content literacy.

Teacher Perceptions

Two prompts within the teacher interview protocol asked participants to describe their level of preparedness to differentiate for content literacy. One prompt asked participants, "How has your training prepared you to address the needs of struggling readers?" The other prompt asked participants how well prepared they felt "about differentiating to meet the needs of students who struggle with content literacy." This prompt was based on recent literacy mandates at the district level, including RTI, and at

the state and national level with expectations that students meet or exceed the Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects. An analysis of the data that resulted from these prompts led to the creation of the category, teacher perceptions. This category encompasses participants' perceptions of their efficacy in differentiating for content literacy. Findings related to this category also incorporate pertinent focus group data. Within the category of teacher perceptions, three subcategories emerged from the data: level of preparedness, struggles, and desire to improve.

Level of preparedness. The data covered a wide range when it came to participants' perceived levels of preparedness to differentiate for content literacy—from "above average" to "underprepared." Two participants reported feeling better than average in their levels of preparedness. One was a veteran teacher who felt that the high level of differentiation she does in her classroom would be impossible to achieve for a beginning teacher.

Other participants reported feeling moderately prepared. While half acknowledged that differentiating instruction was a weakness for them, citing a lack of preparedness. Another related his answer exclusively to literacy, stating, "I don't perceive myself as someone that can teach reading. I perceive myself as somebody that can teach vocabulary."

Overall, half of participant statements reflected feelings of above average or average preparedness to differentiate for content literacy, while the other half indicated

they were less than prepared. All participants, regardless of their perceptions of efficacy, cited struggles as well. These struggles are discussed below.

Struggles. Four participants used the word "struggle" in describing their feelings in relation to differentiating for content literacy. However, all reported some level of struggle, fear, or concern. One participant expressed concern about her ability to help struggling students meet the Common Core State Standards, and questioned whether meeting those standards was even possible. Another worried about being held personally responsible if students did not meet standards. Teachers today are under a great deal of stress due to increased levels of accountability through high-stakes testing and teacher evaluations, and local, state, and federal mandates. Participants in this study were no exception. All found keeping up with added pressures and expectations to be a struggle, but as described below, they also felt a desire to improve.

Desire to improve. Although participants found differentiating instruction for content literacy, and the mandates that led to this expectation, to be a struggle, they also acknowledged it was something they needed to work on. Data indicated that all participants expressed a desire to improve their instruction, and most felt a need to improve instruction in DI for content literacy. One shared that DI for content literacy was something she continuously worked on by attending self-selected professional development. Another stated that the current educational climate, with higher expectations of accountability, has motivated her to work to improve DI for content literacy in her classroom. Yet another found that DI for content literacy was something he would like to receive more training on. Another veteran teacher stated that although she

was fairly confident in her ability to differentiate for content literacy, she felt her teaching was "still evolving." She advised a slow and steady route to differentiation for new teachers.

Not all participants consistently expressed a desire to improve in differentiating for content literacy, however. One, who initially indicated he would benefit from more training, later reported he didn't think the answer to meeting students' literacy needs involved more training or strategies. He elaborated on this comment, adding he did not believe training or strategies would be of much help with 150 students whose reading abilities ranged from kindergarten to high school. Another participant indicated a desire to improve, but more so within his content area rather than in differentiating for content literacy.

Summary of teacher perceptions. Although participants' perceptions of their levels of preparedness in differentiating for content literacy ranged from above average to underprepared, all perceived some degree of struggle in the process, as well as a desire to improve. These findings related to participants' perceptions may likely be the result of their level of knowledge and training, but may also be linked to the next category to be discussed, supports, which includes data relating to what they believed they needed to be able to effectively implement or sustain DI for content literacy.

Supports

In both the individual interviews and the focus group, participants were asked what they needed to effectively implement or sustain DI for content literacy. In their answers, they identified a number of supports they believed were necessary for them to

be able to better differentiate instruction in the future. The overwhelming answer was "time." Aside from time, four additional categories emerged: smaller class sizes, collaboration, strategies to improve instruction, and another adult in the classroom.

Time. All participants reported that differentiating for content literacy took a substantial amount of time beyond planning a traditional one-size-fits-all lesson. One participant reported that differentiating instruction took more time to plan because of the need to find tiered materials and consider the needs of students in her classroom. Participants felt that DI involved significantly more work upfront than traditional teaching. One revealed she felt like she was designing two times as many lessons when she differentiated. Another referenced her limited preparation time. She pointed out that her resources were all at school, which required her to do all her planning at school on her own time. She felt that grading papers was the only prep work she could actually do at home. Another participant reflected, "I feel like…I can never get everything done."

Aside from time to plan, all participants also expressed the need for time to find resources for students, especially leveled texts. One wanted to be able to find leveled texts to connect her content with learners at a variety of reading levels. Another wanted to be able to use leveled articles more than a few times per year. One participant, an ELA teacher, wanted time to find and add more leveled nonfiction texts. In the focus group, several participants shared the difficulties of acquiring leveled texts. One focus group member stated she spent "a ridiculously [*sic*] amount of time on the internet searching, searching, searching, reading, reading, reading, and…wow, I've got 15 minutes left of my prep and I need to print stuff, so here's what we're going to do." Another agreed,

stating it could take him three hours to plan 15 minutes of a differentiated lesson. Still another added that finding leveled resources, materials at a variety of reading levels, takes significantly more time than it takes students to do the activity. Additionally, two participants expressed that they had no texts provided for them, and did not even have textbooks, so they were finding and creating all their materials themselves.

Smaller class sizes. Another common theme that arose from the data was participants' desire for smaller class sizes and a lower total student load. The majority of participants expressed that class sizes of 25–28, and total student loads of 140–150, were too large to effectively differentiate for content literacy. One stated that such numbers make it hard to know kids on either a personal or an educational level. Yet another reported there were simply too many kids per teacher to be able to effectively differentiate instruction for content literacy.

Collaboration. Data indicated that most participants wanted the opportunity to collaborate with and get feedback from colleagues to better differentiate for content literacy. They wanted to be able to work with the ELA staff and the reading specialist. They also expressed an interest in collaborating with special education staff. Reflecting on his students with special needs, one participant stated a desire to work directly with the special education teachers and discuss what works for their students. Most participants also stated they liked seeing examples of others' lesson plans and ideas. Several expressed they would like to collaborate with colleagues as they implement DI for content literacy. Others expressed they a desire for follow up—someone to check in

with them to see what strategies they have used. Another participant stated, “I have nobody, honestly, to bounce things off.”

Strategies to improve instruction. The majority of participants expressed they wanted strategies to improve their instruction as they worked to implement DI for content literacy. They wanted to know how to best meet their students’ varied needs, and how to deal with high and low students, with abilities that may range from kindergarten to high school in the same class. Several wanted to learn how to better group students for success. Participants also wanted strategies to help them access their students’ prior knowledge rather than rely on assumptions of what their students may know. Participants wanted strategies, lessons, and activities at different levels. One wanted to learn strategies that would allow her students to demonstrate their learning in a variety of different ways. Another wanted to learn DI strategies in a face-to-face environment. Yet another wanted to be able to create meaningful writing experiences for all her students.

Although participants expressed a desire to learn strategies for differentiating instruction for content literacy, several expressed the need to do so while maintaining their existing curriculum. One stated that being able to “integrate those (DI and content literacy strategies) into my curriculum and still meet my own curriculum needs has always been a challenge.” Another wanted to seamlessly integrate DI for content literacy into her curriculum.

Another adult in the classroom. Several participants believed the support of another adult in the classroom was needed for them to successfully differentiate for content literacy. One wanted a special educator in the room to help with struggling

readers. Others would be happy to have an educational assistant in their classroom. One participant joked, "You could clone me so there would be several of me in the classroom."

Other supports. In analyzing the data relating to what participants believed they needed to effectively implement and sustain DI for content literacy, two topics emerged that were not identified as themes, tracked classes and money. In the focus group, one participant wanted tracked classes, where high and low ability students are placed in separate classes; he then acknowledged he is aware that tracking students goes against the concept of DI. Another focus group member commented on this statement about tracking by adding that it was like differentiation, and yet it wasn't. Two participants wanted money to purchase textbooks and whatever else was needed to differentiate for content literacy, while a third wanted district funding for substitute teachers so teachers could receive training during the school day.

Summary of supports. Participants' identified a number of supports they believed were necessary for improved implementation of DI for content literacy. First and foremost, they all needed more time to plan and find resources. Second, they expressed a desire for smaller class sizes and a smaller total student load, the total number of students taught per day (Ouchi, 2009). Third, data indicated they wanted opportunities to collaborate with and get feedback from colleagues, both building specialists and content area coworkers. Fourth, most also wanted resources: instructional strategies, lesson ideas, and activities to meet the needs of all their learners. And finally, several participants wanted the assistance of another adult in the classroom, either a

specialist or an educational assistant, to help them meet the needs of their struggling readers. Other supports identified included tracked classes and money for resources and substitute teachers so that teachers could attend professional development on differentiation for content literacy during the school day.

Summary of Findings

The conceptual framework for this study was based on principles of differentiation, as defined and discussed by Tomlinson (1999). In what follows, the relationship between these principles and the categories identified in the findings are discussed in the context of the guiding research questions and the current literature on differentiated instruction.

Summary of Findings Relating to the Category: Knowledge

Data resulting from the research question, "How do middle school content area teachers define differentiated instruction for content literacy?" led to the development of the category, knowledge, and subcategories, definitions and training and professional development. Several interview and focus group prompts were linked to this research question. One prompt asked participants to "describe any training or professional development you have received or participated in relating to differentiated instruction, content literacy, or both." Another prompt asked, "How would you characterize the district's efforts to provide PD and support to its teachers for differentiation for content literacy?" A summary of the findings relating to the subcategories definitions and training and professional development is found below.

Overall, participants' definitions of differentiated instruction were congruent with the literature (Tomlinson, 1999), and recent research (Van Hover et al., 2011). In their definitions, all but one of the study participants stated that DI for content literacy was important to meet the needs of all students. This data is consistent with findings from Tomlinson and Imbeau (2012), who found that most teachers believed DI was necessary to meet the needs of academically diverse learners.

Participants in this study reported they lacked in-service professional development in DI. Dunn et al. (2010) identified insufficient and outdated staff development programs as contributing factors that may have a negative effect on DI implementation. Data revealed that most participants felt their preservice training had not adequately prepared them to differentiate for instruction, a finding supported by Dee's (2011) research. Only one participant indicated she had attended self-selected workshops that had benefitted her greatly as she worked to differentiate for content literacy. Others learned about DI by collaborating with colleagues, and through independent study.

Participants reported having more training and PD in content literacy than in DI, largely due to recent building wide professional development, but also as a result of other literacy trainings such as self-selected workshops and graduate courses. Most reported that the strategies for improving content literacy garnered from their training and PD were largely one-size-fits-all, rather than differentiated instructional approaches.

Summary of Findings Relating to the Category: Practices

The category, practices, stemmed from the research question, "How do middle school content area teachers differentiate content literacy instruction for struggling

readers in their classrooms?" Tomlinson's (1999) definition for differentiation of instruction (Appendix D) was used during data analysis to identify DI practices and strategies reported during participant interviews, the focus group, and in the lesson plans submitted. Participants reported using numerous DI concepts and strategies to meet the needs of the students in their classrooms, however they also did much universal, or traditional one-size-fits-all instruction. This is not surprising, as research shows that although teachers generally differentiate instruction to some extent, few do so purposefully, consistently, or according to more than a few of the general principals of differentiation (Bailey & Williams-Black, 2008; Dee, 2011; Fuchs et al., 2010; Moon et al., 1995; Tomlinson et al., 2003; Van Hover et al., 2011).

Summary of Findings Relating to the Category: Teacher Perceptions

The category, teacher perceptions, also resulted from the research question, "How do middle school content area teachers differentiate content literacy instruction for struggling readers in their classrooms?" Several interview prompts led to data that contributed to the creation of this category. These interview prompts included: "How has your training prepared you to address the needs of struggling readers?" and "In the current educational climate, where content area teachers are expected to differentiate for struggling readers in their classrooms as part of Tier 1 RTI instruction *and* ensure their students are meeting the Common Core State Standards (CCSS) for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects, how well prepared do you feel about differentiating to meet the needs of students who struggle with content literacy?"

Participants perceived themselves as being at varying stages of preparedness to be able to differentiate instruction for content literacy, from above average, to underprepared. Recent research has found that greater levels of teacher efficacy beliefs are associated with greater levels of differentiated instruction in teachers' classrooms (Dixon, Yssel, McConnel, & Hardin, 2014). Therefore it is not surprising that the some participants in this study expressed concerns regarding how to manage DI for content literacy in their classrooms. In fact, all expressed some level of concern about their abilities to adequately implement DI for content literacy, as well as a desire to improve.

Summary of Findings Relating to the Category: Supports

The category, supports, came as a result of an analysis of participant interview and focus group data relating to the research question, "What do content area teachers need to be able to effectively implement or sustain differentiation for content literacy in their classrooms?" Several interview questions led to the data that was included in this category. Examples of these questions include: "Describe the ideal situation for implementing differentiated instruction for content area literacy? What would it look like in your classroom? What would you need to make that happen?" The focus group prompt, "If you could have one thing (tangible or intangible) that would help you better differentiate for struggling readers in your classroom, what would it be?" also led to data that contributed to the creation of the category, supports.

Consistent with current research (Tomlinson & Imbeau, 2012), participants in this study needed more time to plan and gather resources to be able to effectively implement and sustain DI for content literacy in their classrooms. They also wanted to be able to

collaborate with others as they developed, implemented, and reflected upon the efficacy of their lessons. Recent studies (Dixon et al., 2014; Kappler Hewitt & Weckstein, 2012) have found that teachers who collaborated during the process of lesson creation, implementation, feedback and reflection were more likely to differentiate instruction. Moreover, like their counterparts in the study by Dunn et al. (2010), participants wanted to learn strategies to meet the varied needs of learners in their classrooms. Specific strategies requested by participants included how to: group students for success, access students' levels of prior knowledge, and allow students to show their learning in a variety of ways. Other categories that emerged from the data included the need for extra staff in the classroom, and the desire for smaller class sizes and lower total student loads.

Evidence of Quality

To ensure my data collection process was organized and my findings were accurate, I incorporated a number of reliability and validity strategies. To organize and keep track of the data collection and member checking process I used a research log (Hatch, 2002). It included the use of numerical pseudonyms for participants and the cataloging of interview and focus group data chronologically by time and date. I also kept information on the member checking follow-up process in the log. Interview and focus group transcripts were checked, and compared to the recordings to ensure their accuracy (Creswell, 2009, p. 190). To assure findings were valid, participants conducted member checks (Creswell, 2009, p. 191). Participants had the opportunity to comment on a summary of the research findings from both the interview and focus group, respectively, which related to their own statements. As soon as the audio recordings from the

interviews and focus group were transcribed, checked for accuracy, and initial coding was completed, I emailed a summary of the findings to participants so they could member check them to ensure my interpretations were accurate (Merriam, 2009, p. 217). Interview and focus group member checks were emailed separately, approximately two weeks apart. Participants had seven days following both emails to respond with comments. Since the summaries were regarded to be accurate, no addendum to the findings was needed.

Triangulation of the data also contributed to the validity of this study. Methodological triangulation involves using multiple methods to study a phenomenon (Guion, Diehl, & McDonald, 2011). I examined the results from the three data sources through a rigorous process of comparison to see if the dominant recurring patterns in the data provided "a coherent justification" for the development of themes (Creswell, 2009, p. 191). For example, interview, focus group, and lesson plan data indicated that all participants were differentiating instruction to some extent, but also indicated all participants were doing much one-size-fits-all instruction. The triangulation of these data sources appeared to provide a suitable basis for the development of the categories and subcategories. For example, comparison of the data relating to lessons and classroom activities reported by participants through the interviews, focus group, and lesson plans led to the development of the category, practices, and the subcategories, DI for content literacy, and universal instruction. Consistency across the three data sources helped establish the study's validity (Creswell, 2009; Glesne, 2011).

Findings also included discrepant information, or evidence that ran contrary to the dominant themes identified through the triangulation and coding processes. This allowed a variety of participant perspectives to be heard, which made this study more credible (Creswell, 2009, p. 192). For example, in defining differentiated instruction, all participants but one indicated that it was something teachers do for all students, however one participant believed it was something teachers do exclusively for students in special education programming. Another example of discrepant information emerged from the data concerning participants' perceptions of efficacy and their desire to improve their instructional practice. All participants but one expressed a desire to improve their DI practices for content literacy. One participant wanted to improve, but more so within his own content area. The differing perspectives of the participants reinforced the process of triangulation and the overall accuracy of the data.

Conclusion

An intrinsic case study design was used to explore middle school content area teachers' understanding and implementation of differentiation for content literacy. Individual semistructured interviews provided data on how content area teachers defined and were engaged in the process of differentiation for content area literacy, as well as what they needed for its implementation and sustainability. A focus group gave participants an opportunity to delve more deeply into topics from the individual interviews. Data from the interviews and focus group were hand coded to identify themes or categories. The findings from the interviews and focus group were member checked. The collection of unobtrusive data, lesson plans provided by participants, provided the

researcher with an additional opportunity to see how teachers' definitions and classroom practices aligned with Tomlinson's (1999) model of differentiated instruction—the current consensus model for the field (Bell, 2011). Triangulation of these three data sources reinforced confidence in the findings.

Participants' responses in the interviews and focus group, along with their lesson plans, provided the researcher with a deeper understanding of differentiated instruction for content literacy from teachers' perspectives. Participants revealed they believed DI for content literacy was necessary to meet the needs of their students. All participants were implementing DI for content literacy to some extent, yet most were still doing much universal, or one-size-fits-all instruction. Participants felt they lacked time to plan and gather resources, opportunities to collaborate with colleagues, and professional development to learn strategies to be better able to differentiate for content literacy in their classrooms. Therefore, the design and development of professional development opportunities for the school site is a logical outcome for this project study.

Section 3 will discuss the project derived from this research study. Section 4 will include a reflection of the project, including its strengths, limitations, and potential impact for social change, as well as self-analyses, project implications, applications, and directions for future research.

Section 3: The Project

Introduction

The findings from this study identified three areas of concern participants believed needed to be addressed for them to successfully implement and sustain differentiated instruction for content literacy: time to plan and gather resources, opportunities to collaborate with colleagues, and professional development to learn DI strategies. The project I designed for this study is based on these findings and, therefore, could help meet the needs identified by participants, and support their future implementation of DI. The project (Appendix A) provides collaborative PD opportunities through three daylong PD workshops on differentiation for content literacy. A DI website and optional PLC will provide additional supports for workshop participants as they plan, implement, and reflect on DI for content literacy.

Description of the Project

To meet the needs of struggling readers, teachers at SMS are being asked to differentiate for content literacy in their classrooms. Findings from this study indicated supports necessary for SMS teachers to able to successfully implement and sustain DI for content literacy in their classrooms: time to plan and gather leveled resources, opportunities to collaborate with colleagues, and PD to learn DI strategies. The project uses three of the four quarterly PD days set aside by the district. The project will use that time to provide collaborative PD through three daylong workshops on differentiated instruction for content literacy. A website will serve to enhance the PD by providing resources to participants. The website will include resources on DI, a place for document

sharing, a format for discussion and comments, an announcements page, a directory of participants, and a calendar. The website will allow teachers to access information and resources at their level of readiness or interest, and contribute to the site, at any time and in any place that is convenient for them. Workshop attendees will also have the opportunity to participate in an optional PLC focused on differentiating instruction for content literacy. The PLC will occur during time allocated for collaboration in the building after school on Monday afternoons.

Goals of the Project

The goals of the project are to support teachers implementing differentiated instruction in their classrooms by addressing the major needs identified in this study. Findings indicated study participants wanted time to plan and gather leveled resources, opportunities to collaborate with colleagues, and PD to learn DI strategies. Data also revealed that participants had different levels of preservice, in-service, and graduate training in DI for content literacy. Participants often gained their knowledge through self-selected learning, including workshops, conferences, collaborating with colleagues, and independent study. In addition, the findings showed that study participants were at varying levels of perceived preparedness to differentiate instruction for content literacy in their classrooms. This PD project will provide resources on and examples of differentiated instruction practices, as well as opportunities for planning, collaboration, and independent study, through three daylong workshops. These workshops will be supported through the creation of a DI website and an optional professional learning

community. The goals for the project emerged from an analysis of the data and the larger body of literature on DI.

Differentiating Instruction

The initial goal for this project is to ensure teachers have an understanding of what differentiated instruction is, and is not. In a brief introduction to the PD, teachers will examine what differentiated instruction means to them. They will discuss the formal definition of DI (Tomlinson, 1999), discuss what it is and is not, and explore how district and state expectations for differentiated instruction apply to them. As data from this study indicated participants had varying levels of training and perceived preparedness, additional resources will be available for them to learn more about differentiated instruction beyond this brief introduction. The DI website, and optional PLC, will allow teachers to explore DI independently, collaboratively, or both, whichever best meets their personal learning profiles.

Differentiating for Readiness, Interest, and Learning Profiles

Data indicated that study participants wanted to be able to know their students on both a personal and academic level. They wanted to learn how to best meet the academic needs of students with reading ability levels ranging from kindergarten to Grade 11. They wanted to be able to effectively access their students' levels of prior knowledge. Study data also found that participants wanted to work with special education staff to better understand the needs of their educationally exceptional students. In addition, identifying, and differentiating for, student readiness is an integral part of district literacy goals. As a result, one of the goals of this project is to provide teachers with information on how to

differentiate instruction for students' readiness, interests, and learning profiles. Opportunities for data analysis and collaboration with special educators will help staff to meet this goal.

Differentiating for Content

Study participants wanted to be able to readily access leveled resources for their students. Therefore, another goal for this project is to provide information on differentiating for content. Teachers will learn how to find students' best reading levels and examine varied text and resource materials, and varied support systems, including assistive technology. They will learn how to find leveled texts, both in the library media center and online. Also, as many content area teachers have one textbook for all levels of learners, examples of varied support systems for grade-level texts will be provided. The building's library media specialist, reading specialist, and occupational therapist will assist in these learning opportunities.

Differentiating for Process

This study revealed that teachers wanted to learn more differentiated strategies and activities to incorporate in their classrooms. Therefore this project will provide teachers with activities and strategies to help them differentiate for process. In addition, study participants indicated they liked seeing examples of others' lessons and ideas. This project will include examples of strategies to differentiate for process in different content areas. Teachers will have the opportunity to implement these strategies and share their experiences with their peers.

Flexible Grouping

This study also found that teachers wanted to be better able to group students for success. Flexible grouping has been identified by Tomlinson (1999) as one of the key principles of differentiated instruction. Grouping students according to readiness, interest, or learning profile can help teachers differentiate for content, process, and product. Therefore, this project will help teachers learn how to flexibly group students for success. Teachers will examine and experiment with grouping strategies, and share examples from their classroom practices.

Differentiating for Products

Data indicated that study participants wanted to allow students to show their learning in a variety of ways. Therefore, this project will provide teachers with strategies to differentiate for products. This project will show teachers what it means to differentiate for products. Examples of differentiated products will be provided, including lists of potential products. Teachers will also learn about and discuss effective product design.

Additional Learning Opportunities

In addition to the topics, above, the DI website and optional PLC meetings will provide teachers with the following opportunities: sharing of DI resources, activities, ideas, and materials; independent study; additional planning between grade-level teachers or among content area teachers; further analysis of student data; analysis of student work; peer evaluation of differentiated activities, lesson plans, or units; and planning for and reflecting on peer observations of differentiated lessons. Such opportunities for additional

learning and collaboration could enhance, improve and sustain the DI practices of those educators currently implementing them.

Rationale

Southland School District's literacy goals and its *Student Servicing Handbook* (2013) contain expectations that teachers differentiate their instruction to meet students' needs. Expectations for differentiated instruction extend beyond the district's borders to the state level as well. Wisconsin's recent implementation of a statewide teacher evaluation process, Educator Effectiveness (EE), is based on Charlotte Danielson's 2014 Framework for Teaching, which emphasizes differentiated instruction (WI DPI, 2016). Differentiated instruction is an indicator or "look-for" in both the planning and preparation, and instruction domains of EE (WI DPI, 2016, p. 24). Evaluators look for differentiated instruction during their classroom observations and as a component of other evidence gathered as part of the EE process. Observations and other evidence are scored numerically. The resulting teacher practice score and the student learning outcomes (SLOs) score are graphed as coordinate pairs and reported to the state. Although educator effectiveness scores are not subject to disclosure under state public records law, they may be used in human resources and compensation decisions.

Despite recent district and statewide expectations that teachers differentiate their instruction, data from this study revealed that there had been no significant PD in differentiation at Southland in the past 10 years. Data also indicated that teachers at the site had differing levels of preservice or graduate training in DI. Most study participants felt their college or university training in DI was minimal. Only one participant found her

preservice DI training to be "sufficient." Study data also found that participants perceived themselves to be at varying levels of efficacy when differentiating instruction for struggling readers in their classrooms, from "above average" to "underprepared." Research has found that teachers with more hours of PD in DI felt more prepared to differentiate instruction (Dixon et al., 2014). Additionally, studies have shown that PD that is differentiated and incorporates a variety of learning opportunities, from job-embedded trainings to PLCs, has a significant effect on teacher practices in DI (Dixon et al., 2014; Kappler Hewitt & Weckstein, 2012; TNTP, 2015).

Study findings, combined with the larger body of literature on DI, provided the framework for three daylong workshops. Study results revealed the participants, content area teachers at SMS, needed more time to plan and gather leveled resources. The data also highlighted participants' desire to collaborate with colleagues as they worked to differentiate for content literacy. Finally, participants wanted to learn more about differentiation and DI strategies to meet the literacy needs of their students. The workshops will provide teachers with collaborative opportunities to: better understand their students' literacy needs; readily access and provide resources to meet students' literacy needs; acquire and implement strategies to differentiate for content, process, and product; and flexibly group students for success. The workshops themselves will be differentiated to address participants' levels of readiness, interests, and learning profiles. SMS content area teachers will be able to sign up for the proposed three workshop series as part of the district's scheduled PD. Workshops will be held during scheduled PD days occurring at the start of each of the first three quarters. These workshops, outlined in

Appendix A, will be supported by a DI website. An optional PLC will give workshop participants additional opportunities to deepen and extend the learning experiences of the workshops.

Review of the Literature

To identify successful research-based PD practices, I conducted a broad search of electronic databases in the Walden Library, including ERIC, Education Research Complete, and SAGE Journals. Boolean searches for recent full-text, peer reviewed journal articles and research studies were conducted until saturation was reached using the following search terms: *professional development*, *PD*, *differentiated instruction*, *DI*, *collaboration*, *teaming*, *online*, *web*, *website*, *professional learning communities*, and *PLCs*. Citations referenced in these articles and studies contributed to the list of sources. Google and Google Scholar also provided access to reports and articles referenced in this review of literature. The criteria for this project were based on current research in PD, including the use of workshops, websites, and PLCs.

Professional Development

Differentiating instruction is a mandatory part of tier 1 RTI in the district's *MLSS Student Servicing Handbook* (2013), and is an integral component of Danielson's (2014) Framework for Teaching used by the state of Wisconsin for teacher evaluation, yet participant data revealed there had been no PD in DI at SMS for at least ten years. Furthermore, the data in this study indicated the majority of participants' wanted additional PD in differentiation strategies. Research has found PD should be aligned with school and district goals (DeMonte, 2013). Given Southland School District's mandate

for DI in core classes and goal to increase the percentage of students scoring proficient or above on the state reading test by 2018 ([redacted], 2013, p. 15), the state's current evaluation model, and study participants' desire for PD in DI, the need for PD in differentiating instruction for content literacy at SMS is clear.

Although PD in DI at SMS is both wanted and warranted, a recent study of teacher PD by The New Teacher Project (2015) presented startling statistics that should be taken into consideration. The study surveyed more than 10,000 teachers and 500 school leaders, and interviewed more than 100 staff members in three large, geographically diverse school districts and one charter school network. The New Teacher Project looked at teacher evaluation ratings, and found that "substantial improvement seems especially difficult to achieve after a teacher's first few years in the classroom; the difference in performance between an average first-year teacher and an average fifth-year teacher was more than nine times the difference between an average fifth-year teacher and an average twentieth-year teacher" (p. 2). The study also found that when teachers did improve, that improvement was not significantly linked to any specific PD strategy. Data indicated that the effect of PD strategies on teacher evaluation ratings seems to be "the equivalent of a coin flip: some teachers will get better, and about the same number won't" (TNTP, 2015, p. 22). The "exception to the rule" in this study occurred within the charter school network discussed below (TNPT, 2015, p. 30).

The New Teacher Project (2015) study found that teachers in charter network schools had a growth rate of more than four times the district with the next highest growth rate. Student test scores in math and reading were also higher at charter network

schools. Several differences were identified between the charter network and the other, less successful districts in the study. These factors will be incorporated in this project. First, "teacher support efforts occur at the school site" rather than the central office (TNPT, 2015, p. 31). The primary component of this project, the workshops, will be teacher-led and driven by research conducted at the site, as will the supporting website and optional PLC. Second, The New Teacher Project study also found that teachers in the charter school networks felt they still had "room to improve" (p. 32). If participants' perceptions at SMS are indicative of the rest of the teaching staff, it bodes well for their ability to grow professionally; they all expressed a desire to improve their classroom practices, and most stated a desire to improve practices in differentiated instruction for content literacy. A third difference between the successful charter network and the other districts identified in The New Teacher Project study was that they focused on "practicing new skills or reflecting on changes to be made next, and preparing for their upcoming units" (p. 32).

Given these findings, the workshops for this project will include time for preparation, practice, and reflection on DI skills. The website will extend the scope of the project by providing a place for participants to access and share DI resources, collaborate between workshops, and plan optional PLC meetings. Additionally, the PLC meetings will provide an opportunity for participants to collaborate with their peers as they work to enhance and extend what they learned through the workshops.

Professional Development and Workshops

Results from this study found that most participants wanted PD in DI for content literacy. Study participants reported attending workshops and graduate classes for their professional development. Research indicates that workshop-style PD and university courses are not consistently linked to changes in practice, however (Odden, 2011; Parise & Spillane, 2010). Gulamhussein (2013) revealed that PD with less than 14 hours, "like the one-shot workshops commonly held in schools," yielded no effect on student achievement (p. 10). Yoon et al. (2007) (as cited in Gulamhussein) conducted an analysis of 1,300 studies relating to PD which found only lengthy, intensive programs affected student achievement. This does not mean workshop-style PD is inherently bad. The same comprehensive analysis found "all of the studies that showed a positive relationship between professional development and improvements in student learning involved workshops or summer institutes" (Guskey & Yoon, 2009, p. 496). A factor that made these workshops or institutes successful was that "virtually all" of them incorporated "structured and sustained follow-up" (Guskey & Yoon, 2009, p. 497). Additionally, recent research found that teachers with more hours of PD in DI felt more prepared to differentiate instruction (Dixon et al., 2014).

As a result of these findings, and in alignment with Walden project study guidelines, three daylong workshops totaling 21 hours of professional development are the foundation of this project. The daylong workshops will present teachers with information about, and strategies for differentiation for content literacy, and provide them with time to collaborate and plan differentiated lessons. The inclusion of planning time in

the workshops will address the needs of study participants who, like their counterparts in current research (Tomlinson & Imbeau, 2012), felt they lacked the time to effectively plan for, implement and sustain DI for content literacy in their classrooms. As the workshops will occur at quarterly intervals, teachers will have time to apply their new knowledge through changes in practice. Additionally, the workshops will incorporate time for follow up, as they will include activities to help teachers reflect on the efficacy of their DI implementation.

It should be noted that all participants in this study expressed positive feelings about recent building-level literacy workshops facilitated by the SMS reading specialist. This high level of participant support for in house teacher-led workshops is consistent with findings from a recent study that indicated teachers were "more likely to embrace the leadership of their peers than they are to embrace administrative directives" (Kappler Hewitt & Weckstein, 2012, p. 39). In discussing the role teachers play in the process of educational change, Hargreaves and Fullan (2012) wrote, "Successful and sustainable improvement can…never be done *to, or even for* teachers. It can only ever be achieved *by and with* them" (p. 45). The workshops created for this project stemmed from study participants' desires for PD in DI, time to plan and gather leveled resources, and opportunities for collaboration. Study data was collected from participants who represented all core content areas and grade levels at SMS. As a fellow content area teacher at SMS, I believe the data-driven workshops developed for this project study have strong potential to be embraced by my fellow teachers and lead to positive educational change.

Although in-house teacher-led workshops tend to be well received and have the capacity to affect educational change, administrative expectations may be necessary for implementation to occur (Kappler Hewitt & Weckstein, 2012; TNPT, 2015; Tomlinson, 1999). To describe this phenomenon, Tomlinson has noted that teachers either change their practice "because they see the light or because they feel the heat" (p. 114). Building administrators have the capacity to provide both the light and the heat necessary to affect a change in practice (Tomlinson, 1999). Therefore, I plan to share the findings of my study with my building administrator to garner his support for the workshops. Administrative support will ensure the workshops' placement on the PD schedule and encourage content area teachers' participation.

Professional Development and the World Wide Web

Web-based learning communities have become a recent phenomenon in education (Gray & Smyth, 2012; Hardman, 2012; King, 2011; McConnell, Parker, Eberhardt, Koehler, & Lundeberg, 2013; Sweet & Blythe, 2012). Research has found "there is considerable potential for online learning communities to support professional learning for teachers within schools" (Mackey & Evans, 2011). As a new teacher, Satterfield (2014) discussed the "comfort and inspiration" she found as part of what she called "an endless professional learning community" (p. 478). In fact, all teachers "facing enduring isolation" behind closed classroom doors could benefit from the online dialogue and connection with colleagues that could occur in a virtual environment (King, 2011, p. 44). The creation of such an environment could help ameliorate the feelings expressed by one participant in this study, who stated he had "nobody, honestly, to bounce things off."

Although research has found benefit in online or virtual learning environments, studies have found that participants and facilitators prefer face-to-face meetings (Mackey & Evans, 2011; McConnell et al., 2013). However, McConnell et al. found that even "weak online ties offer valuable learning opportunities" that can facilitate "the strong links teachers often have within their school communities" (p. 13). To create a website that would best meet the needs of SMS staff I will incorporate tools and online features suggested by recent research, discussed below (Gray & Smyth, 2012; Sweet & Blythe, 2012; Trust, 2012).

Recent research supports the use of websites as a component of teacher PD. Gray and Smyth (2012) used a survey and in depth interviews to evaluate the Edinburgh Napier Education Exchange (ENEE), a collaborative website for educators. Participants were asked what features of the ENEE website they used most. The top uses of the website included: reading and contributing to discussions, keeping up to date on teaching and learning activities, providing a shared collaborative space for groups, and sharing education resources (Gray & Smyth, 2012, p. 65). Sweet and Blythe's (2012) study found that having a website to serve as a "repository for important documents" was beneficial to educators (p. 17). Trust's (2012) study of online professional learning networks found that teachers use them "to share information, connect with other members, find resources, solicit ideas, and obtain feedback or help" (p. 137). As a result of the findings from these studies, the website developed for this project study will include: resources on DI, a place for document sharing, a format for discussion and comments, an announcements page, a directory of participants, and a calendar.

It should be noted that although all participants in this study wanted more opportunities for collaboration, one indicated she also liked learning through independent reading. Additionally, participants had different levels of training and felt varying degrees of efficacy in regards to their abilities to differentiate for content literacy. Therefore, the website will include DI resources and articles for workshop and PLC participants to access independently, at varying levels of preparedness, from those beginning to implement DI strategies and concepts to those who are looking to improve and sustain their practice.

Professional Development and Professional Learning Communities

Research has commonly traced the roots of professional learning communities, or PLCs, to Lave and Wenger's (1991) theory of communities of practice (Borg, 2012; Caskey & Carpenter, 2012; Levine, 2010; Lippy & Zamora 2012; Owen, 2014). Wenger (2006) described communities of practice, "in a nutshell," as: "groups of people who share a concern or passion for something they do and learn how to do it better as they interact regularly" (para. 3). Since the turn of this century, schools and school districts, including Southland and SMS, have adopted DuFour and Eaker's (1998) model for PLC development (Blanton & Perez, 2011; Johnson & Smith, 2011). DuFour, DuFour, and Eaker (2008) have defined PLCs as:

> educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve. Professional learning communities operate under the assumption that

> the key to improved learning for students is continuous, job-embedded learning for educators. (p. 14)

As the focus of professional learning communities is "*learning*…not *teaching*," DuFour et al. (2008) advocate for improved student learning by investing in the ongoing learning of teachers (p. 19). The optional PLC will provide participants with the opportunity to extend and deepen the learning experiences of the workshops. I will facilitate the PLC to ensure it includes topics of study and investigation that will address participants' needs.

Recent research has found that PLCs have the potential to positively affect teachers' perceptions of their practice (Borg, 2012; Owen, 2014; Parise & Spillane, 2010; Richmond & Manokore, 2011). PLCs have also been linked to improved student learning (Blanton & Perez, 2011; Owen, 2014), including students with special educational needs (Huberman, Navo, & Parrish, 2012). Additionally, the data from this study indicated that participants wanted more opportunities to collaborate as they work to differentiate instruction for content literacy. The potential for PLCs to positively affect teachers' perceptions of efficacy, improve student learning, and meet the needs of teachers at SMS points to the possibility of their use as a means to enhance the PD workshops for those who want more opportunities for collaboration as they work to differentiate their instruction for content literacy.

Conclusion

In conclusion, the project—three daylong professional development workshops on differentiated instruction for content literacy supported by a website and an optional

professional learning community—serves to meet the needs identified by participants in this study. Participants stated they needed more time to be able to plan, find resources, learn strategies, and collaborate with colleagues to address the differentiated literacy needs of their students. Scheduling the project's DI workshops during times already allocated for PD in the building will help meet these needs while adding no additional time to teachers' schedules. The website will serve to support teachers' learning and collaboration in a virtual environment. The optional PLC will provide additional opportunities for participants who wish to extend and deepen the learning experiences of the workshops through face-to-face interactions.

Project Description

The research-based project developed as a result of the findings of this study is outlined, below. In the following sections, I will discuss factors that could affect the implementation of the project, including: resources and supports needed to make the project successful; barriers that could hinder implementation, and potential solutions to these barriers; a proposal for implementation, including a timetable; and the roles and responsibilities of the student and others.

The project (Appendix A) provides ongoing PD on DI for content literacy through the creation of three daylong workshops supported by a website and an optional PLC. Appendix A includes: daily outlines of workshop purposes, goals, outcomes and objectives; daily timelines with workshop components, activities, and strategies; outlines of the workshop slide presentations with presenter notes and references; formative and summative workshop evaluations; and handouts. The project also includes a DI website.

Website information found in Appendix A includes: the website's purpose, goals, outcomes, and objectives; website resources by topic; screen shots from the website to illustrate its format and contents; and a bibliographic list of website resources. Workshop participants will be able to upload or link DI resources they have found useful, or those they discover as a result of further inquiry. Appendix A also includes the purpose, goals, outcomes and objectives for the DI PLC, an outline of potential DI PLC opportunities, a meeting log template, and sample meeting logs for setting norms and developing SMART goals. The meeting log template is based on the PLC Meeting Log currently in use at SMS and Solution Tree's (2006) Team Feedback Sheet. A summative DI PLC and website evaluation is the final item found in Appendix A. I will serve as the workshop presenter, PLC facilitator, and web master.

Potential Resources and Existing Supports

Research has found that staff is "more likely to embrace" teacher-led, in-house professional development (Kappler Hewitt & Weckstein, 2012, p. 39). Therefore, in addition to being facilitated by myself, a teacher, other building staff would also contribute resources and supports to this project. Teachers and specialists whose expertise and skills may benefit this project include: special education teachers, the reading specialist, the library media specialist, and the occupational therapist.

The data for this study found that participants wanted to talk with special education staff about how to best meet the literacy needs of students with special needs. Therefore, I will invite special educator participants to share individualized education plan (IEP) information with grade level teams as part of the first day's workshop. The

data also identified the reading specialist as a valuable resource—someone with "a strong background in reading and how to differentiate." As a result, I will request that she consider sharing information on understanding and using students' reading scores to plan instruction as part of the second workshop. Additionally, findings indicated that participants wanted help finding leveled resources, or classroom materials at a variety of reading levels, including non-fiction. Two study participants stated they did not even have textbooks and were finding and creating all their materials on their own. Since the library media specialist is trained in finding and acquiring leveled materials, I will request that she consider sharing information on this topic at the second workshop. I will extend an invitation to the occupational therapist to share information about the assistive technology available to struggling readers at the second workshop as well. Finally, study participants all stated they liked PD that incorporated work samples from their colleagues. Therefore, the third daylong workshop will include teacher created examples on how to differentiate for process and products to improve content literacy—both from their peers in the building as well as those on the web.

District administration has already provided the number one resource identified by study participants for successful DI implementation, time. Professional development days are scheduled quarterly. In addition, a minimum of two hours per month have been set aside for building-level collaboration. Administration has expressed the expectation that this collaboration will occur within PLCs. Ongoing support for the ideas and concepts introduced in the workshops will be provided to those who choose to use their

collaboration time as participants in the DI PLC. “District-supported” PLCs have been found to improve students’ reading levels (D’Ardenne et al., 2013, p. 143).

In addition to support at the district level, this project will benefit from the support of the building principal. Although teacher-led PD has the capacity to affect educational change, administrative expectations may be necessary for change to take place (Kappler Hewitt & Weckstein, 2012; TNPT, 2015; Tomlinson, 1999). As a result, I plan to share my findings with my principal to garner his assistance in getting the workshops on the PD schedule. I anticipate the data will prompt him to encourage SMS content area teachers to attend the workshops. Additionally, as school leaders have been found to have a positive impact on staff developing professional learning communities, I hope he will encourage teacher participation in the optional DI PLC as well (Lunenburg, 2010; Richmond & Manokore, 2011).

The district will need to provide the site for the workshops and PLC meetings. The ideal locations for the workshops would be the resource room and the library media center (LMC) at SMS. The resource room is a large open space with projection capabilities and round tables that are conducive for group discussions. The LMC would provide ample computer access, copying, and projection capabilities. Due to the availability of this technology, the LMC would be a good location for the DI PLC as well. The library proper is a large open space where PLC participants could break off into small groups for study, discussion, or collaboration in content or grade level groups. The conference room, also in the LMC, could provide a quiet space for smaller groups.

Finally, the district's Google account was used to create the workshop slide presentations and the website for this project. All staff has the ability to use their district-supplied Google accounts for educational purposes, including PD. All Southland staff will be able to view and access resources on the website. SMS workshop attendees and PLC participants will be granted editing rights to the website, allowing them to upload resources as well.

Potential Barriers and Solutions

Findings from this study identified two interconnected barriers to DI implementation not directly addressed by this project. Most participants felt class sizes were too large, with 25–28 students, to effectively differentiate for content literacy. Additionally, data indicated that some participants believed having another adult in the classroom was necessary for them to be able to meet the students' needs due large class sizes and total student loads of 140–150. In fact, research has found that many teachers consider class size to be a barrier to differentiation (Tomlinson & Imbeau, 2012). Tomlinson and Imbeau suggest that large class sizes are a reason for the implementation of DI, however. They state that although lower teacher-student ratios have been found to be beneficial, "research indicates teachers typically do not differentiate more when class sizes are reduced" (Tomlinson & Imbeau, 2012, para. 12). In fact, research has found that when teachers take incremental steps toward meeting their students' needs through differentiation, they "learn to be more responsive to the students they teach, and positive student outcomes encourage continued teacher development" (Tomlinson & Imbeau, 2012, para. 23). This project—three daylong workshops spread out over three quarters

and supported by a website and an optional PLC—will serve to provide instructional resources and support for SMS teachers as they take these incremental steps toward differentiating for content literacy with fidelity.

Proposal for Implementation and Timetable

The plan is for the project to be formally launched at the start of the 2016–2017 school year. I plan to share relevant data with the building's principal, special education teachers, reading specialist, library media specialist, occupational therapist, and other content area teachers to encourage their support of the project. The daylong workshops will be held on the building-wide PD days during the first three quarters of the 2016–2017 school year. I anticipate the principal's support in encouraging participation in the workshops and the optional PLC. Participants will have the option to attend the PLC twice each month during collaboration time set aside by the district. The DI website will be maintained and updated regularly by the web master. Workshop and PLC participants will be encouraged to contribute to website resources and participate in online discussions. The DI website and PLC will continue as long as participants find value in them.

Roles and Responsibilities of Student and Others

My role will be to serve as the workshop presenter, facilitator of the optional PLC, and web master of the DI website. As the creator of the workshops, it was my job to ensure they met the needs identified by study participants at the site: time to plan and gather leveled resources, opportunities to collaborate with colleagues, and professional development to learn DI strategies. Additional building staff will also support and lend

their expertise to the workshops, including: special education teachers, the reading specialist, the library media specialist, the occupational therapist, and other content area teachers. As stated earlier, the principal will also play a vital role in both supporting and expecting educational change as a result of this project (Kappler Hewitt & Weckstein, 2012; Richmond & Manokore, 2011; TNPT, 2015; Tomlinson, 1999).

Teachers who choose to participate in the PLC will collaborate with their peers to develop a school culture supporting pedagogical norms of scholarly research and instructional practice. Participants in successful PLCs create "norms that will make their collective experience more satisfying and fulfilling, and then they commit to acting in accordance with those norms" (DuFour, DuFour, & Eaker, 2008, p. 284). As the facilitator of the PLC, I will have to make sure the topics of study and investigation for the meetings address participants' needs.

Both workshop and PLC participants at SMS will be able to access and add to the resources on the DI website. The website will also provide a virtual space for teachers participate in discussions on differentiating instruction for content literacy. As web master, I will be responsible for maintaining the site and ensuring links and resources are reviewed and updated.

Project Evaluation

The Program Evaluation Standards published by the Joint Committee for Educational Evaluation have described evaluation as the "systematic investigation of…worth or merit" (Yarbrough, Shulha, Hopson, & Caruthers, 2011, p. xxiv). In the field of education, the evaluation of professional development generally takes the form of

a one-time post PD assessment, rather than a meaningful investigation of the PD's value or effectiveness (Dean, Tait, & Kim, 2012, pp. 146-147). To incorporate such a meaningful investigation, research states that evaluation must be a part of "all the stages of the professional development process" (Muñoz, Guskey, & Aberli, 2009, p. 79). Therefore, this professional development project will incorporate both formative and summative evaluation processes. The teachers participating in the professional development will be the main stakeholders in the evaluation process. Just as study participants' needs determined the goals for the project's workshops, workshop participants' needs will drive the goals for the PLC, and ultimately determine whether it continues past its initial year.

Formative Evaluation

Program Evaluation Standard U6 states that "evaluations should construct activities, descriptions, and judgments in ways that encourage participants to rediscover, reinterpret, or revise their understandings and behaviors" (Yarbrough et al., 2011, p. 3). Formative evaluations will play an integral role in identifying the needs of workshop participants and helping them address those needs in a systematic way. Activities conducted during the workshops and exit slips completed after the first two workshops will help inform the goals for the subsequent workshops, the content of the website, and the topics for the optional PLC meetings. PLC Participants will collectively create goals using a SMART goal-setting plan (Mattos, 2007). This plan will inform the addition of web resources and drive future learning within the PLC; it can be revisited and revised to meet the needs of the participants.

Research indicates that "school improvement initiatives" must "engage in deeper reflection about the nature of action and practices in schools, specifically those practices that pertain to professional learning and teacher agency" (Riveros, Newton, & Burgess, 2012, p. 209). Opportunities for personal reflection will occur throughout the workshops and in PLCs through the use of a variety of protocols designed for text or article analysis and problem or issue solving. Links to these protocols and planning tools are found in Appendix A. Additionally, PLC participants will engage in "group agenda planning," a process to help them reflect on their collaborative work or learning to determine next steps for the group (Allen-Spann & Bambino, n.d.). At the conclusion of each meeting, PLC participants will reflect on how well the meeting's topics met their goals and voice any questions or concerns they may have. This reflection process, based on Solution Tree's (2006) Team Feedback Sheet, is incorporated into the DI PLC Meeting Log Template (Appendix A). Reflections from this feedback can be used for future agenda planning.

Summative Evaluation

Guskey's (2000) theoretical framework for evaluating teacher professional development has been utilized and cited in in a number of recent research studies (Dean, et al., 2012; Doherty, 2011; Lau & Yuen, 2013; Ringler, O'Neal, Rawls, & Cumiskey, 2013). According to Guskey (2002), effective evaluation of professional development involves the collection and analysis of five levels of information, each one building upon the other (p. 46). Guskey (2002) has also asserted, "because each level builds on those that come before, success at one level is usually necessary for success at higher levels"

(p. 46). Guskey's (2002) five levels of professional development evaluation are found in Appendix E. Additionally, Guskey (2000) has stated, "teachers almost always gain better results the second year of implementation (of new instructional procedures) than they do the first" and that "in the second year, efforts are typically more refined and efficient" (p. 10). As a result, the summative evaluations for this yearlong professional development experience will focus on the first two of Guskey's five levels—participant's reactions and participant's learning—to determine whether the PD provided the necessary resources and supports for participants to put what they learned into practice (Doherty, 2011).

The Final DI Workshop Evaluation (Appendix A) is based on Doherty's (2011) post-workshop evaluation (p. 389). This evaluation includes Likert-style prompts that illicit teachers' levels of agreement to statements about the workshop itself, as well as their own learning. Prompts include statements regarding the level to which workshop materials, facilitators, discussions, activities, and the physical environment contributed to participants' learning. Statements also ask participants the level to which they believe they could now flexibly group students for success, and differentiate for: readiness, interest, and learning profile; content; process; and products. The evaluation concludes with several statements regarding overall satisfaction, including the extent to which the workshop helped deepen participants' understanding of DI for content literacy.

The DI PLC and Website Survey (Appendix A) is based on a survey by Linder, Post, and Calabrese (2012, p. 22). It includes Likert-style questions designed to illicit teachers' reactions relating to the level of value they place on the different components of the DI PLC and website. These components include: reading, discussing, and analyzing

articles or book chapters on DI; selecting, receiving, and sharing new materials on DI; sharing, discussing, and analyzing the results of implementing DI activities and lessons; analyzing student data and work; collaborative learning and planning; participating in peer observations; and using the website and its resources. The survey includes an area for participants to add comments to support their rating for each of these components. The survey also includes several open-ended questions, which ask participants what they found most beneficial, what they would improve, and whether they would like to see the website and PLC continue the following year.

Conclusion

This project was designed to provide the major supports study participants needed to be able to differentiate instruction with fidelity through a series of workshops, supported by a website and an optional PLC. The overall goals of this project are to provide resources on and examples of differentiated instruction practices, as well as opportunities for collaboration as teachers learn about, plan for, implement, and reflect on DI. The use of formative evaluations—in the form of exit slips, group goal setting and planning, and individual and group reflections—will ensure goals are aligned with content area teachers' needs. The summative evaluations will identify the degree to which content area teachers valued the various aspects of the professional development, as well as evaluate the effectiveness of their learning experience. The summative evaluation will also provide teachers an opportunity to reflect on their experiences and their learning.

The future of the DI PLC and website will be determined by the results of the summative evaluation. Should the results indicate participants want the PLC and website to continue for another year, additional organizational support would be necessary (Guskey, 2002). Success at the third of Guskey's (2002) five levels of professional development, "organization support and change," relies on "the organization's advocacy, support, accommodation, facilitation, and recognition" (pp. 47-48). Such organizational change would require "public and overt" support, the availability of "sufficient resources," and the organization's recognition and sharing of the PLC's and website's successes (Guskey, 2002, p. 48). As the facilitator of the DI PLC and website, I would need to garner the administrative support necessary for this organizational change. To do so, I would need to share evaluation data with administration that would indicate participants not only valued the PD process but also that learning had occurred as result. Once organizational support is provided, then work toward Guskey's fourth and fifth levels of evaluation could occur. These levels include evaluation of the "degree and quality of implementation" of participants' "new knowledge and skills," and "student learning outcomes" (Guskey, 2002, p. 48). This process would be a reiterative one that could sustain the DI PLC and website indefinitely as existing and new participants work toward extending and enhancing their differentiated instruction practices to meet their students' needs.

Implications Including Social Change

Local Community

This project addresses the needs of the learners in the local community by supporting their teachers via three daylong workshops on differentiated instruction for content literacy held at the beginning of each of the first three quarters of the school year. The information presented at these workshops will be enhanced and supported by a website where teachers can access and share DI resources and ideas and a PLC focused on DI. The project will affect students by improving teachers' instructional practices in differentiation for content literacy through workshops supported by online and optional face-to-face and learning. As the workshops and PLC meetings will occur within the school, during contract hours, administrators will also reap the benefits of improvements in teaching and student learning at no additional cost to the district. The website will allow teachers to access and contribute to differentiation resources freely and at any time of the day or night. Additionally, as teachers and students experience success through increased and more effective differentiated instruction, families and the larger community will also benefit.

Far-Reaching

This project has the potential to positively affect teachers, and their students, across the country. Teacher-led professional development that is sustained and incorporates structured follow-up, like that found in the DI workshops, has been linked to both teacher growth and student learning (Guskey & Yoon, 2009; TNPT, 2015). Recent research has found that PLCs have the potential to positively impact teachers' perceptions

of their practice (Borg, 2012; Owen, 2014; Parise & Spillane, 2010; Richmond & Manokore, 2011). PLCs have also been linked to improved student learning (Blanton & Perez, 2011; Owen, 2014), including students with special educational needs (Huberman et al., 2012). The project, found in Appendix A, includes materials that could assist others wishing to conduct workshops on differentiated instruction for content literacy, design a DI website, or start a DI PLC. Materials include: workshop purposes, goals, outcomes, and objectives; workshop icebreakers; workshop timelines, components, activities, and strategies; workshop presentation outlines with presenter notes and references; formative and summative workshop evaluations; workshop handouts; the purpose, goals, outcomes, and objectives for the DI PLC; an outline of DI PLC opportunities; DI PLC meeting log templates; the purpose, goals, outcomes, and objectives for the DI website; DI website resources by topic; DI website screen shots; a bibliographic list of references for the DI website; and a summative evaluation for the DI PLC and DI website. Using these materials, the project could be replicated and applied by teachers in other districts, states, or countries to help them develop their own workshops, websites and/or PLCs focused on DI.

Conclusion

The goal of this project is to provide teachers with resources on and examples of differentiated instruction practices, as well as opportunities for collaboration, as they learn about, plan for, implement, and reflect on DI. To meet this goal, this project provides PD that includes three daylong workshops, a website, and an optional PLC. Studies have found sustained PD that incorporates collaboration and follow-up can

improve both teaching and student learning (D'Ardenne et al., 2013; DeMonte, 2013; Gulamhussein, 2013; Guskey & Yoon, 2009). A recent study also found that teacher development that incorporates the practice of new skills, regular feedback, and collaborative planning and reflection improves teacher performance (TNTP, 2015). Additionally, studies have found that teachers prefer their own learning to be differentiated (Gulamhussein, 2013; Kappler Hewitt & Weckstein, 2012; TNTP, 2015). By providing PD on DI through a series of workshops supported by a PLC and website, my project will help teachers better meet the literacy and learning needs of their students.

Section 4 includes a reflection on the project. This reflection addresses the project's strengths, limitations, and potential impact for social change. This final section also incorporates several self-analyses, as well as implications, applications, and directions for future research as they relate to the project.

Section 4: Reflections and Conclusions

Introduction

As a response to below-grade-level literacy scores for multiple subgroups of students on state reading assessments, Southland School District and SMS expect that teachers will differentiate instruction in their content area classrooms as part of the universal tier of the RTI process. The purpose of this project study was to explore middle school content area teachers' understanding and implementation of differentiation for content literacy to identify what they know, do, and need to effectively implement or sustain DI in their classrooms. The findings from this study indicated SMS teachers' levels of training in and implementation of DI vary. Findings also revealed that although all participants were implementing DI for content literacy to some extent, most were still doing much one-size-fits-all instruction. Data identified a number of supports participants needed to differentiate for content literacy with fidelity: time to plan and gather resources, opportunities to collaborate with colleagues, and professional development to learn strategies. The focus of this project was to provide these supports through the development of three daylong workshops, the construction of a website, and the creation of an optional PLC focused on DI.

Section 4 discusses the strengths and limitations of the project, as well as recommendations for alternate approaches. This section also includes self-reflections and analyses on scholarship, leadership, and my role as both a practitioner and a project developer. The section concludes with a discussion of the project's potential to affect social change, its applications, and implications for future research.

Project Strengths

This project has a number of strengths. Research has found that high-quality PD should be aligned with school and district goals (DeMonte, 2013). Therefore, this project is aligned with the school and district goals of attaining a 20% increase in the number of students scoring proficient or above on the state reading test by 2018 through a "focus on highly effective instruction," ([redacted], 2013, p. 15). This focus carries with it an expectation that content area teachers "provide students with the additional or differentiated instruction and time needed to meet learning targets" ([redacted], 2013, p. 12).

Teachers with more hours of professional development in DI feel more prepared to differentiate instruction in their classrooms (Dixon et al., 2014). In addition, PD longer than 14 hours has the potential to positively affect student achievement (Gulamhussein, 2013). The project centers on three daylong workshops on differentiating instruction for content literacy, totaling 18 hours of professional development spread through the first three quarters of the school year. Workshop participants will have unlimited opportunities for learning, sharing, and discussing via the DI website. An optional 18 hours of contracted time could be used to extend and deepen the learning experiences of the workshop through a PLC, should participants choose to do so. Sustained PD that incorporates collaboration and follow-up has been found to improve both teaching and student learning (D'Ardenne et al., 2013; DeMonte, 2013; Gulamhussein, 2013; Guskey & Yoon, 2009). The project is sustained, collaborative, and provides participants opportunities for both feedback and follow-up.

This research-based project is designed to provide the supports study participants identified as necessary to implement DI with fidelity: time to plan and gather resources, opportunities to collaborate with colleagues, and strategies to help them differentiate instruction to meet the literacy needs of their students. The workshops and optional PLC meetings will occur during contracted time for PD and collaboration already scheduled on the district calendar. Teachers will not have any additional time commitments beyond those already expected by administration. In addition, as I am a teacher, and I have created and will facilitate the workshops, research indicates SMS staff will likely support them (Kappler Hewitt & Weckstein, 2012). Another benefit to this research-based professional development project being teacher-led and held during contracted hours is that it is no additional cost to the district (Odden, 2011).

Recommendations for Remediation of Limitations

The project also has limitations. Although the workshops and optional PLC meetings will likely include participants who teach the same grade level or subject area, due to the district's small size, each core teacher at SMS is the only person who teaches his or her content and curriculum. There is only one science, social studies, Spanish, and English language arts teacher per grade level, and one art, family and consumer education, and technology teacher at SMS. The only exception occurs in Grade 6, which has two reading language arts teachers who each teach half the students and share a curriculum. As a result, the majority of teachers will be creating lessons, units, and assessments exclusively for their own classes. Although the workshop and PLC formats will allow participants to collaborate and provide feedback to one another, they may still

have feelings of isolation as they work to differentiate instruction within their own curriculum.

An alternative approach could be to convene teachers from neighboring districts, so participants would have the ability to learn and collaborate with others who teach similar curricula (McConnell et al., 2013). This approach would be costly, due to travel expenses, and would likely occur outside the contracted day. Technology could provide a solution to these problems. Workshops could be shared virtually, either streamed live or recorded. Teachers in neighboring districts with similar demographics could be invited to create their own DI PLCs, using the resources found on the DI website. Interdistrict DI PLC participants could use the contacts page to find others who teach the same content, and connect with them via the website's discussion board, email, phone, or Skype. Free videoconferencing software such as Google Hangout could be used to connect participants to workshops, PLC groups, or individuals. Such virtual interactions have been found to provide social interactions that are similar to face-to-face meetings, without the time and cost involved in travelling to another district (McConnell et al., 2013). As a result, participation in interdistrict virtual learning experiences such as the workshops and DI PLC, and access to the DI website may help alleviate feelings of isolation participants may have as a result of being the sole teacher of a particular curriculum.

Scholarship

I learned a great deal about scholarship throughout the research and project development processes. I learned that although the field of education is focused on

research-based practices, there is a disconnect between what departments of education, districts, schools, and even teachers profess to do, and what actually happens when the classroom door closes. The gap between research and practice became evident as I began reading scholarly, peer-reviewed studies on DI. Not surprisingly, my study also found gaps between research-based DI practices and the teaching that occurs at SMS. Scholarly sources have found that DI is integral to improving students' learning and literacy. Departments of education, districts, and schools expect teachers to use this research-based method of instruction to help all students succeed. But studies, including this one, have shown that differentiating instruction is a difficult task, one not likely performed with fidelity without research-based supports. Therefore, I learned to use scholarly research studies to guide the development of a project designed to provide these supports.

Project Development and Evaluation

Prior to beginning the doctoral process, my experience with project development was limited to attending and designing one-shot professional development sessions, followed by brief, one-time post PD evaluations. Through the course of this project study, I learned the value of using peer-reviewed, scholarly sources, not only to build my own knowledge and support my research, but also in the process of project development and evaluation. I realized that the type of PD to which I was accustomed was ineffective in improving teacher practice and student learning. I learned that effective PD is a research-based response to a research-based need. As a result, all aspects of development and evaluation for this project were informed by research. Finally, I learned that project

development and evaluation, if done right, are joined in an iterative process that can lead to a PD experience that has the potential to affect educational change.

Leadership and Change

Throughout the project study process I came to realize that the political or administrative issuance of a mandate does not equate to meaningful educational change. Issuing mandates does not make one an educational leader, it makes one an issuer of mandates, one who wait for results. Educational leaders are those who actively affect the changes that cause those results to happen. In fact, teachers are more likely to follow the leadership of their colleagues than the mandates of their administrators (Kappler Hewitt & Weckstein, 2012). This is not to state that administrators play no leadership role in school improvement. Educational leaders, whether teachers or administrators, are those who create school cultures that support and promote student learning (Huff, 2011).

In researching my project, I learned that although teacher leaders play an integral role in affecting educational change, administrator support is vital (Richmond & Manokore, 2011). I learned that for educational change to occur as a result of PD, administration must provide teachers with support, in the form of public recognition as well as resources (Guskey, 2002). I also learned that administrative expectations must often be expressed for educational change to take place (TNPT, 2015; Tomlinson, 1999). Prior to beginning my research, this symbiotic relationship between teacher leaders and administration would have seemed improbable. Now, I know it is not only possible, but also necessary for the success of our students, our schools, and our society.

Analysis of Self as Scholar

Thanks to my love of reading, and subsequent ability to write well, I have always been successful in my educational endeavors. Despite family issues, I was able to graduate high school a semester early. I entered the workforce at age 18, where I held a steady job with a decent wage and benefits. While working full time, I started college when I was 25, earned my associate and bachelor's degrees with high honors, and was elected to the Phi Beta Kappa chapter at Beloit College. I began teaching, earned my master's degree in education and professional development through the University of Wisconsin, La Crosse, and garnered local, statewide, and national recognition in my profession. But it wasn't until I was well into my doctoral journey that I became a scholar.

Completing the coursework for my doctorate was challenging, especially while teaching full time, but I found that as long as I addressed the criteria outlined in the courses, I was able to earn full points. Once I began work on my proposal, I encountered something I hadn't before, the need to revise my work based on feedback. Feedback led to research, additions, review, reflection, and more revisions. In this recursive process, I submitted 65 drafts before my committee approved my proposal. As of this writing, I am on draft 87 of my study (and anticipate reaching 100). I have learned it is the process that makes a person a scholar, not their writing abilities or other isolated academic skills. Writing well does not make you a scholar. The ability to research, read, and properly reference scholarly sources does not make you a scholar. Collecting data, analyzing it, and reporting your findings does not make you a scholar. Even designing a research-

based project as a result of your findings does not make you a scholar. It is all of these things in concert, and more.

Even though a doctorate is considered a terminal degree, the scholarship this process instilled in me has led me to believe there is always something new to be learned, more to be accomplished. Being a scholar has given me the skills, knowledge, and confidence to advocate for educational change, in my district, and at the state and national levels. Being a scholar will enable me to facilitate research-based professional development with my colleagues. Being a scholar may even provide me with the opportunity, as a professor, to help others gain the skills of scholarship in the future. I am a scholar.

Analysis of Self as Practitioner

As a teacher in my 20th year at SMS, I am still in love with my job. It is my vocation and my calling. I love my students, my colleagues, my community, and my curriculum. My passion for my work has taken me far beyond what I ever thought possible in my career as an educator. I was recognized for this passion: named state teacher of the year, given ambassadorships, fellowships, and scholarships—including the Richard W. Riley Scholarship through Laureate Education. But as I pursued my doctorate, another set of emotions crept into my educational being—critical awareness and understanding.

Now, as I read scholarly literature, I cannot help but see my students, my colleagues, my administrators, myself. I read about problems in education that are also occurring at my school, and I want to fix them. I read about new ideas and innovations

and want them for my students and colleagues. I read about the reauthorization of ESEA as the Every Student Succeeds Act (ESSA, 2015), and question how it will affect my state, my school, and my students. Not only am I more aware of the challenges and strengths that exist within my educational reality, I also have a deeper understanding of the supports necessary to improve, enhance, and sustain them. I know such supports must be guided by research and driven by data. I also know that passion, while important, is not enough to carry me through the latter part of my career as an educator. I can no longer close my door with the certainty that I am doing all I can for my students within the four walls of my classroom. I must do more. The doctoral process has opened doors for me to take the next step as a practitioner, be it through project development in my district, political advocacy at the local, state, or national level, or involvement in teacher preparation at the college level.

Analysis of Self as Project Developer

Prior to beginning my doctoral studies, I designed and conducted numerous professional development sessions and workshops, both on my own and with colleagues. The feedback was always positive, and I walked away feeling that I taught my audience something, that I made a difference. Through the process of researching and developing my project for this study, I learned that my earlier efforts at professional development were unlikely to have had any significant effect on my audience or their students. I learned that one-shot workshops and PD sessions have no effect on student learning (Gulamhussein, 2013). For PD to improve teaching and student learning, it must be sustained, collaborative, and incorporate follow-up (D'Ardenne et al., 2013; DeMonte,

2013; Gulamhussein, 2013; Guskey & Yoon, 2009). I also learned that, like their students, teachers also benefit from differentiation (Gulamhussein, 2013; Kappler Hewitt & Weckstein, 2012; TNTP, 2015). The project I created for this study is vastly different than any professional development I experienced in the past. Rather than the traditional PD model, a one-shot slide presentation that incorporates a few collaborative or hands-on activities, this project is a sustained, collaborative, differentiated, data-driven, teacher-led, research-based, web-supported PD experience with the potential to meet teachers' needs as they work to differentiate their instruction to improve student literacy and learning.

Reflection on the Importance of the Work

Teaching is important work. This fact became increasingly evident as I conducted my research and worked to develop my project. As I read peer-reviewed studies, many of them qualitative, I was exposed to the work of teachers across the nation and the world, their struggles and their successes. In a sense, I was invited into their lives. When it came time for me to collect data for my own study, I felt honored that so many of my colleagues invited me into their lives. In interviewing my peers, individually and as part of a focus group, I learned of their efforts to be the best teachers they can be. I learned about classroom practices my colleagues are proud of, and areas they feel they need to improve. And, most importantly, I learned what supports they needed to be able to differentiate instruction to meet the learning and literacy needs of all their students: time to plan and gather resources, opportunities to collaborate with colleagues, and professional development to learn strategies. By providing these supports, this project has

the potential to improve the quality and level of teachers' practices in differentiated instruction, which, in turn, has the potential to improve student learning and literacy.

Implications for Social Change and Directions for Future Research

This project has the potential to affect social change by guiding and supporting teachers at SMS as they work to differentiate instruction for content literacy. Teachers with more hours of professional development in DI feel more prepared to differentiate instruction (Dixon et al., 2014). Additionally, on-the-job professional learning opportunities, like those provided through the workshops and PLC meetings, have been shown to improve teacher practices and performance (Dixon et al., 2014; Kappler Hewitt & Weckstein, 2012; Parise & Spillane, 2010; TNTP, 2015). The improvement in teacher practice resulting from PLC participation has the potential to improve student learning (Blanton & Perez, 2011; Owen, 2014), including of students in subgroups, like those with special needs (Huberman et al., 2012). Therefore, implementation of this project has the potential to improve teachers' sense of efficacy, their practice, and their performance. These improvements in teaching, in turn, have the potential to improve student literacy and learning. Increased levels of student literacy would likely result in higher scores on state tests, bringing Southland School District closer to its goal of attaining a 20% increase in the number of students scoring proficient or above on the state reading test by 2018 ([redacted], 2013, p. 15). Meeting this student literacy goal would not only benefit students, their families, and the district, but also the community as a whole, by contributing to higher scores on the state report card. Families and employers use state issued school and district report card grades as factors when choosing the community

where they will live or do business. There is even a possibility that educators outside of the study's boundaries may read this study and be motivated to use its format and its resources to create their own PD experience focused on differentiated instruction for content literacy.

Although this study focused on what teachers know, do, and need in the context of differentiating instruction, further research is needed to ensure teachers are differentiating instruction with fidelity, and have the supports necessary to do so. Research on the level of teachers' implementation of DI as a result of this PD opportunity would be beneficial. Such research could include classroom observations, along with interviews and the collection of lesson plans. Given the critical importance of administrative support, research could also be conducted on the effect of administrator encouragement, organizational support, and expectations on teachers as they work to differentiate instruction to meet their students' literacy and learning needs. Future studies, both qualitative and quantitative, could also explore the effect of participation in the workshops and the DI PLC, as well as the utilization of the DI website, on student literacy and learning.

Conclusion

This project study began as an exploration into what middle school content area teachers know, do, and need to implement and sustain differentiated instruction for content literacy. Through scholarly research and my own qualitative study, I learned that although most educators understand the principles of differentiation, few have the supports necessary to implement them with fidelity. To provide the supports identified by

study participants—time to plan and gather resources, opportunities to collaborate with colleagues, and professional development to learn DI strategies—I designed a research-based PD experience. The foundation of this yearlong PD is a series of three daylong workshops on differentiating instruction for content literacy. The workshops are supported by a website and an optional PLC, which provide participants with additional opportunities to enhance and extend their learning.

Throughout the doctoral process, I gained much new knowledge from reading others' research, discourse and collaboration with Walden faculty, and learning from and about the participants in my study. I learned about the importance of data in establishing a strong rationale. I learned to use scholarly studies to build a strong base for the research, data collection and analysis, and project development phases of my study. I learned that the doctoral writing process is an iterative one that requires much research, feedback, reflection, and revision. And, most importantly, I gained an enhanced appreciation for the participants in my study, my colleagues. Their desire to improve their classroom practices in differentiating instruction inspired me to develop the best project possible—one that is research-based and will meet their needs, and in the process, the needs of the ultimate stakeholders, the students.

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Appendix A: The Project

Professional Development on Differentiating Instruction for Content Literacy

Findings from the study of middle school content area teachers' perceptions and practices in differentiating instruction for content literacy indicated both general and specific needs for professional development (PD) at Southland Middle School (SMS). Using the findings from this study and recommendations from the literature on differentiated instruction (DI), I have developed a yearlong PD program for middle school content area teachers at SMS. This PD program will provide resources on and examples of DI practices, as well as opportunities for collaboration and independent study. The following documents and presentations include program materials and details for three workshops, the foundation of the PD, supported by DI website and an optional differentiated instruction professional learning community (DI PLC).

Program materials and details include the following:

- Differentiating Instruction for Content Literacy Workshops:
    - Workshop purposes, goals, outcomes, and objectives
    - Workshop icebreakers
    - Workshop timelines, components, activities, and strategies
    - Workshop presentation outlines with presenter notes and references
    - Workshop evaluations
        - Formative: Exit slips
        - Summative
    - Workshop handouts

        - Differentiated Lesson Plan and Reflection Template
        - Teacher Checklist for Group Work
        - Product T-Chart
- DI Website:
    - DI Website purpose, goals, outcomes, and objectives
    - DI Website Resources by Topic
    - DI Website screen shots
    - DI Website Bibliography
- Differentiating Instruction Professional Learning Community (DI PLC):
    - DI PLC purpose, goals, outcomes, and objectives
    - DI PLC Opportunities Outline
    - DI PLC Meeting Log Template
    - DI PLC sample meeting logs
        - DI PLC Meeting Log—Norms
        - DI PLC Meeting Log—SMART Goals
- DI PLC and website summative evaluation: DI PLC and Website Year-End Survey

Differentiating Instruction for Content Literacy Workshops

Day 1 Workshop: Why DI?
Purpose, Goals, Outcomes, and Objectives

Purpose for Day 1

Study data indicated that participants at the site had varying levels of training and perceived preparedness relating to differentiated instruction. Therefore, the Day 1

Workshop includes definitions of, and district and state expectations for, differentiated instruction.

Data indicated that study participants wanted to be able to know their students on both a personal and academic level. Therefore, this workshop will provide teachers with information on how to identify and differentiate for students' levels of readiness, interests, and learning profiles.

Goals for Day 1

A. To provide differentiated examples and definitions of differentiated instruction and give teachers opportunities to discuss what DI is, and is not.

B To inform teachers of district and state expectations for differentiated instruction and allow them to explore how these expectations apply to them.

C. To provide grade level groups of teachers the time to analyze and discuss student STAR Reading data to identify levels of readiness using a data analysis protocol.

D. To provide grade level groups time to work with EEN teachers to discuss EEN students' literacy needs and identify students' readiness levels, as well as accommodations and modifications that should be provided for these students.

E. To provide teachers with examples of pretests and activities to access and assess prior knowledge.

F. To inform teachers about students' learning profiles—interests, intelligence preferences, and learning styles—through a small group jigsaw activity.

G. To provide teachers with time to explore the DI website, including links to additional information on readiness and learning profiles. On the site, teachers will also will learn about exit slips and complete an online exit slip for the workshop.

H. To consider the formation of a DI PLC to support teachers who have participated in the workshop as they work to implement, or sustain their implementation of, differentiated instruction in their classrooms.

Outcomes for Day 1

A.1. Teachers will be able to demonstrate an understanding of differentiated instruction, including what it is and what it is not, through activities and discussions.

B.1. Teachers will be able to identify district and state expectations for DI as well as how these expectations apply to them.

B.2. Teachers will be able to identify reasons why they should differentiate their instruction.

C.1. Teachers will analyze STAR reading data to assess student readiness.

D.1. Teachers will collaborate with EEN teachers to better understand EEN students' literacy needs, and identify EEN students' readiness levels.

E.1. Teachers will understand the importance of accessing and assessing students' prior knowledge through seeing peer examples of pretests and other activities.

E.2. Teachers will create pretests and activities for their classrooms to access or assess students' prior knowledge.

F.1. Teachers will understand the different types of student learning profiles: interests, intelligence preferences, and learning styles.
F.2. Teachers will design lessons that incorporate strategies to determine students' learning profiles.
G.1. Teachers will be able to access and navigate the DI website and its resources, including those on student readiness and learning profiles, as well as exit slips.
H.1. A DI PLC will be proposed to support teachers who attended the workshop as they implement, or sustain implementation, of DI in their classrooms.

Objectives for Day 1

A.1.a. As a result of the introduction to differentiated instruction, teachers will be able to identify what differentiated instruction is, and is not.
B.1.a. As a result of discussing and exploring district and state expectations for DI, teachers will be able to describe how these expectations apply to them, and identify why DI is considered an educational best practice.
C.1.a. As a result of analyzing STAR Reading data with grade level groups, teachers will be able to assess students' reading readiness for the upcoming year.
D.1.a. As a result of their collaboration with EEN staff, grade level teachers will have an understanding of EEN students' literacy needs and readiness levels. This will allow them to prepare modifications and accommodations for their EEN students for the upcoming year.
E.1.a. As a result of seeing examples from their peers, teachers will be able to design lessons that incorporate pretests and other activities to access and assess students' prior knowledge.
F.1.a. As a result of participating in a jigsaw activity on student learning profiles, teachers will be able to design lessons that incorporate students' interests, intelligence preferences, and learning styles.
G.1.a. As a result of having explored the DI website, teachers will be able to utilize it to access resources on differentiated instruction, including those on student readiness, learning profiles, and exit slips.
H.1.a. As a result of attending the workshop, teachers will have the opportunity to form, if they so choose, a DI PLC, where they will receive support and additional information as they implement, or sustain the implementation of, DI in their classrooms.

Day 1 Workshop Icebreaker: Have You Ever?

As participants enter the resource room, the presenter will have them sit at round tables with colleagues of their choice. A comic on differentiated instruction will be displayed on the projector screen. The comic shows a variety of animals—a monkey, goldfish, elephant, dog, etc.—being given an exam that includes climbing a tree. The presenter will ask participants to talk with their tablemates about situations when they were asked to complete a task that was not fair for them or do something they felt they were not prepared for.

Day 1 Workshop: Why DI?
Timeline, Components, Activities, and Strategies

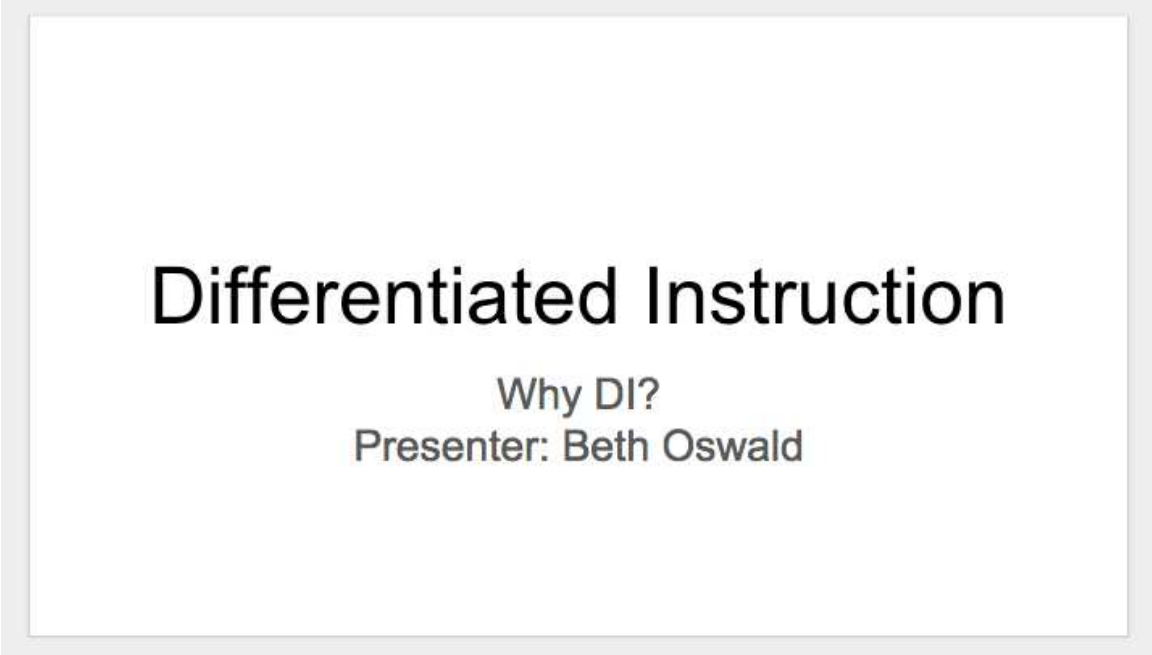
Time	Activity	DI Strategy Demonstrated
8:00-8:30	Participants will gather in the resource room for an icebreaker and an introduction to DI. Icebreaker: Have you ever? The icebreaker will feature a DI comic and discussion with tablemates regarding times when participants were asked to do something they felt they were unprepared to do. The introduction to DI activity offers participants the choice of reading a story or watching a video about differentiating for family and friends during the holidays. The introduction concludes with a quote from Carol Ann Tomlinson (1999, p. 110) on change.	 Small group discussion Choice activity Large group instruction
8:30-9:00	An overview of DI will begin with Tomlinson's (2001) graphic. Participants will discuss their training or PD experiences with DI with their tablemates. Participants will use a text protocol, The 4 "A"s, to examine graphics on what DI is and is not. Volunteers will share thoughts with the whole group following the activity.	Small group discussion Activating prior knowledge Small group activity Large group discussion
9:00-9:30	The presenter will share district expectations for DI. DI and the Danielson Framework is the foundation of Educator Effectiveness, the state teacher evaluation model. Participants will: explore where DI is	Large group instruction Independent work

	expected and implied within the Danielson Framework domains; discuss with tablemates; and have volunteers do a shout out.	Small group discussion Large group discussion
9:30-9:40	Break	
9:40-9:45	Introduction to DI for readiness, interests, and learning profiles: The presenter will share Littky and Grabelle's (2004) quote and do the Fist of Five activity to gauge levels of agreement.	Identifying students' levels of understanding or agreement
9:45-11:00	Readiness, Part I: Breakout session with grade level teams. Participants will complete a data analysis protocol using STAR Reading data. Participants will identify struggling readers. Participants will report implications for practice from the activity with the whole group.	Small group activity Large group discussion
11:00-12:00	Readiness, Part II: Breakout session with grade level teams and EEN staff. Participants will compare lists of EEN students with those they identified during the STAR Reading data analysis, and discuss literacy accommodations/modifications that should be provided, and strategies that have been found to work with these students.	Small group activity
12:00-1:00	Lunch	
1:00-1:30	Readiness, Part III: Accessing prior knowledge The presenter will use the "hand-o-meter" activity to have participants point to show the degree to which they use pretests or other activities to determine levels of students' prior knowledge. Colleagues will share examples of pretests and activities they use to assess and access student knowledge/interest.	Assessing prior knowledge Peer teaching

1:30-2:00	Student Interests and Learning Profiles: Participants will work in groups of three to do a jigsaw reading of a chapter on student learning profiles by Powell & Kusuma-Powell (2011). After reading, participants will teach their peers about their topic: interests, intelligence preferences, or learning profiles.	Small group activity Jigsaw Peer teaching
2:00-2:10	Break & move to computer lab	
2:10-2:50	DI Website: The presenter will introduce the site and explain its features. Participants will log on to their computers and: -Take a Multiple Intelligences Self-Assessment (linked to site) -Have time to explore links related to DI for readiness, interests, and learning profiles -Watch a video: Exit slips to drive instruction -Complete an online exit slip (evaluation)	Whole group instruction Independent work Choice activity Exit slips
2:50-3:00	Closing (in the resource room) The presenter will discuss the following invitations and expectations: Invitations: -Invite teachers to form a DI PLC that could meet the 2nd and 4th Monday of each month. -Invite teachers to access and contribute to resources on the DI website Expectations: -Teachers are expected to design, use, and reflect on at least one pre-assessment or pre-teaching strategy to assess student readiness. -Teachers are expected to design, use, and reflect on at least one strategy to	Large group Small group/choice Choice activity Independent work/choice Independent work/choice

	determine students' interests or learning profiles. -Teachers are expected to complete a Differentiated Lesson Plan and Reflection for each. -Teachers are expected to bring their lesson plans to share at the next DI workshop.	

Workshop 1: Presentation Outline and Presenter Notes (in italics)



Welcome to the first workshop of this year's DI professional development series.

Welcome! Have you ever felt like this?
(DI comic image)
The educational system comic. (2011). Retrieved from http://weknowmemes.com/2011/10/the-educational-system-comic/
Have you ever felt like this? Talk with your tablemates about situations where you felt you were being asked to do a task that was not fair for you, or that you were not prepared for.

Activity: A Holiday Take on DI
Would you rather read an article or watch a video?
"A Thanksgiving Take on Differentiating Instruction" by Kathy Collins
or
http://www.ispot.tv/ad/776R/ikea-holiday-gathering

Ask participants whether they would rather learn by reading an article or watching a video. Have those who would rather read should grab a copy of the article and go to the next room. Have those who would rather watch a video stay and watch it. Instruct participants that when they are done, they should get in groups of 3-4 and discuss times they have differentiated for family and friends.
Back in large group: share examples of instances where people have differentiated or made adjustments for family or friends. With tablemates, discuss why differentiating for guests at a dinner party might be easier than doing DI in the classroom. Have one person from each table share thoughts. Some answers could include: knowing family and friends better than students; teaching 150 students, it is hard to know them all well; etc.

One size doesn't fit all...
(DI comic image)
Lefty parent. (2013). We need to move away from one-size-fits-all education. Retrieved from http://www.leftyparent.com/blog/2013/02/24/we-need-to-move-away-from-one-size-fits-all-education/
Raise your hand if you appreciated having the option of reading or watching a video? Differentiation does not have to be an impossible chore.

but DI isn't individualized education either.
(DI comic image)
Uplifting teaching. (2013). What is differentiated instruction? Retrieved from https://uplifting-teaching.net/category/instruction/differentiated-instruction/
There is no way we can create individualized lessons for 150 students. But DI can help us meet their needs.

Change takes time.
Carol Ann Tomlinson (1999) advises that to "avoid overload," teachers should "prepare for the long haul" (p. 110).
Substantial educational change can take 5 to 10 years.
Start with the essential concepts and provide opportunities for teachers to make sense of and try out new ideas.
Create teams of teachers to work together, plan together, and nourish new ideas.
School leaders must: provide ongoing assistance to help teachers feel safe in trying new things, and express appreciation.
Differentiation is not a fad that will just go away if we ignore it. But it also can't happen school-wide overnight. Fidelity takes time and commitment.

(Differentiating instruction graphic)
Tomlinson, C. A. (2001).
When was the last time you saw this graphic representation of Carol Ann Tomlinson's definition of Differentiated Instruction? Discuss the training or professional development

you have received in differentiating instruction you with your tablemates. Share with the group that this activity was activating and assessing their prior knowledge about DI.

Activity: What DI Is and Is Not
(Graphics) What differentiation is–and is not (2015). Retrieved from http://www.teachthought.com/uncategorized/the-definition-of-differentiated-instruction/
Hand out hard copies of the graphics (above) and the 4 "A"s Protocol. Working independently, participants should identify the parts of the graphics they Agree with, want to Argue, and want Aspire to, as well as the Assumptions the author has about DI - these thoughts should go on Post-it notes. After everyone has completed their Post-its, complete the protocol by having teachers share each of the 4 "A"s with tablemates. Have volunteers share thoughts with the whole group.

District Expectations for DI:
Tier I, Universal instruction includes:
- High-quality instruction
- Clearly identified Priority standards
- Formative assessment that drives instruction
- Differentiation for multiple levels of learning
- Instruction through a culturally responsive lens
- Screening for students who struggle/excel three times a year
- A clearly defined set of behavioral expectations
- Universal instruction on expected behaviors
- Clear distinction between major vs. minor office referrals
- Clear and consistent documentation of behavioral referrals

PLC teams:
- Analyze the data from their screener
- Discuss and support each other in best educational practices
- Share strategies for classroom management
- Share differentiated lessons

([redacted] Response to Intervention Student Servicing Handbook, 2012)
DI is expected as part of RTI Tier 1, universal instruction (as seen in the 2012 RTI Student Servicing Handbook). We have had lots of great professional development in the recent years, but we haven't had PD relating to DI for at least 10 years. Hopefully this year's PD will help us help our students to succeed.

DI and the Danielson Framework for Teaching:
(Charlotte Danielson's Framework for Teaching graphic)
Framework for teaching smart card. (2014). Retrieved from www.danielsongroup.org/framework
DI is also something we are evaluated on as part of the new Wisconsin Educator Effectiveness model. Hand out copies of the Danielson Framework for Teaching Smart

Card, and have groups identify areas where DI is expected, as well as where DI is implied, within the four domains by writing an "E" next to areas where DI is expected and an "I" next to where it is implied. Discuss with tablemates and have a representative do a shout out.

Take a Break
(Clock graphic)
http://www.eremedia.com/
10 minute break.

Why DI for readiness, interests, and learning profiles?
"You cannot have a relationship with or make things relevant for or expect rigor from a kid you don't know" (Littky & Grabelle, 2004, p. 39)
Do a "Fist of 5" with this statement, with 1 being strongly disagree, and 5 being strongly agree. Share that the "Fist of 5" is a good way to gauge where students are at with levels of agreement, knowledge, interest, etc., as well.

Readiness, Part I
Readiness is a student's entry point relative to a particular understanding or skill (Tomlinson, 1999).
Breakout Session: STAR Reading Data Activity
Break out into grade level groups to look at student STAR Reading data using the protocol, Atlas: Looking at Data. Have groups put answers to Implications for Classroom Practice prompts on big paper. Which students do you want more information on? Make a list to discuss later. Come back to large group and share answers to Implications.

Readiness, Part II
Look at the list of students your grade level group wanted more information on. Compare that list to the list of EEN students for your grade level.
Breakout Session: EEN Round Table
Have grade level groups compare their lists of students (from the STAR Data activity) they wanted more information on with the list of EEN students at that grade level. Tell them they will have the opportunity to talk with special educators in a roundtable setting to ask questions relating to how to best meet their EEN students' needs. Each grade level group will be assigned at least one special educator from the building. EEN teachers will provide a chart where teachers can list EEN students who struggle, along with accommodations/modifications that should be provided for them, strategies that have been found to work with them, etc. One staff member should fill in the chart; copies will be made for everyone who works with those students. Are there students who struggled on the STAR Reading test who are not EEN? Are they ELL? Are they receiving services from the reading specialist? If so, schedule the ELL teacher and/or reading specialist to come into grade level PLCs to discuss how to best meet these students' literacy needs. If

not, talk with the BIT (building intervention team) coordinator to see if that student is on BIT's radar.

Lunch Break
See you in an hour!
60 minute lunch break off site.

Readiness, Part III: Accessing Prior Knowledge
(Always, sometimes, rarely, never image)
Back to large group. Hand-o-meter: Have participants use their hands and arms as a "hand-o-meter" to point and show the degree to which they use pretests or other activities to determine levels of students' prior knowledge. Tell them that an activity like a hand-o-meter can help them quickly assess the degree to which their students know or understand something.

Accessing and Assessing Prior Knowledge
Pretests
Activities
SMS staff will share examples of pretests and activities they use to assess and access students' prior knowledge, as well as interest.

Student Learning Profiles
Jigsaw Activity on Learning Profiles
Interests
Intelligence Preferences
Learning Styles
Powell, W., & Kusuma-Powell. (2011). How to teach now: Five keys to personalized learning in the global classroom (chapter 1, knowing our students as learners).
Have teachers line up by number of years taught then count off by threes to determine groups. Each group will be responsible for reading about then teaching the others about three topics found in Chapter 1 of How to Teach Now, Five Keys to Personalized Learning in the Global Classroom. Group 1 will read about differentiating according to students' interests. Group 2 will read about differentiating according to students' intelligence preferences. Group 3 will read about differentiating according to students' learning styles. Each group will be responsible for teaching the others about their topic. Encourage groups to teach using methods that correspond to the topic they read about. Before moving on to the next activity, tell the group that they were divided into groups based on their levels of teaching experience, and that cooperative and ability grouping will be a discussed as a DI strategy at a later workshop.

Take a Break
(Clock graphic)
http://www.eremedia.com/

10 minute break.

DI Website
Introduce: https://sites.google.com/a/[redacted]net.org/di-plc/
Computer Lab
Take the Multiple Intelligences Self-Assessment (link is on the site)
Explore other links related to differentiating for readiness, interest, and learning profile.
Complete the online Exit Slip
For more on using exit slips in your classroom, see these links on the DI website:
Watch the video: "Exit Slips to Drive Instruction"
Read about Exit Slips in Making Differentiation a Habit (Heacox, p. 48).
(Exit slip graphic)
https://www.flickr.com/photos/barrydahl/6675297699
Introduce the features of the website. Move to the LMC Computer Lab. Have teachers log in to the DI website, find the MI Self-Assessment and take it, then explore other links relating to DI for readiness, interest, and learning preferences. Ten minutes before the end of the day, have teachers wrap up and complete the online Exit Slip linked to the site. They can learn more about exit slips by following the links on the DI website. Return to the resource room for closing.

Closing
Invitations:
You are invited to form and participate in a DI PLC, which will meet the 2nd and 4th Monday of each month.
You are invited to access and contribute to resources on the DI website.
Expectations:
Design, use, and reflect on at least one pre-assessment or pre-teaching strategy to assess student readiness.
Design, use, and reflect on at least one strategy to determine students' learning profiles.
Complete a Differentiated Lesson Plan and Reflection for each.
Bring your lesson plans to share at the next DI workshop.
Discuss invitations and expectations. Hand out a hard copy of the Differentiated Lesson Plan and Reflection, and tell teachers it is available on the DI website as well. Dismiss.

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Day 2 Workshop: Differentiating for the Content in Content Literacy
Purpose, Goals, Outcomes, and Objectives

Purpose for Day 2

Study data found that many content area teachers have one textbook for all levels of learners. Therefore, this workshop will provide examples of varied support systems for grade-level texts.

Data indicated that participants at the site wanted to be able to readily access leveled resources to meet their students' literacy needs within their content areas. As a result, this workshop will provide teachers with information on how to find leveled content area texts, both in the library media center (LMC) and online.

Goals for Day 2

A. To provide examples of varied support systems for grade level texts via text and online sources.
B. To provide teachers with information on assistive technology available to students in the district.
C. To provide links to free online assistive technology resources for teachers to explore.
D. To provide teachers with the necessary skills to be able to find leveled texts in the LMC by Lexile and grade level.
E. To provide teachers with links to online resources to help them find leveled texts on the web, including texts by topic.
F. To provide teachers with time to work with content area colleagues to find leveled texts that will work for their curriculum, and the opportunity to collaborate with them to design a lesson plan incorporating these texts.

Outcomes for Day 2

A.1. Teachers will demonstrate an understanding of varied support systems for grade level texts, and will design a lesson that incorporates one or more of these supports for grade level texts.
B.1. Teachers will be able to identify assistive technology available to students in the district.
C.1. Teachers will be able to access links to free online assistive technology resources.
D.1. Teachers will understand the difference between Lexile and grade level texts.
D.2. Teachers will use STAR reading scores to find reading materials at students' best levels.

D.3. Teachers will find books in the LMC by Lexile and grade level.
E.1. Teachers will access and use online resources to find leveled texts, including texts by topic.
F.1. Teachers will collaborate with content area colleagues to find leveled texts, and have the opportunity to collaborate with them as they design a lesson plan incorporating leveled texts.

Objectives for Day 2

A.1.a. As a result of learning about varied support systems for grade level texts, teachers will be able to design lessons that incorporate these supports with their classroom texts.
B.1.a. As a result of the information provided by the occupational therapist on assistive technology, teachers will be able to identify and utilize the assistive technology resources available to students within the district.
C.1.a. As a result of exploring free assistive technology resources linked to the DI website, teachers will be able to identify online resources for their students to access outside of school.
D.1.a As a result of learning from their peers—the reading specialist and library media specialist—teachers will be able to use STAR Reading scores to find books in the LMC by Lexile and grade level.
E.1.a. As a result of exploring online sources for finding leveled texts linked to the DI website, including texts by topic, teachers will be able to readily access leveled texts for their curricula.
F.1.a. As a result of time spent collaborating with content area peers, teachers will be knowledgeable in finding leveled texts online, and will design a lesson plan that incorporates leveled texts.

Day 2 Workshop Icebreaker: That's Me!

Participants will be seated at tables. The presenter will ask participants to stand and proclaim, "That's me!" when they hear statements that are true for them. Once they stand, the presenter will ask participants to look around to see who else is standing, then sit back down and get ready for the next statement. Statements include:
-I am glad there are snacks and coffee here this morning.
-I like having a school day with adults only.
-I will miss my students today.
-I like that we can wear casual clothing on PD days.
-I used the DI website since our last workshop.
-I attended a DI PLC meeting.
-At this point in the year, I know my students pretty well on a personal level.
-At this point in the year, I know my students pretty well on an academic level.
-I have the resources necessary to meet all my students' literacy needs.
-I have enough resources to address my students' varied interests.
-I have enough time to find leveled resources for my classroom.

To conclude, the presenter will say, “That is what today’s workshop is designed to do—help you learn strategies and find resources to meet your students’ literacy needs within your content area, and give you some time to do so.” The presenter will also point out that this activity is a quick way to get kids moving, determine students’ prior knowledge, interest level, personal information, etc.

Day 2 Workshop Timeline, Components, Activities, and Strategies

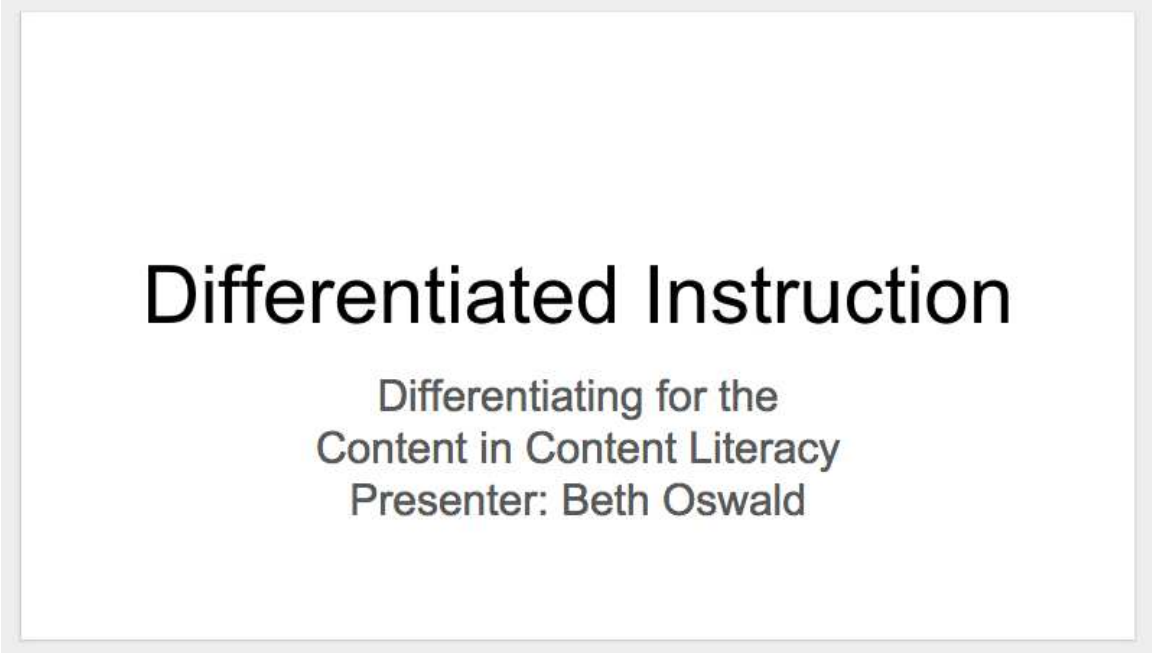
Time	**Description of PD**	**DI Strategies Demonstrated**
8:00-8:20	Welcome back! The presenter will facilitate a Milling to Music activity to engage participants in sharing their lesson plans from the previous workshop. Have participants do a large group shout out about the successful strategies their colleagues used.	 Musical Kinesthetic Verbal linguistic Multiple partner activity Large group share
8:20-8:30	Icebreaker Activity: That’s me! The presenter facilitates this activity by making a number of statements. Participants stand and proclaim, “That’s me!” if the statements are true for them. Statements include those related to the previous workshop, as well as those that address issues related to today’s workshop.	Kinesthetic Accessing prior knowledge
8:30-8:50	The presenter has participants brainstorm all the resources they use to teach content. Participants share their lists and do a shout out of the types of resources they identified. The presenter compiles a list of resources at the front of the room, then has participants do a “thumbs up, thumbs down, thumbs sideways” to show the degree to which they believe each of these types of resources can	Independent work Small group discussion Large group discussion Accessing prior knowledge

	meet their students' literacy needs.	
8:50-9:15	Have participants read "using varied support systems" (Tomlinson, 2001, p.77), list the supports they currently use, and share their list with their tablemates	Independent work Small group discussion
9:15-9:30	Break: Have participants grab a textbook or other nonfiction text to be used in the near future and reconvene in the LMC	
9:30-10:30	The presenter will provide participants with time to create at least one lesson using varied support systems for the text material they brought with them. Tell participants that there are links for supports available on the DI website. Presenter will help facilitate. LMC specialist will assist with technology.	Independent work
10:30-11:00	The occupational therapist will share information on assistive technology: Read & Write Gold. The presenter will facilitate a partner discussion by asking, "What would be needed to use this software with your students?"	Large group instruction Partner discussion
11:00-11:30	Other assistive technology: Provide time for participants to try out free assistive technologies linked to the DI website.	Independent work
11:30-12:30	Lunch	
12:30-1:00	The reading specialist and library media specialist will: -Discuss the difference between Lexile and grade level texts -Show how to use STAR Reading scores for reading level/Lexile/ZPD and explain how to find materials at students' best levels	Large group instruction

	-Demonstrate how to find books in the LMC by Lexile/grade level	
1:00-1:30	The reading specialist and library media specialist will facilitate an LMC scavenger hunt for leveled resources with participants grouped by content area. The presenter will facilitate a large group sharing of leveled resources found during the scavenger hunt.	Small group activity Large group share
1:30-1:50	Break/Celebration: Everyone wins the scavenger hunt—snacks are provided for break.	
1:50-2:50	The presenter will show a computer search image, and have participants raise their hand if they have ever felt frustrated while searching for leveled resources. The presenter will share links to online resources for finding leveled texts, including texts by topic (on the DI website). The presenter will provide time for participants to collaborate with content area colleagues to find leveled texts that will work for their curriculum, and design lesson plans incorporating these texts. Participants will complete an online exit slip on varied support systems and leveled texts (on the DI website).	Accessing prior knowledge Large group instruction Small group/partner work Independent work Independent work
2:50-3:00	Closing (in the Resource Room) The presenter will discuss the following invitations and expectations: Invitations: -Invite teachers to participate in the DI PLC the 2nd and 4th Monday of each month	Large group Small group/choice Choice

	-Invite teachers to access and contribute to resources on the DI website Expectations: -Teachers are expected to design, use, and reflect on at least one lesson that incorporates one of the varied support systems (as discussed by Tomlinson, 2001) -Teachers are expected to design, use, and reflect on at least one lesson using leveled texts -Teachers are expected to complete a Differentiated Lesson Plan and Reflection for each lesson -Teachers are expected to bring their lesson plans to share at the next DI workshop.	Independent work

Workshop 2: Presentation Outline and Presenter Notes (in italics)



Welcome to the second workshop of this year's DI professional development series.

Activity: Mill and Share
You need your:
Pre-assessment or pre-teaching Lesson Plan and Reflection
Student interest or student learning profiles Lesson Plan and Reflection

(Dance image)
http://purplefiddle.com/bands/dance-party/
Tell teachers, "Take out the Differentiated Lesson Plan and Reflection sheets you completed based on your implementation of the pre-assessment/pre-teaching strategy and the student interest/learning profiles strategy you tried in your classroom." Tell them they will be doing a "milling to music" activity to share the strategies they used and how these strategies worked in their classrooms. Tell them that when the music starts, they are to grab their sheets, get up, and mill around the room saying hello to their colleagues as they move about. Dancing is encouraged. Start the music. When the music stops, tell them to partner up with a colleague near them (or two if there are an odd number of people) and share one of the strategies they used and how they felt it went. Their partner will share about a strategy they used and their reflection as well. When the music starts, have them mill around again, and when the music stops, repeat the sharing activity for their second strategy. Repeat the process a few more times, so teachers can get a feel for what a number of their colleagues did and how it went. Tell them this is an activity they can use to meet the needs of students with bodily-kinesthetic, interpersonal, and musical intelligences. It works well for sharing ideas and comparing answers—but, it works best when students have something written down to share, like we have today. Have teachers return to their tables and do a shout out about the successful strategies their colleagues used. Did they talk with anyone who used the same strategy? If so, did they use it in a different way? How so?

Activity: That's Me!
Stand up and proclaim, "That's me!" when you hear a statement that is true for you.
(Stand up image)
http://socold.tumblr.com/
Have teachers stand and proclaim, "That's me!" when they hear statements that are true for them. Once they stand, have them look around to see who else is standing, then sit back down.
Say each statement, below:
-I am glad there are snacks and coffee here this morning.
-I like having a school day with adults only.
-I will miss my students today.
-I like that we can wear casual clothing on PD days.
-I used the DI website since our last workshop.
-I attended a DI PLC meeting.
-At this point in the year, I know my students pretty well on a personal level.
-At this point in the year, I know my students pretty well on an academic level.
-I have the resources necessary to meet all my students' literacy needs.
-I have enough resources to address my students' varied interests.
-I have enough time to find leveled resources for my classroom.
Say "That is what today's workshop is designed to do - help you learn strategies and find resources to meet your students' literacy needs within your content area, and give you

some time to do so." Point out that this activity is a quick way to get kids moving, determine students' prior knowledge, interest level, personal information, etc.

Teaching Content: Brainstorm
List all of the types of resources you use in your classroom to teach content.
(Brainstorming image)
http://timetowrite.blogs.com/creativitynow/2009/10/bonus-10-brainstorming-guidelines-poster.html
Have teachers list resources they use to teach classroom content. Some examples could include textbooks, videos, lectures, magazine or newspaper articles, and other non-fiction literature.
Have teachers share their lists with their tablemates, and have them do a shout out of the resources they identified. Compile a list of resources on big paper at the front of the room.
Read the list out loud, and have teachers do a thumbs up, thumbs down, thumbs sideways to show the degree to which each of these types of resources can adequately meet all their students' literacy needs. Tell them the thumbs up activity can also be used to quickly identify levels of student knowledge, understanding, interest, agreement, etc. The thumbs up activity can be made more confidential by having students hold their thumbs chest high, rather than in the air (Heacox, 2009, p. 41).

Using Varied Support Systems
Reading partners
Note-taking organizers
Highlighted print materials
Digests of key ideas (Cliffs-style notes)
Peer or adult mentors
(Tomlinson, 2001, p. 77)
Have teachers read p. 77 of Tomlinson (2001) (provide handout of this page), and identify the varied support systems they already use. Have them share with tablemates.

Take a Break
Take a 15-minute break
Grab a textbook or other piece of nonfiction text you plan to use in your classroom in the near future
Meet back in the LMC
(Clock image)
http://15min4him.org/
15 minute break. Tell teachers to grab a textbook or any other piece of nonfiction text they plan to use in their classroom in the near future and meet back up in the LMC.

Application: Using Varied Support Systems

Which supports, identified in the reading (Tomlinson, 2001), do you believe would help your struggling readers better understand the content in the text material you chose to bring?
Design a differentiated lesson using one or more of these supports.
See the links on the DI website under "Content" for different note-taking organizers:
All About Adolescent Literacy
Graphic Organizers
Complete a lesson plan for at least one of the supports you want to try.
After looking at Tomlinson's list of varied support systems, have teachers identify a support or two they do not already use with the text they brought from their classroom, but believe would benefit students they currently have. Provide time for them to design a differentiated lesson using these supports that utilizes the text material they brought with them. Have computers, scanners, audio and video recording equipment available. Have the library media specialist available to assist with technology. Have teachers complete a lesson plan for at least one of the supports they plan to use. If they do not finish in the time provided, it is homework. Have hard copies of the Differentiated Lesson Plan and Reflection template available. Remind teachers it is also available on the DI website.

Read & Write Gold
Read & Write Gold:
Text reading in quality computerized voices
Editing tools such as a spell checker, word predictor, dictionary, thesaurus, and a sounds alike tool that helps users determine if they've chosen the correct homophones in their writing
An MP3 converter to convert text into files for later playback in an MP3 player
A pronunciation tutor, fact-finding tool, fact mapping graphic organizer tool
A voice dictation tool for writing assistance
A floating toolbar that allows users to access Read & Write Gold from within other programs such as word processing programs or .pdf reader programs
https://www.texthelp.com/en-us/products/read-and-write-family
(Teachers will need earphones). Our occupational therapist (OT) is going to talk with us about the assistive technology for reading and writing that is available to our students - Read & Write Gold. The OT will do a demonstration, and teachers will have the opportunity to try out the program for themselves. Discussion: Talk with your neighbors about what would have to be provided for your students to be able to use this software with your content. Some answers could include: scanned textbook pages or articles; access to digital versions of Word or Google documents (or anything else) you assign in class; computers/iPads with earphones; student training in Read & Write Gold; etc.

Other Assistive Technology
NaturalReader: http://www.naturalreaders.com/index.html
Free online text to speech reader
Requires download

Dragon NaturallySpeaking: https://www.youtube.com/watch?v=ImlKOA1MhlI
Speech recognition software
District has a license
Some students are trained to use
Text Compactor: http://www.textcompactor.com
Free online automatic text summarization tool
Rewordify: http://rewordify.com
Simplifies difficult English for faster comprehension

There are also free text to speech programs, like NaturalReader, available for students to utilize at home.
Our district has a license for Dragon NaturallySpeaking, a speech recognition app that allows students to type via speech. Watch video on Dragon NaturallySpeaking. The OT will share information on students who currently are accessing this technology. Have teachers break out into a grade level discussion on students who may benefit from this technology but are not currently using it/trained in it. Whole group discussion: What may preclude a student from being able to use this technology? Some answers could include: speech impediments; lack of private/quiet spaces for students to use the technology; lack of devices/computers. Final word from the OT.
Other assistive technology:
There are a number of free text compacting sites available; some are better than others. Try out these two, using text of your choice. Would you recommend either to your students? Discuss. (I personally like Rewordify.)
Shout out: teachers share other technology they are aware of that may help struggling students (list on big paper and add to the DI website).

Lunch Break
See you in an hour!
60-minute lunch break off site. Return to the LMC after lunch.

Lexile and Leveled Texts
What is the difference between Lexile and grade level?
Using STAR reading scores to find students' best levels
Grade equivalent (GR)
Independent reading level (IRL)
Zone of Proximal Development (ZPD)
ZPD 2000 (turns ZPD into a number similar to Lexile)
Finding leveled resources in the LMC
Content Area scavenger hunt!
Reading Specialist and Library Media Specialist will:
Discuss the difference between Lexile and grade level texts.
Show how to use STAR Reading scores for student reading levels/Lexile/ZPD (zone of proximal development) and explain how to find materials at students' best levels.

Demonstrate how to find books in the LMC by Lexile/grade level.
Teachers will work with fellow content area teachers on a content area scavenger hunt for leveled resources in the LMC (designed and facilitated by the reading specialist and Library Media Specialist).
Get back in large group and share resources found.
Everyone's a winner - all get snacks and a break to enjoy them!

Take a Break
(Clock image)
https://www.eagleonline.com/
20 minute break. Enjoy the snacks!

Have you ever felt like this when looking for resources online?
(Frustrated computer user image)
http://www.pcsupportgroup.com/
Tell teachers: "Welcome back! Find a seat at a computer next to your content area peers." "Raise your hand if you have ever spent hours searching for leveled resources, or resources on a particular topic for your classroom, only to come up empty handed?" Call on volunteers to share this experience with the group. Then tell them, "We are going to spend the rest of the day finding leveled resources for your content area using the Web." (Wait for groans or eye rolls before going to next slide.)

Using the Web to Work Smarter, Not Harder...
Find a Book: http://www.bookadventure.com/book_finder.aspx
The Lexile Framework for Reading: https://lexile.com
News in Levels: http://www.newsinlevels.com
COMMONLIT: http://commonlit.org
Newsela: https://newsela.com
Smithsonian Tween Tribune: http://tweentribune.com
Google Search by Reading Level: https://www.youtube.com/watch?v=P1_Cp33rFBY
Say, "But you need to work smarter, not harder. You don't have to go it alone. There are many sites to help you in your search for leveled texts, including texts by topic." Show them the following sites, and how to access them (on the DI website). Google search by reading level is a 1:15 minute video that can help teachers and students as well. Have teachers search for leveled resources to use in their classrooms with their current or upcoming units. Since they will be sitting next to their content area colleagues, they will be able to share resources they find that may work for their peers at other grade levels. Once teachers find leveled texts that will work for their classroom, they will need to complete a lesson plan describing how they will incorporate these resources. Have hard copies of the Differentiated Lesson Plan and Reflection template available. Remind teachers it is also available on the DI website. If they do not finish the lesson plan during this time, it is homework.

Online Exit Slip
Complete the online Exit Slip and return to the Resource Room for the closing.
(Exit slip image)
https://www.flickr.com/photos/barrydahl/6675297699
With 10 minutes left in the day, have teachers wrap up their lesson planning, complete the online exit slip (linked to the DI website), and return to the resource room for the closing.

Closing
Invitations:
You are invited to participate in the DI PLC the 2nd and 4th Monday of each month.
You are invited to access and contribute to resources on the DI website.
Expectations:
Design, use, and reflect on at least one lesson that incorporates one of the varied support systems (as discussed by Tomlinson, 2001).
Design, use, and reflect on at least one lesson using leveled texts.
Use the Differentiated Lesson Plan and Reflection found on the DI website.
Bring these lesson plans and reflections to share at the next DI workshop.
Discuss invitations and expectations. Have hard copies of the Differentiated Lesson Plan and Reflection template available for those who want them. Dismiss.

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Day 3 Workshop: Differentiating for Process and Product
Purpose, Goals, Outcomes, and Objectives

Purpose for Day 3

This study found that participants wanted strategies to help them be better able to group students for success. Flexible grouping has been identified by Tomlinson (1999) as one of the key principles of differentiated instruction. Grouping students according to readiness, interest, or learning profile can help teachers differentiate for content, process, and product. Therefore, this workshop will provide information on how and when to flexibly group students for success.

Study data revealed that teachers at the site wanted to learn more differentiated strategies and activities to incorporate in their classrooms. As a result, this workshop will provide teachers with strategies and activities to help them differentiate for process. Additionally, study participants indicated they liked seeing examples of others' lessons and ideas. Therefore, this workshop will include teacher-created examples of strategies to differentiate for process in various content areas.

Data indicated that study participants wanted to be able to allow students to show their learning in a variety of ways. Therefore, this workshop will provide teachers with strategies to differentiate for products, including lists of products, examples, and information on effective product design.

Goals for Day 3

A. To facilitate small groups of teachers as they complete a reflection protocol for lessons designed during the previous workshop.

B. To facilitate small groups of teachers as they brainstorm and share ways to flexibly group students.
C. To inform teachers about how and when to flexibly group students.
D. To provide teachers with information on, and examples of, differentiating for process: tic-tac-toe, learning menus, and cubing.
E. To inform teachers about important things to consider when differentiating for process.
F. To facilitate small groups of teachers as they use a text protocol to discuss a reading on differentiating products (Tomlinson, 2001).
G. To provide teachers with time to explore links to online lists of product ideas (on the DI website) and identify those they would like to try.
H. To provide teachers with peer examples of products.
I. To provide teachers with time to: design a lesson or unit that differentiates for process; *and/or* design a lesson or unit that differentiates for products

Outcomes for Day 3

A.1. Teachers will be able to share and reflect on the lessons they designed and implemented that differentiated for content.
B.1. Teachers will identify multiple ways to flexibly group students.
C.1. Teachers will be able to identify how and when to flexibly group students, and reflect on how well they meet these criteria.
D.1. Teachers will understand what it means to differentiate for process.
D.2. Teachers will be able to identify, and see peer examples of, three strategies to differentiate for process: tic-tac-toe, learning menus, and cubing.
E.1. Teachers will be able to identify components that are important to consider when using strategies to differentiate for content.
F.1. Teachers will work in cooperative groups to learn about differentiating for products, and explore implications of differentiating for products as they relate to their classrooms.
G.1. Teachers will explore online lists of products and identify those that would work in their classrooms.
H.1. Teachers will see peer examples of differentiated products.
I.1. Teachers will: design a lesson or unit that differentiates for process; *and/or* design a lesson or unit that differentiates for products.

Objectives for Day 3

A.1.a. As a result of the completion of a reflection protocol in small groups, teachers will be able to share and reflect on their lessons that differentiated for content.
B.1.a. As a result of a brainstorming activity, teachers will be able to identify multiple ways to flexibly group students.
C.1.a. As a result of the information provided on how and when to group students, and the completion of a reflection on these criteria, teachers will be able to identify how to and when to flexibly group students for success.
D.1.a. As a result of the information provided, teachers will understand what it means to differentiate for process.

D.2.a. As a result of the information provided on differentiating for process, including peer examples, teachers will be able to identify three strategies—tic-tac-toe, learning menus, and cubing—as well as the steps necessary to implement them, including adaptations for readiness and learning profiles.

E.1.a. As a result of the information provided on "things to consider when differentiating for process," teachers will have the foundational information to be able to successfully implement strategies that differentiate for process in their classrooms.

F.1.a. As a result of a collaborative reading activity on differentiating for products, teachers will understand what it means to differentiate for products, including what makes an effective product and implications for their own classroom practice.

G.1.a. As a result of exploring online lists of products, teachers will identify product ideas they already use, as well as those they would like to try.

H.1.a. As a result of peer sharing of products, teachers will be able to visualize how differentiated products can be used in middle school classrooms.

I.1.a. As a result of the presentation, reading activity, online exploration, and peer sharing, teachers will design lessons that differentiate for process and products.

Day 3 Workshop Icebreaker: Two Truths and a Lie (Teacher's Edition)

The presenter will hand out playing cards as participants enter. Participants will sit at tables with those who have cards of the same rank. The presenter will have participants write down two things that have happened during their teaching that are true (the stranger the better), and one thing that is a lie. Participants will go around the group sharing their truths and lies as group members try to guess which is which. The presenter will share that the Two Truths and a Lie activity is a fun way to get to know people, including their students, on a more personal level.

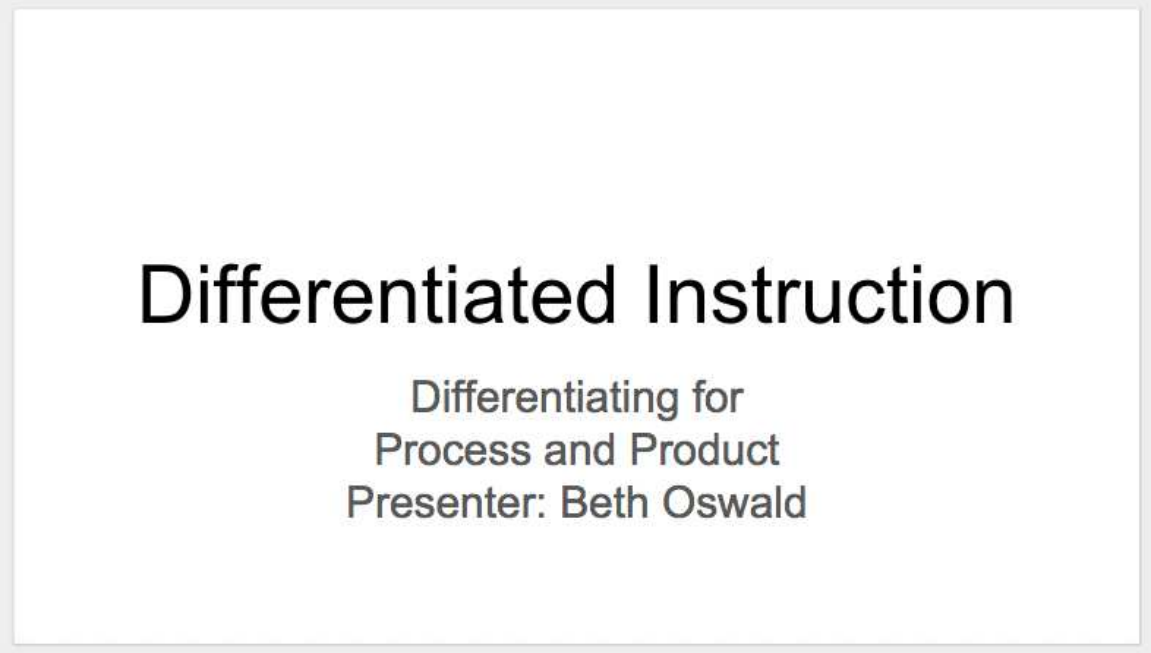
Day 3 Workshop Timeline, Components, Activities, and Strategies

Time	**Description of PD**	**DI Strategies Demonstrated**
8:00-9:15	Welcome back! Presenter will use playing cards to group participants. Playing card groups will: -Do an icebreaker, Two Truths and a Lie, about their teaching. -Use the "A Change in Practice" protocol to reflect on their lesson plans from the previous workshop.	 Interpersonal Verbal linguistic Interpersonal/Intrapersonal Small group activity
9:15-9:45	Participants will get in groups of 4–5 and brainstorm all the ways they partner	Small group activity Accessing prior knowledge

	or group students (on big paper). Participants will do a gallery walk and annotate grouping ideas to designate whether they already use it, want to use it, or need clarification.	Kinesthetic
9:45-10:15	The presenter will share Tomlinson's (1999, 2001) information on flexible groups, including when and how to use them. Participants will annotate "Teacher Checklist for Groups" (Tomlinson, 2001; Wormeli, 2006), and anonymously write the components that they find most difficult to do on Post-it notes.	Large group instruction Independent work Accessing/assessing prior knowledge Intrapersonal
10:15-10:25	Break: Participants should report to LMC after break and log in to a computer.	
10:30-11:30	The presenter will introduce, define, and share strategies—tic-tac-toe, learning menus, and cubing—for differentiating for process. Participants will see peer examples, from colleagues and online, of: tic-tac-toe, learning menus, and cubing. The presenter will share "things to consider when differentiating for process" (Heacox, 2009, p. 73).	Large group instruction Peer teaching Choice Large group instruction
11:30-12:30	Lunch: Participants will meet back in the resource room when they return.	
12:30-1:15	The presenter will facilitate participants as they get into candy groups and use a text protocol to read about differentiating products (Tomlinson, 2001, pp. 85–92) and explore implications for their classrooms.	Small group activity
1:15-1:30	Participants will explore online lists of products in computer lab and use a T-chart to identify those they already use and those they would like to use in the	Independent work

	future.	
1:30-1:45	Participants will see examples of products from their colleagues.	Peer teaching
1:50-2:50	The presenter will provide time for participants to: Design a lesson or unit that differentiates for process *and/or* Design a lesson or unit that differentiates for products	Independent work (in LMC or classrooms—participants to report to the resource room at 2:50 for the closing) Choice
2:50-3:00	Closing (in Resource Room) The presenter will discuss the following invitations and expectations: Invitations: -Invite teachers to join the DI PLC the 2nd and 4th Monday of each month. -Invite teachers to access and contribute to resources on the DI website -Teachers may wish to upload their lesson/unit plan that differentiates for process or products to their Educator Effectiveness Google Docs to share with the building administrator Expectations: -Design and implement at least one lesson or unit that differentiates for process *or* -Teachers are expected to design and implement at least one lesson or unit that differentiates for products -Teachers are expected to use the Differentiated Lesson Plan and Reflection format found on the DI website -Teachers are expected to complete the Final Workshop Evaluation before they leave and place it in the envelope on the front table -Thank you!	Large group Small group/choice Choice Choice Independent work

Workshop 3: Presentation Outline and Presenter Notes (in italics)



Welcome to the third and concluding DI workshop.

Icebreaker with Playing Card Groups
Pick a playing card and sit at a table with those who have cards of the same rank.
Icebreaker: Two Truths and a Lie (Teacher's Edition)
Write down two things that have happened during your teaching that are true, and one thing that is a lie.
Go around your group sharing truths and lies, as group members guess which are true and which are lies.
Is truth stranger than fiction?
Have teachers pick a playing card on the way in and sit at a table with those who have cards of the same rank (remove some cards so there will be groups of three). Have them do an icebreaker, Two Truths and a Lie. Give examples if needed.

Reflect and Share
With your Playing Card Group
Use the A Change in Practice (Thompson-Grove, n.d.) protocol to reflect on either:
Your varied support systems lesson
or
Your lesson using leveled texts
Hand out the protocol, A Change in Practice, and briefly introduce the process. Tell teachers they should choose the lesson that was the biggest change in their practice for the writing part of the process.

Flexible Grouping
(Group image)

http://www.clipartpanda.com/
A key component of differentiated instruction is flexible grouping. Throughout this workshop series, you have worked with a number of different groups of colleagues. Some groups were random, like the card group you just worked with. Some were predetermined: by interest, like your content area groups; by learning style, when you chose between reading or watching a video; by grade level group, when analyzing at student data and discussing IEPs; or when you were grouped heterogeneously by years of teaching. You also moved around and shared with a variety of partners while milling to music. Other times, your partners or groupings were self-selected - like we are going to do right now. Get in a group of 4 or 5, and brainstorm all the ways you partner or group students in your classroom. Put each method on a sheet of big paper then post it at the front of the room. When all groups are ready, do a gallery walk and have teachers put a star next to methods they already use/have used, a smiley face next to methods they would like to use, and a question mark if a method is unclear to them. If some of the posted methods are unclear, ask for clarification and encourage teachers to provide examples or demonstrate the unfamiliar process. Save the big paper and transfer these grouping ideas to the DI website.

Flexible Grouping
Flexible grouping is one of the key principles of differentiated instruction. Grouping students according to readiness, interest, or learning profile can help teachers differentiate for content, process, and product (Tomlinson, 1999).
Tomlinson (2001, p. 26) suggests teachers plan groupings as they plan their units:
When should the class work as a whole?
When should I plan small group activities?
When should students work individually?
When should I confer with individual students?
Flexible grouping is an important principle of differentiation. Tomlinson suggests planning student groupings as you plan your units.

Grouping
(Image of "Classroom Instructional Arrangements")
(Tomlinson, 2001, p. 25)
This chart can help you as you plan your next unit for whole class, small group and individualized activities, and when to confer with your students.

Teacher Checklist for Group Work
(Checklist image)
✓ = Yes, I currently do this well
X = No, I don't do this
? = I need clarification or have questions about this
! = Help, I need more information to do this well
(Tomlinson, 2001, p.24; Wormeli, 2006, p. 52)

Hand out checklist and have teachers work independently to annotate this checklist using the symbols, above. Have teachers identify components from the checklist that are the most difficult to do, and write them on Post-it notes. Have teachers anonymously turn in Post-its during the break (next). Compile a list of components that may need further discussion and information, and plan upcoming PLC meetings accordingly to address them.

Take a Break
(Clock image)
http://www.eremedia.com/
10 minute break. Report to the LMC after break.

Differentiating for Process
Differentiating for process involves incorporating "activities designed to ensure students use key skills to make sense out of essential ideas and information" (Tomlinson, 1999, p. 11).
Tic-Tac-Toe
Learning Menus
Cubing
Read the statement, above, on differentiating for process. Tell teachers that the following activities can help them allow for student choice while differentiating for readiness, interest, or learning profiles.

Tic-Tac-Toe: Steps
1. Identify the outcomes and instructional focus of a unit of study.
2. Use assessment data and student profiles to determine student readiness, learning profiles, or interests.
3. Design nine different tasks.
4. Arrange the tasks on a choice board.
5. Select one required task for all students. Place it in the center of the board.
6. Students complete three tasks, one of which must be the task in the middle square.
7. The three tasks should complete a Tic-Tac-Toe row.
(On Target, 2006, p. 14)
Tell teachers that choice boards are a great way to differentiate for process. Tic-tac-toe is just one type of choice board. Share information on tic-tac-toe choice boards.

Tic-Tac-Toe: Adaptations
Allow students to complete any three tasks—even if the completed tasks don't make a Tic-Tac-Toe.
Assign students tasks based on readiness.
Create different Tic-Tac-Toe boards based on readiness. (Struggling students work with the options on one choice board while more advanced students have different options.)

Create Tic-Tac-Toe board options based on learning styles or learning preferences. For example, a Tic-Tac-Toe board could include three kinesthetic tasks, three auditory tasks, and three visual tasks.
(On Target, 2006, p. 14)

Tic-Tac-Toe: Examples
World History - Medieval Unit
English Language Arts - Mythology Unit
Spanish - Dialogue
I will share examples from SMS staff.

Learning Menus: Steps
1. Identify the most important elements of a lesson or unit.
2. Create an imperative or required assignment or project that reflects the minimum understanding you expect all students to achieve.
3. Create negotiables that expand upon the main dish or imperative assignment or project. These negotiables often require students to go beyond the basic levels of Bloom's taxonomy. For example, they often include activities that require synthesis, analysis, or evaluation.
4. Create a final optional section that offers students the opportunity for enrichment. This section often reflects activities that students can use for extra credit.
(On Target, 2006, p. 10)
Learning menus are another great way to differentiate for process. Share information on learning menus.

Learning Menus: Format
Appetizers (Negotiables)
A list of assignments or projects
Students select one item to complete
The Main Dish (Imperatives)
An assignment or project that everyone must complete
Side Dishes (Negotiables)
A list of assignments or projects
Students select two items to complete
Desserts (Options)
Optional but irresistible assignments or projects
Options should be high interest and challenging
Students choose one of these enrichment options
(Wormeli, 2006, p. 62)

Learning Menu: Examples
Login to the DI Website: https://sites.google.com/a/[redacted]net.org/di-plc/
Click on the Documents tab

Look in the Differentiating for Process folder for examples of Menus for:
English Language Arts (ELA)
Math (Fractions)
Science
Social Studies (video)
Have teachers log in and explore online examples and information on Learning Menus.

Cubing: Steps
1. Identify the outcomes and instructional focus of a unit of study.
2. Use assessment data and student profiles to determine student readiness, learning profiles, or interests.
3. Design six different tasks—based on Bloom's taxonomy or Gardner's multiple intelligences—that probe the specifics of your unit.
4. Each face of a cube represents a different task.
5. The tasks may vary in difficulty - not all students/groups receive the same cube.
6. A student, alone or as part of a group, rolls the cube and completes the activity displayed on the top face of the cube. You may assign as few or as many sides as you like—you make the rules.
(Hall, 2009, p. 4; What is cubing? p. 4)
Cubing is another great way to differentiate for process. Share information on cubing.

Cubing: Adaptations
Using the first cube as your "average" cube, create two more using one as a lower level and one as a higher level.
Remember all cubes need to cover the same type of questions, just geared to the level or readiness, don't water them down or make them too busy!
Label your cubes so you know which level of readiness you are addressing.
Have a colleague look the cubes and see if they can tell which is high, medium, or low. If they can't tell, adjust slightly.
Have an easy and hard task on each cube, regardless of its readiness level.
Color code or otherwise delineate the cubes for easy identification.
(What is cubing? p. 4)

Cubing: Prompt Ideas
Side one—Describe it, recall, name, locate, list
Side two—Compare it, contrast, explain, write
Side three—Associate it, connect, make, design
Side four—Analyze it, review, discuss, diagram
Side five—Apply it, propose, suggest, prescribe
Side six—Argue for/against it, debate, formulate, support
(Hall, 2009, p. 5; What is cubing? p. 5)

Cubing: Examples

Log in to the DI Website: https://sites.google.com/a/[redacted]net.org/di-plc/
Click on the Documents tab
Look in the Differentiating for Process folder for examples of Cubing for:
ELA (poetry)
Art
Science
Social Studies
A printable cubing template and a step-by-step tutorial are also linked to the website
Have teachers log in and explore online examples and information on Learning Menus.

Things to Consider When Differentiating for Process:
1. Make sure activities are clearly focused on learning goals or academic standards.
2. Explicitly teach students the processes in advance.
3. Make sure activities address multiple learning profiles.
4. Organize tasks in ways that control choices to benefit students.
5. Offer engaging, interesting choices for all students.
6. Include a variety of tasks that are purposefully differentiated by learning profiles, interests, and/or readiness.
or
Include tasks that are differentiated to respond to the needs of a specific group of learners (and assigned based on learning needs).
(Heacox, 2009, p. 73)
Discuss these important things to consider when differentiating for process as a large group. Make copies of this slide and distribute before teachers work on their lesson/unit plans.

Lunch
See you in an hour!
Meet back in the LMC after lunch.

Effective Product Design
Grouping Activity: Candy Groups
Read about Differentiating Products (Tomlinson, 2001, pp. 85–92).
Use the Three Levels of Text Protocol (2003) to deepen your understanding of the text and explore implications for your work.
See the DI PLC site for lists of product ideas:
Multimodal Grid of Activities (2011)
Products for Multiple Intelligences (Taylor, 2002)
Complete the T-chart
Welcome back! We are going to finish up this workshop with information on and examples of differentiating products. First we are going to get into groups and read about DI for products. You will be using a text protocol in your groups to help you think more deeply about the text and explore implications for your work. Take a piece of candy

from the bowl at the front. Find the other teachers with the same flavor. Grab a copy of the text and the text protocol off the front table then find a comfortable spot to read and work with your group. When you are finished, meet up in the LMC and log in to the DI website to look at links to sample lists of product ideas. Distribute the T-chart handout and have teachers make a list of product ideas they already use, as well as those they would like to try in the future.

Example of Products
Museum of Ancient Civilizations - World History
Holocaust Project - English Language Arts
I will share examples of SMS staff student products.

Lesson/Unit Design
Design a lesson or unit that differentiates for process
and/or
Design a lesson or unit that differentiates for products
You have time to work—either in the LMC, in your classroom, or in a colleague's classroom—on designing a lesson or unit that differentiates for process or products (or both). You will be expected to implement this lesson/unit, and may wish to upload it to your Educator Effectiveness Google Docs to include as evidence of differentiated instruction.

Take a Break
Take a 10-minute break!
Get what you need to create your lesson/unit.
Work Time
Report to your chosen work area.
Return to the LMC 10 minutes before the end of the day.
10 minute break then work time. If working in the LMC or in a colleague's room, get the materials you will need to create your lesson/unit and report to your chosen work area. Please return to the LMC 10 minutes before the end of the day for the Closing.

Closing
Invitations:
You are invited to participate in the DI PLC the 2nd and 4th Monday of each month.
You are invited to access and contribute to resources on the DI website.
You may wish to upload your lesson/unit plan that differentiates for process or products to your Educator Effectiveness Google Docs as evidence of differentiation to share with the building administrator.
Expectations:
Design and implement at least one lesson or unit that differentiates for process.
or
Design and implement at least one lesson or unit that differentiates for products.

Use the Differentiated Lesson Plan and Reflection format found on the DI website. Complete the Final Workshop Evaluation before you leave and place it in the envelope on the front table.
Discuss invitations and expectations. Provide hard copies of the Differentiated lesson Plan and Reflection sheet for those who want it. Encourage teachers to come to PLC meetings to collaborate on their lesson/unit designs and reflect on their implementation. Reiterate that the DI website has links to all the information from these workshops and more. Encourage the use of the website for sharing and collaboration. Have teachers complete the final evaluation of the workshops, and place it in the envelope at the front of the room.

Thank you!
Thank teachers for attending! Dismiss.

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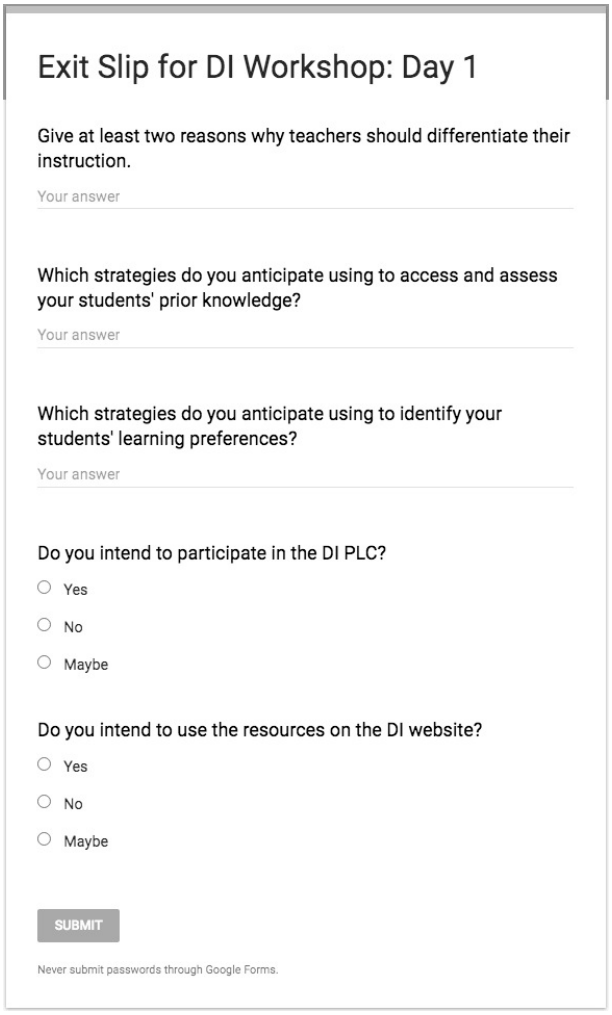
Formative Evaluations



Exit Slip for DI Workshop: Day 1

Give at least two reasons why teachers should differentiate their instruction.

Your answer

Which strategies do you anticipate using to access and assess your students' prior knowledge?

Your answer

Which strategies do you anticipate using to identify your students' learning preferences?

Your answer

Do you intend to participate in the DI PLC?

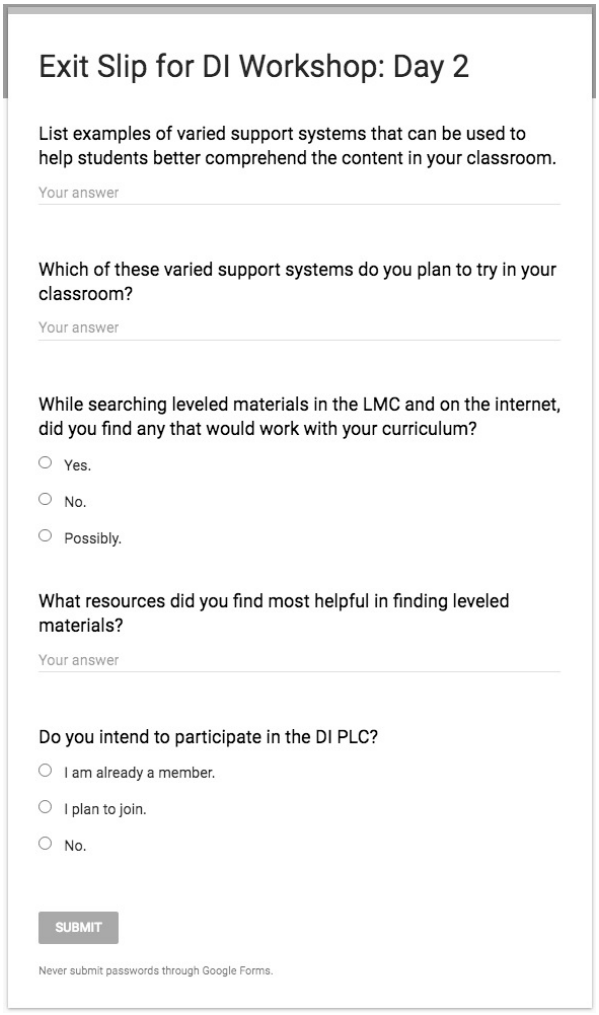
- Yes
- No
- Maybe

Do you intend to use the resources on the DI website?

- Yes
- No
- Maybe

SUBMIT

Never submit passwords through Google Forms.



Exit Slip for DI Workshop: Day 2

List examples of varied support systems that can be used to help students better comprehend the content in your classroom.

Your answer

Which of these varied support systems do you plan to try in your classroom?

Your answer

While searching leveled materials in the LMC and on the internet, did you find any that would work with your curriculum?

- Yes.
- No.
- Possibly.

What resources did you find most helpful in finding leveled materials?

Your answer

Do you intend to participate in the DI PLC?

- I am already a member.
- I plan to join.
- No.

SUBMIT

Never submit passwords through Google Forms.

Summative Evaluation

Final Workshop Evaluation

Place an X in the box which best represents your level of agreement with the following statements:
SA=Strongly Agree; A=Agree; N=Neutral; D=Disagree; SD=Strongly Disagree

	SA	A	N	D	SD
I had a clear idea of what was expected of me in this workshop					
The workshop helped motivate me to learn					
I found the workshop intellectually stimulating					
The workshop materials helped me to learn					
The volume of work in this workshop was appropriate					
The facilitators showed an interest in my needs during this workshop					
I received helpful feedback on how I was doing in this workshop					
The physical environment of the workshop helped me to learn					
I could now differentiate for readiness, interest, and learning profile					
I could now differentiate for content					
I could now differentiate for process					
I could now differentiate for products					
I could now flexibly group students for success					
The workshop discussions helped me with my learning					
The small group activities helped me with my learning					
This workshop helped deepen my understanding of DI for content literacy					
Overall I was satisfied with the quality of this workshop					

This survey is based on Doherty's (2011) post-workshop evaluation (p. 389).

Doherty, I. (2011). Evaluating the impact of educational technology professional development upon adoption of web 2.0 tools in teaching. *Australasian Journal of Educational Technology, 27*(3), 381–396.

Workshop Handouts

Differentiated Lesson Plan and Reflection Template

Teacher' Name:

Subject/Grade Level:

Objectives/KUDos (what will students know, understand, and be able to do):

Know:

Understand:

Do:

Pre-Assessment/Formative Assessment Notes:

"Why" differentiate? (describe the identified/anticipated learner needs in this class):

Hook/Entry Activity:

Differentiating the "what" and the "how"? (The curricular elements you are using/ modifying in response to learner needs.)

Content (materials/resources to teach content):

Process (activities through which students will make sense of key ideas using essential skills):

Product (how students will demonstrate and extend what they understand and can do as a result of a span of learning):

Closure (activity/Q & A/sharing of products/exit slip/review):

Post lesson reflection:

This lesson plan is based on the works of Tomlinson (1999) and Heacox (2009).

Heacox, D. (2009). Making differentiation a habit: How to ensure success in academically diverse classrooms. Minneapolis, MN: Free Spirit.

Tomlinson, C. A. (1999). The differentiated classroom: Responding to the needs of all learners. Alexandria, VA: Association for Supervision and Curriculum Development.

Teacher Checklist for Group Work

Read and annotate the checklist for group work, below, using the following symbols:

✓ = Yes, I currently do this well
χ = No, I don't do this
? = I need clarification or have questions about this
! = Help, I need more information to do this well

☐ Students understand the task goals.

☐ Students understand what's expected of individuals to make the group work well.

☐ The task matches the goals (leads students to what they should know, understand, and be able to do).

☐ Most kids should find the task interesting.

☐ The task requires an important contribution from each group.

☐ The task is likely to be demanding of the group and its members.

☐ The task requires genuine collaboration to achieve shared understanding.

☐ The timelines are brisk (but not rigid).

☐ Individuals are accountable for their own understanding of all facets of the task.

☐ There's a "way out" for students who are not succeeding with the group.

☐ There is opportunity for teacher or peer coaching and in-process quality checks.

☐ Students understand what to do then they complete their work at a high level of quality.

(Tomlinson, 2001, p. 24; Wormeli, 2006, p. 52)

Product T-Chart

Product Ideas I Use	Product Ideas I'd Like to Try

DI Website

DI Website Purpose

Study data indicated that teachers at SMS wanted resources to help them differentiate for content literacy: instructional strategies, lesson ideas, and activities. The DI website documents page will include attachments and links to materials and resources utilized and referenced during the workshops, as well as additional resources to guide and support the DI PLC. Additionally data indicated SMS teachers had limited preparation time at school, and often had to plan all their lessons at school on their personal time, as all their resources were there. The DI website resources will be accessible online, allowing teachers to access its resources when and where it is most convenient for them.

The data showed that participants wanted time to collaborate with their peers. Although the workshops include collaborative activities, and the DI PLC would provide teachers with the option of at least two additional hours of collaboration time per month, teachers may want more opportunities to collaborate. Therefore, the DI website will include a directory, discussion board, and resource sharing page. These web features will allow teachers to collaborate anytime, anywhere, and will also provide virtual a space for them to share documents and links.

Data also found that some teachers preferred to learn independently, or to choose their own learning opportunities. The DI website will provide numerous topics and resources for self-selected, independent learning.

DI Website Goals

A. To provide teachers with online access to resources for differentiating instruction for content literacy.
B. To provide teachers with virtual opportunities for collaboration.
C. To provide teachers with online opportunities for independent or self-selected learning on differentiated instruction for content literacy.

DI Website Outcomes

A.1. Teachers will be able to access resources for differentiating instruction for content literacy online.
B.1. Teachers will be able to collaborate and share virtually with colleagues.
C.1. Teachers will be able to learn independently and choose from a variety of learning resources on differentiation for content literacy.

DI Website Objectives

A.1.a. As a result of the creation of the DI website, teachers will have unlimited access to workshop and PLC resources to help them differentiate instruction for content literacy.

B.1.a. As a result of the creation of the DI website—with its directory, discussion board, and resource sharing page—teachers will have opportunities to collaborate and share virtually.

C.1.a. As a result of the creation of the DI website, teachers will have access to a variety of independent learning opportunities to choose from.

DI Website Resources by Topic

Introduction: Differentiating Instruction

Differentiated Instruction: Defined

Tomlinson, C. A., & Demirsky, A. (2000). *Leadership for differentiating schools and classrooms* (chapter 1, figure 1.1). Retrieved from http://www.ascd.org/publications/books/100216/chapters/Understanding-Differentiated-Instruction@-Building-a-Foundation-for-Leadership.aspx

What differentiation is—and is not. (2015). Retrieved from http://www.teachthought.com/uncategorized/the-definition-of-differentiated-instruction/

Tomlinson, C. A. (2014, May 15). Revisiting the differentiated classroom: Looking back and ahead. Webinar retrieved from http://video.ascd.org/services/player/bcpid18377529001?bckey=AQ~~,AAAAAmGjiRE~,escbD3Me8-wT_coVb7sTe18vG6vv3Oyk&bctid=3570868569001

District RTI Handbook: DI and Tier 1 RTI

[redacted] multi-level system of support (MLSS) student servicing handbook. (2013, August 23). Retrieved from

https://drive.google.com/a/[redacted]net.org/file/d/0B_42rjDKxVxLM094cDh3Z3VKUDA/view

Analyzing Changes in Practice: Activity

Thompson-Grove, G. (n.d.). *A change in practice.* Retrieved from http://www.nsrfharmony.org/system/files/protocols/change_practice_0.pdf

DI Self-Assessment Tool

Stetson and Associates, Inc. (2006). Differentiated instruction self-assessment. Retrieved from http://stetsonassociates.com/wp-content/uploads/2012/06/DI-Self-Assessment-Tool.pdf

Example: 3, 2, 1 Activity

Sloan, N. (2012, May 1). 3-2-1: A differentiated instruction strategy [Web log post]. Retrieved from https://greeceathena.wordpress.com/2012/05/01/3-2-1-a-differentiated-instruction-strategy-by-nancy-sloan/

Differentiating for Readiness, Interest, and Learning Profiles

Articles for Discussion/Analysis

Powell, W., & Kusuma-Powell. (2011). *How to teach now: Five keys to personalized learning in the global classroom* (chapter 1, knowing our students as learners). Retrieved from http://www.ascd.org/publications/books/111011/chapters/Knowing-Our-Students-as-Learners.aspx

Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms* (2nd ed.) (chapter 10, the how to's of planning lessons differentiated by learning

profile). Retrieved from http://www.ascd.org/publications/books/101043/chapters/The-How-To's-of-Planning-Lessons-Differentiated-by-Learning-Profile.aspx

Tomlinson, C. A., Brighton, C., Hertberg, H., Callahan, C. M., Moon, T. R., Brimijoin, K., & ... Reynolds, T. (2003). Differentiating instruction in response to student readiness, interest, and learning profile in academically diverse classrooms: A review of literature. *Journal for the Education of the Gifted, 27*(2-3), 119–145.

Pre-Assessment: Introduction

Pre-assessing for general readiness, interests, and learning profiles. (2012). Retrieved from http://www.fortthomas.kyschools.us/docs/DI-AssessmentM2ReadingGeneralPre-assessment.pdf

Pre-Assessment Strategies

McCarthy, J. (2014, July, 29). 15+ readiness resources for driving student success [Web log]. Retrieved from http://www.edutopia.org/blog/differentiated-instruction-readiness-resources-john-mccarthy

Preparing learners: Activating prior knowledge [Video file]. (n.d.). Retrieved from https://www.teachingchannel.org/videos/activating-prior-knowledge

Multiple Intelligence (MI) Self-Assessment

Multiple intelligences self-assessment. (2015, November 15). Retrieved from http://www.edutopia.org/multiple-intelligences-assessment

Post-Lesson Strategy

How to do exit slips: Teach like this [Video file]. (2013, October 9). Retrieved from https://www.youtube.com/watch?v=tN-R_KPtKp8

Differentiating for Content

Why Differentiate for Content?

Carol Tomlinson on differentiation: connecting kids and content. [Video file]. (2011, October 6). Retrieved from https://www.youtube.com/watch?v=1OyfG6L67oA

Varied/Leveled Text Resources

Commonlit. (2015). Retrieved from http://commonlit.org/

Find a book. (2015). Retrieved from http://www.bookadventure.com/book_finder.aspx

Finding leveled articles and resources. (n.d.). Retrieved from http://libguides.[redacted]net.org/content.php?pid=612640&sid=5143644

The Lexile framework for reading. (2015). Retrieved from https://lexile.com/

Leveled News Resources:

Newsela. (2015). https://newsela.com/

News in levels. (2014). http://www.newsinlevels.com/

Smithsonian tween tribune. (n.d.). Retrieved from http://tweentribune.com/

Text Summarization/Simplification Tools

Rewordify. (n.d.). Retrieved from http://rewordify.com/

Text compactor. (2014). Retrieved from http://www.textcompactor.com/

Reading Strategies and Graphic Organizers

AdLit.org. (2016). Classroom strategies. Retrieved from http://www.adlit.org/strategy_library/

Freeology. (n.d.). Graphic organizers. Retrieved from http://freeology.com/graphicorgs/

Grouping Students for Success

Articles for Discussion/Analysis

Center for Mental Health in Schools. (2013, July). *Matching students and instruction: The dilemma of grouping students* (Issue brief). Retrieved from http://smhp.psych.ucla.edu/pdfdocs/grouping.pdf

Yee, V. (2013, June 9). Grouping students by ability regains favor in classroom. *The New York Times.* Retrieved from http://www.nytimes.com/2013/06/10/education/grouping-students-by-ability-regains-favor-with-educators.html?_r=1

Grouping Strategies

Connell, G. (2013, November 6). 15 quick and creative ways to group and partner students [Web log post]. Retrieved from http://www.scholastic.com/teachers/top-teaching/2013/11/15-quick-and-creative-ways-group-and-partner-students

Differentiating for Process

Cubing Strategies

Cassidy. How the cubing strategy can be used in art class. (2012, July 19). Retrieved from http://www.theartofed.com/2012/07/19/how-the-cubing-strategy-can-be-used-in-art-class/

Cubing and think dots. (n.d.). Retrieved from https://daretodifferentiate.wikispaces.com/file/view/nagc_cubing__think_dots.pdf/43640297/nagc_cubing__think_dots.pdf

Cubing: Classification. (n.d.). Retrieved from http://www.bsu.edu/gate/Instruction/Cubing/Classification.htm

Menu Strategies

Differentiating with learning menus [Video file]. (n.d.). https://www.teachingchannel.org/videos/differentiating-instruction-strategy

Diner menu: Photosynthesis. (n.d.). Retrieved from http://www.calhounisd.org/downloads/dcia/bb_ieps_diner_menu.pdf

Fenton, J. (n.d.). Math menu: Fractions. Retrieved from http://issuu.com/jennysfen/docs/fractions-_math_menu_2012

Learning menus. (n.d.). Retrieved from http://iris.peabody.vanderbilt.edu/module/di/cresource/q2/p07/di_07_link_menus/

Tic-Tac-Toe Strategies

Choice boards: Tic-tac-toe menu boards. (n.d.). Retrieved from http://www.alexiscullerton.com/uploads/2/4/7/2/24729748/choice_boards_packet.pdf

How to use a think tac toe assessment: Teach like this [Video file]. (2014, June 4). Retrieved from https://www.youtube.com/watch?v=EWMo4WbVSPQ

Differentiating for Products

Reading for Discussion/Analysis

Tomlinson, C. A. (2001). Differentiating products. *How to differentiate instruction in mixed-ability classrooms* (2nd ed.) (pp. 85–92). Retrieved from https://books.google.com/books?id=A7zI3_Yq-

lMC&lpg=PA86&ots=Wko9IwvNUv&dq=tomlinson%20effective%20product%20design&pg=PA85#v=onepage&q&f=false

Student Product/Activity Ideas

Multimodal grid of activities. (2011). Retrieved from http://soltreemrls3.s3-website-us-west-2.amazonaws.com/solution-tree.com/media/pdfs/Reproducibles_SDI/multimodalgrid.pdf

Taylor, R. (2002). Products for multiple intelligences. Retrieved from https://www.rogertaylor.com/clientuploads/documents/references/Product-Grid.pdf

Lesson Planning

Differentiation central: Lesson plans. (2012). Retrieved from http://www.diffcentral.com/Lesson_Plans.html

Heacox, D. (2009). A CD-ROM of reproducible forms for making differentiation a habit: How to ensure success in academically diverse classrooms. Minneapolis, MN: Free Spirit.

Protocols

Text/Article Discussion/Analysis Protocols

Averette, P. (n.d.). Save the last word for me. Retrieved from http://www.nsrfharmony.org/system/files/protocols/save_last_word_0.pdf

Fischer-Mueller, J., & Thompson-Grove, G. (n.d.). The final word. Retrieved from http://www.nsrfharmony.org/system/files/protocols/final_word_0.pdf

Gray, J. (2005). Four “A”s text protocol. Retrieved from http://www.nsrfharmony.org/system/files/protocols/4_a_text_0.pdf

Text rendering experience. (n.d.). Retrieved from http://www.nsrfharmony.org/system/files/protocols/text_rendering_0.pdf

Three levels of text protocol. (2003, November 20). Retrieved from http://www.nsrfharmony.org/system/files/protocols/3_levels_text_0.pdf

Student Work/Data Analysis Protocols

Atlas: Looking at data. (n.d.). Retrieved from http://www.nj.gov/education/AchieveNJ/teams/strat21/AtlasLookingatData.pdf

Consultancy: Adapted for examining student work. (n.d.). Retrieved from http://www.nsrfharmony.org/system/files/protocols/consultancy_0.pdf

Data analysis protocol. (n.d.). Retrieved from http://www.allthingsplc.info/files/uploads/data_analysis_protocol.pdf

Observation Protocols

Frazer, E. (n.d.). School walk protocol. Retrieved from http://www.nsrfharmony.org/system/files/protocols/school_walk_0.pdf

Observation protocol #2: Focus point. (n.d.). Retrieved from http://www.nsrfharmony.org/system/files/protocols/obs_focus_point.pdf

Observation protocol #6: Person observed as coach. (n.d.). Retrieved from http://www.nsrfharmony.org/system/files/protocols/observed_coach.pdf

Problem/Issue-Oriented Protocols

Peeling the onion: Developing a problem protocol. (n.d.). Retrieved from http://www.nsrfharmony.org/system/files/protocols/peeling_onion_0.pdf

Ping pong protocol: A consultancy for groups. (n.d.). Retrieved from http://www.nsrfharmony.org/system/files/protocols/ping_pong.pdf

Forms for PLCs

Establishing Norms

Wentworth, M. (n.d.). *Forming ground rules.* Retrieved from http://www.nsrfharmony.org/system/files/protocols/forming_ground_rules.pdf

Setting Goals

Mattos, M. (2007). *Team SMART goal-setting plan.* Retrieved from http://www.allthingsplc.info/files/uploads/TeamSMARTgoal-settingplan.pdf

SMART goal worksheet. (2010). Retrieved from http://www.allthingsplc.info/files/uploads/smartgoalworksheet.pdf

Group Agenda Planning

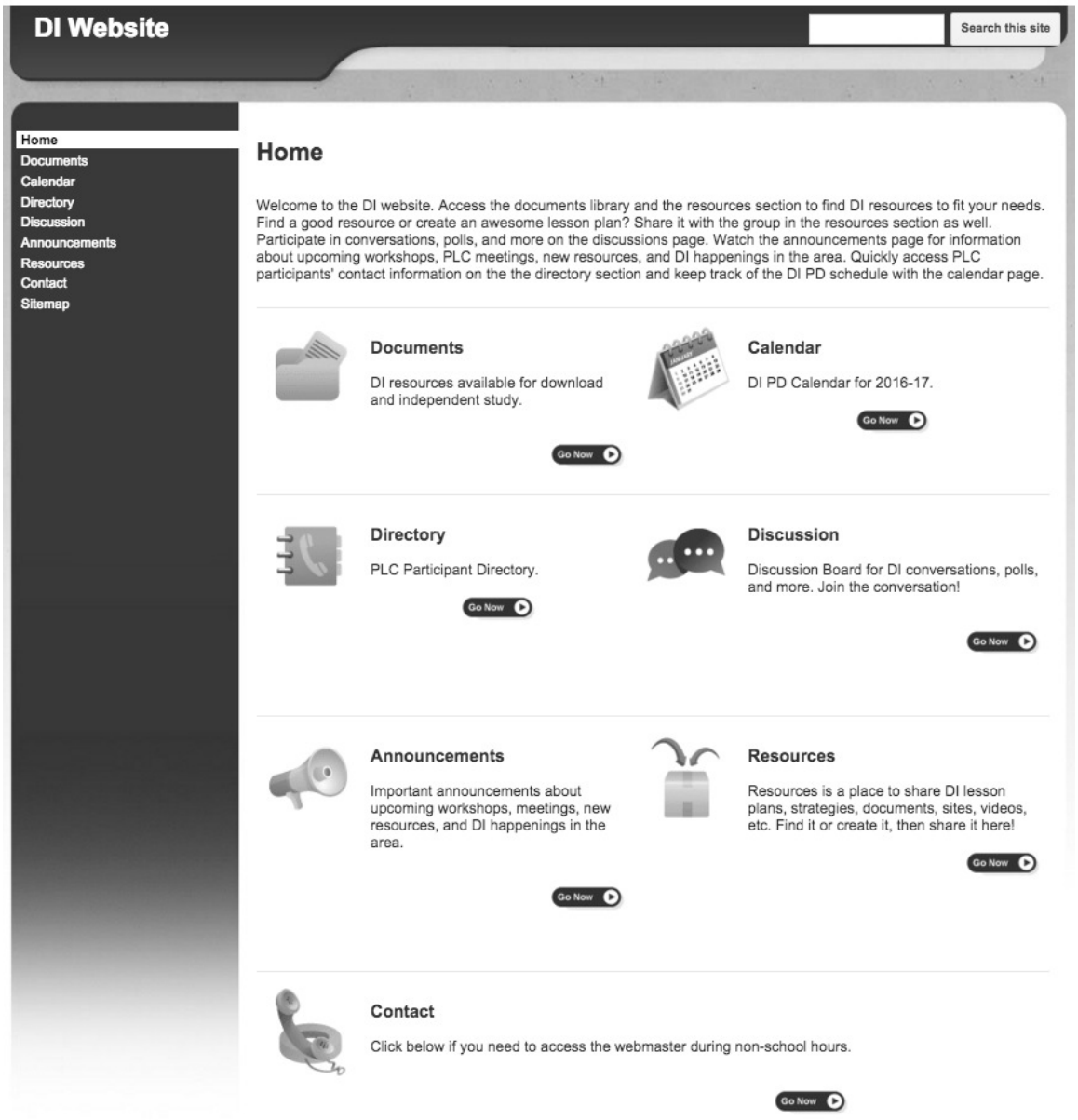
Allen-Spann, S., & Bambino, D. (n.d.). Group agenda planning. Retrieved from http://www.nsrfharmony.org/system/files/protocols/group_imap.pdf

PLC Feedback

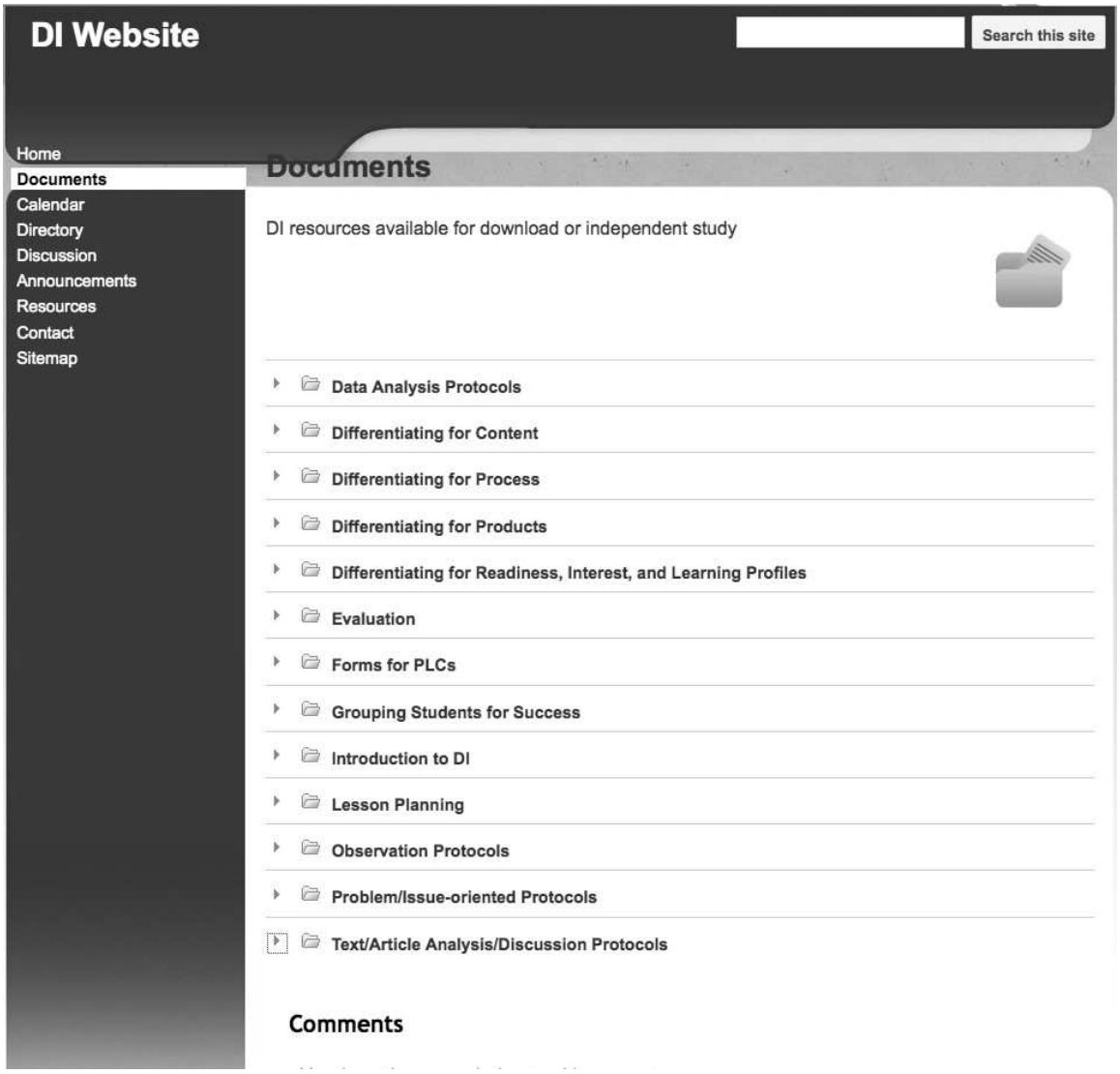
Solution Tree. (2006). Team feedback sheet. Retrieved from http://www.allthingsplc.info/files/uploads/TeamFeedbackSheet.pdf

DI Website Screen Shots

DI Website Homepage Screen Shot



DI Website Documents Page Screen Shot



DI Website Bibliography

AdLit.org. (2016). Classroom strategies. Retrieved from http://www.adlit.org/strategy_library/

Allen-Spann, S., & Bambino, D. (n.d.). Group agenda planning. Retrieved from http://www.nsrfharmony.org/system/files/protocols/group_imap.pdf

Atlas: Looking at data. (n.d.). Retrieved from http://www.nj.gov/education/AchieveNJ/teams/strat21/AtlasLookingatData.pdf

Averette, P. (n.d.). Save the last word for me. Retrieved from http://www.nsrfharmony.org/system/files/protocols/save_last_word_0.pdf

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Cassidy. How the cubing strategy can be used in art class. (2012, July 19). Retrieved from http://www.theartofed.com/2012/07/19/how-the-cubing-strategy-can-be-used-in-art-class/

Center for Mental Health in Schools. (2013, July). *Matching students and instruction: The dilemma of grouping students* (Issue brief). Retrieved from http://smhp.psych.ucla.edu/pdfdocs/grouping.pdf

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Connell, G. (2013, November 6). 15 quick and creative ways to group and partner students [Web log post]. Retrieved from http://www.scholastic.com/teachers/top-teaching/2013/11/15-quick-and-creative-ways-group-and-partner-students

Consultancy: Adapted for examining student work (n.d.). Retrieved from http://www.nsrfharmony.org/system/files/protocols/consultancy_0.pdf

Cubing and think dots. (n.d.). Retrieved from https://daretodifferentiate.wikispaces.com/file/view/nagc_cubing__think_dots.pdf/43640297/nagc_cubing__think_dots.pdf

Cubing: Classification. (n.d.). Retrieved from http://www.bsu.edu/gate/Instruction/Cubing/Classification.htm

Data analysis protocol. (n.d.). Retrieved from http://www.allthingsplc.info/files/uploads/data_analysis_protocol.pdf

Differentiating with learning menus [Video file]. (n.d.). https://www.teachingchannel.org/videos/differentiating-instruction-strategy

Differentiation central: Lesson plans. (2012). Retrieved from http://www.diffcentral.com/Lesson_Plans.html

Diner menu: Photosynthesis. (n.d.). Retrieved from http://www.calhounisd.org/downloads/dcia/bb_ieps_diner_menu.pdf

[redacted] multi-level system of support (MLSS) student servicing handbook. (2013, August 23). Retrieved from https://drive.google.com/a/[redacted]net.org/file/d/0B_42rjDKxVxLM094cDh3Z3VKUDA/view

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Find a book. (2015). Retrieved from http://www.bookadventure.com/book_finder.aspx

Finding leveled articles and resources. (n.d.). Retrieved from http://libguides.[redacted]net.org/content.php?pid=612640&sid=5143644

Fischer-Mueller, J., & Thompson-Grove, G. (n.d.). The final word. Retrieved from http://www.nsrfharmony.org/system/files/protocols/final_word_0.pdf

Frazer, E. (n.d.). School walk protocol. Retrieved from http://www.nsrfharmony.org/system/files/protocols/school_walk_0.pdf

Freeology. (n.d.). Graphic organizers. Retrieved from http://freeology.com/graphicorgs/

Google search: Reading level [Video file]. (2013, February 19). Retrieved from https://www.youtube.com/watch?v=P1_Cp33rFBY

Gray, J. (2005). Four "A"s text protocol. Retrieved from http://www.nsrfharmony.org/system/files/protocols/4_a_text_0.pdf

Hall, B. (2009). Differentiated instruction: Reaching all students. Retrieved from http://assets.pearsonschool.com/asset_mgr/current/201034/MatMon092625HS2011Hall_12504.pdf

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Heacox, D. (2009). Making differentiation a habit: How to ensure success in academically diverse classrooms. Minneapolis, MN: Free Spirit.

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Powell, W., & Kusuma-Powell. (2011). *How to teach now: Five keys to personalized learning in the global classroom* (chapter 1, knowing our students as learners). Retrieved from http://www.ascd.org/publications/books/111011/chapters/Knowing-Our-Students-as-Learners.aspx

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Rewordify. (n.d.). Retrieved from http://rewordify.com/

Sloan, N. (2012, May 1). 3-2-1: A differentiated instruction strategy [Web log post]. Retrieved from https://greeceathena.wordpress.com/2012/05/01/3-2-1-a-differentiated-instruction-strategy-by-nancy-sloan/

SMART goal worksheet. (2010). Retrieved from http://www.allthingsplc.info/files/uploads/smartgoalworksheet.pdf

Smithsonian tween tribune. (n.d.). Retrieved from http://tweentribune.com/

Solution Tree. (2006). Team feedback sheet. Retrieved from http://www.allthingsplc.info/files/uploads/TeamFeedbackSheet.pdf

Stetson and Associates, Inc. (2006). Differentiated instruction self-assessment. Retrieved from http://stetsonassociates.com/wp-content/uploads/2012/06/DI-Self-Assessment-Tool.pdf

Taylor, R. (2002). Products for multiple intelligences. Retrieved from https://www.rogertaylor.com/clientuploads/documents/references/Product-Grid.pdf

Text compactor. (2014). Retrieved from http://www.textcompactor.com/

Text rendering experience. (n.d.). Retrieved from http://www.nsrfharmony.org/system/files/protocols/text_rendering_0.pdf

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Three levels of text protocol. (2003, November 20). Retrieved from http://www.nsrfharmony.org/system/files/protocols/3_levels_text_0.pdf

Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms* (2nd ed.). Retrieved from http://www.teachersity.org/resources/instruction.pdf

Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms* (2nd ed.). (Chapter 10, the how to's of planning lessons differentiated by learning profile). Retrieved from

http://www.ascd.org/publications/books/101043/chapters/The-How-To's-of-Planning-Lessons-Differentiated-by-Learning-Profile.aspx

Tomlinson, C. A. (2014, May 15). Revisiting the differentiated classroom: Looking back and ahead. Webinar retrieved from http://video.ascd.org/services/player/bcpid18377529001?bckey=AQ~~,AAAAAmGjiRE~,escbD3Me8-wT_coVb7sTe18vG6vv3Oyk&bctid=3570868569001

Tomlinson, C. A., Brighton, C., Hertberg, H., Callahan, C. M., Moon, T. R., Brimijoin, K., & ... Reynolds, T. (2003). Differentiating instruction in response to student readiness, interest, and learning profile in academically diverse classrooms: A Review of literature. *Journal for the Education of the Gifted, 27*(2-3), 119–145.

Tomlinson, C. A., & Demirsky, A. (2000). *Leadership for differentiating schools and classrooms* (chapter 1, figure 1.1). Retrieved from http://www.ascd.org/publications/books/100216/chapters/Understanding-Differentiated-Instruction@-Building-a-Foundation-for-Leadership.aspx

Wentworth, M. (n.d.). *Forming ground rules.* Retrieved from http://www.nsrfharmony.org/system/files/protocols/forming_ground_rules.pdf

Wormeli, R. (2006). Fair isn't always equal: Assessing and grading in the differentiated classroom. Portland, ME: Stenhouse.

What differentiation is—and is not. (2015). Retrieved from http://www.teachthought.com/uncategorized/the-definition-of-differentiated-instruction/

What is Cubing? (n.d.) Retrieved from http://www.amaesd.net/media/teacher%20resources/differentiated%20instruction/Differentiated%20Strategies/What%20Is%20Cubing.pdf

Yee, V. (2013, June 9). Grouping students by ability regains favor in classroom. *The New York Times.* Retrieved from http://www.nytimes.com/2013/06/10/education/grouping-students-by-ability-regains-favor-with-educators.html?_r=1

Differentiating Instruction Professional Learning Community (DI PLC)

DI PLC Purpose, Goals, Outcomes, and Objectives

DI PLC Purpose

Study participants stated they needed more time to plan and gather resources to be able to effectively implement and sustain DI for content literacy in their classrooms. They also wanted to be able to collaborate with others as they developed, implemented, and reflected upon the efficacy of their differentiated lessons. Recent studies (Dixon et al., 2014; Kappler Hewitt & Weckstein, 2012) have found that teachers who collaborated during the process of lesson creation, implementation, feedback and reflection were more likely to differentiate instruction. As a result, this professional development program offers middle school content area teachers at SMS the opportunity to extend and deepen the learning experiences of the workshops by participating in a DI PLC. The DI PLC will provide teachers with time to collaborate with their colleagues, and receive support from the workshop presenter as they work to differentiate instruction for content literacy.

DI PLC Goals

A. To provide teachers with time to collaborate with colleagues as they develop, implement, and reflect on lessons that differentiate for content literacy.

B. To provide teachers with support and feedback on topics related to the differentiated instruction for content literacy workshops.

DI PLC Outcomes

A.1. Teachers will have the opportunity to collaborate with colleagues as they develop, implement, and reflect on differentiated lessons.

B.1. Teachers will have access to support and feedback as they work to differentiate instruction for content literacy.

DI PLC Objectives

A.1.a. As a result of collaboration time with colleagues, teachers will develop, reflect on, and improve lessons that differentiate instruction for content literacy.

B.1.b. As a result of DI PLC participation, teachers will have access to a support network of colleagues and the workshop presenters as they differentiate instruction for content literacy.

DI PLC Opportunities Outline

This outline includes possible activities and topics for the DI PLC. As the DI PLC's agenda will be driven by its participants, the opportunities listed are suggested. The outline includes both formative and summative evaluation methods.

DI PLC opportunities for teachers:

a. Lesson planning between grade level teachers
b. Lesson planning among content area teachers
c. Analysis of student data
d. Analysis of student work
e. Sharing, discussing, and analyzing DI resources, activities, ideas, and materials
f. Peer evaluation of differentiated activities, lesson plans, or units
g. Planning for and reflecting on peer observation of differentiated lessons
h. Other opportunities as determined by the needs of the participants

II. Evaluation
   a. Formative:
      i. Group Agenda Planning (Allen-Spann & Bambino, n.d.)
      ii. DI PLC Meeting Logs
   b. Summative: PLC Year End Survey—teachers will complete a year end survey indicating how much they valued the different components of the DI PLC and supporting website (using a 5 point Likert-style scale), including:
      i. Reading/discussing/analyzing articles/book chapters
      ii. Selecting/receiving/sharing new materials on DI
      iii. Sharing/discussing/analyzing results of DI implementation: activities/lessons
      iv. Analyzing student data/work
      v. Collaborative learning/planning
      vi. Participating in peer observations
      vii. Using the collaborative website
      viii. Additional open-ended questions include:
         1. What part(s) of the DI PLC were most beneficial to you?
         2. What changes could be made to improve the DI PLC?
         3. Would you like to see this PLC continue?
         4. Would you like to see the DI Website continue?

DI PLC Meeting Log Template

DI PLC participants will focus on all students' achievement through data driven collaboration and continuous learning.

Date	
Location	LMC
Time	

Teachers Present	
Facilitator:	
Recorder:	
Norm/Time Keeper:	

Standing Agenda Items:
• Review Norms
•
•

PLC SMART Goals (check all that apply for today's meeting):
☐
☐
☐
☐

Today's Discussions/Activities:

Topic	**Desired Outcome**	**Action Steps/Data to Consider/Collect**	**By Whom?**

Questions/Concerns (resulting from today's PLC):

Question/Concern	**Continued Action Needed/Next Steps?**	**By Whom?**

This meeting log is based on [redacted] "PLC Meeting Log" (2015), and Solution Tree's "Team Feedback Sheet" (2006).

Sample Meeting Logs

DI PLC Meeting Log—Norms

DI PLC participants will focus on all students' achievement through data driven collaboration and continuous learning.

Date	
Location	LMC
Time	

Teachers Present	
Facilitator: Beth Oswald	
Recorder:	
Norm/Time Keeper:	

Standing Agenda Items:

-
-
-

PLC SMART Goals (check all that apply for today's meeting):

☐
☐
☐
☐

Today's Discussions/Activities:

Topic	Desired Outcome	Action Steps/Data to Consider/Collect	By Whom?
Norms/Ground Rules	Establish Norms	Complete the "Forming Ground Rules" protocol to establish norms. Decide who will be the Norm/Time Keeper for the group. Norms will be added to the Meeting	Beth will facilitate. All DI PLC participants present.

		Log and revisited at the start of each meeting.	
Other roles	Recorder needed	Decide who will be the recorder for the group	All DI PLC participants present.

Questions/Concerns (resulting from today's PLC):

Question/Concern	**Continued Action Needed/Next Steps?**	**By Whom?**

DI PLC Meeting Log – SMART Goals

DI PLC participants will focus on all students' achievement through data driven collaboration and continuous learning.

Date	
Location	LMC
Time	

Teachers Present	
Facilitator: Beth Oswald	
Recorder: Jane Johnson	
Norm/Time Keeper: John Doe	

Standing Agenda Items:
• Review Norms
•
•

PLC SMART Goals (check all that apply for today's meeting):
☐
☐
☐
☐

Today's Discussions/Activities:

Topic	Desired Outcome	Action Steps/Data to Consider/Collect	By Whom?
SMART Goals	Develop SMART goals for DI PLC	Complete "Team SMART Goal Setting Plan" and "SMART Goal Worksheet."	Facilitated by Beth. All DI PLC participants present.
Group Agenda Planning	Decide next steps for the group	Complete "Group Agenda Planning" protocol using SMART Goals (this will likely take two meetings).	Facilitated by Beth. All DI PLC participants present.

Questions/Concerns (resulting from today's PLC):

Question/Concern	Continued Action Needed/Next Steps?	By Whom?

DI PLC and Website Year-End Survey

In the table, below, circle the number that indicates how much you valued the different components of the DI PLC:
1 = low value and **5 = high value**. N/A indicates you did not participate in that component of the DI PLC. Please add comments to support your rating.

Component of DI PLC	Rating	Comment
Reading/discussing/analyzing articles/book chapters on DI	1 2 3 4 5 N/A	
Selecting/receiving/sharing new materials on DI	1 2 3 4 5 N/A	
Sharing/discussing/analyzing results of implementing DI activities/lessons	1 2 3 4 5 N/A	
Analyzing student data/work	1 2 3 4 5 N/A	
Collaborative	1 2 3 4 5 N/A	

learning/planning		
Participating in peer observations	1 2 3 4 5 N/A	
Using the DI website	1 2 3 4 5 N/A	

Additional Questions:

What part(s) of the DI PLC were most beneficial to you?

What changes could be made to improve the DI PLC?

Would you like to see this PLC continue?

Would you like to see the DI Website continue?

This survey is based on Linder, Post, and Calabrese's "End-of-Year Survey" (2012, p. 22).

Linder, R. A., Post, G., & Calabrese, K. (2012). Professional learning communities: Practices for successful implementation. *Delta Kappa Gamma Bulletin*, *78*(3), 13-22.

Appendix B: Teacher Interview Protocol

Interviewee (Title and Name):

_____

Interviewer:

_____

Protocol Topics:

_____ General Interview Background
_____ 1: Defining Differentiated Instruction and Content Area Literacy Instruction
_____ 2: Content Area Teacher's Perceived Roles in Literacy Instruction
_____ 3: Alignment with Research-Based Practices

Other Topics Discussed:

_____

_____

Lesson Plan Obtained:

_____

_____

_____

Post Interview Comments or Leads:

_____

_____

Differentiated Instruction for Content Literacy Interviews

Introductory Protocol

To facilitate my note taking, I would like to audiotape our conversation today. For your information, only the researcher (Beth Oswald) and transcriptionist (who will sign a confidentiality agreement) will be privy to the recordings, which will be destroyed at the end of this study. In addition, you must sign a form devised to meet human subject requirements. Essentially, this document states that: (1) all information will be held confidential, (2) your participation is voluntary and you may stop at any time if you feel uncomfortable, and (3) I do not intend to inflict any harm. Thank you for your agreeing to participate in this study. I have planned this interview to last no longer than one hour. During this time, I have several questions I would like to cover. If time begins to run short, it may be necessary to interrupt you in order to push ahead and complete this line of questioning.

Introduction

Thank you for volunteering to speak with me today. My research project, as a whole, focuses on differentiated instruction for content literacy, with particular interest in understanding how content area teachers define, view, and are engaged in this activity. My study does not aim to evaluate your techniques or experiences. Rather, I am trying to

learn more about teaching and learning, and hope to learn about educational best practices that can help improve student literacy through differentiated instruction.

Interviewee Background

How long have you been …
teaching? _____
at this institution? _____
What subject do you teach? _____

The overarching question for this study is: how do middle school content area teachers differentiate for content literacy instruction.

The guiding research questions for this study are:

1. How do middle school content area teachers define differentiated instruction for content literacy?

Interview prompts linked to this question include:

   a. What three words or phrases come to mind when you think about differentiated instruction?
      Probes: Does anything else come to mind when you think about DI?
   b. With those thoughts in mind, how might you use them to define differentiated instruction?
      Probes: Is there anything more you would like to add to your definition?
   c. How do you define content literacy, or literacy in the content areas?
      Probes: Is there anything more you would like to add to your definition?
   d. What does differentiated instruction for content literacy look like in practice in your content area?
      Probes: Please describe for me: What are students doing? What are teachers doing? What does the classroom look like? What resources are being used?

2. How do middle school content area teachers differentiate content literacy instruction for struggling readers in their classrooms?

Interview prompts linked to this question include:

   a. How do you help all students acquire and understand the major concepts and vocabulary in your curriculum?
      Probes: What strategies do you expect students to use when reading texts or articles in your classroom? Do you plan specific vocabulary instruction? How do you check for understanding?
   b. Describe your role as a content area teacher when there are struggling readers in your classroom?
      Probes: What do you do when you encounter students who struggle with understanding your content due to reading difficulties? How does that change the way you teach? What strategies have you used to help

struggling readers? Have you ever: grouped students for success? Offered leveled texts? Used tiered assignments? Explain.

3. What do content area teachers need to be able to effectively implement or sustain differentiation for content literacy in their classrooms?

Interview prompts linked to this question include:

a. Describe any training or professional development you have received or participated in relating to differentiated instruction, content literacy, or both.
   Probes: How long did the training last? Was the training mandatory? If not, what prompted you to engage in the training?
b. How has your training prepared you to address the needs of struggling readers?
   Probes: What did you learn about struggling readers? What resources did you get from the training? What strategies did you learn for supporting struggling readers? Which of these do you use? How do you use them/decide to use them? Describe your overall experience with the training you have received to support students who struggle with content literacy.
c. In the current educational climate, where content area teachers are expected to differentiate for struggling readers in their classrooms as part of Tier 1 RTI instruction *and* ensure their students are meeting the Common Core State Standards (CCSS) for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects, how well prepared do you feel about differentiating to meet the needs of students who struggle with content literacy?
   Probes: Can you explain?
d. What do you need to be able to better address the needs of struggling readers in your classroom?
   Probes: Describe the ideal situation for implementing differentiated instruction for content area literacy? What would it look like in your classroom? What would you need to make that happen?

Conclusion

Thank you for participating in this interview. You will be asked to member check, or review a summary of the findings.

Following your interview, you will also be asked to participate in a focus group.

Invitations will be sent via email.

Again, thank you for taking the time to participate in this study.

Appendix C: Focus Group Guide: Differentiation for Content Literacy

Guiding research questions:

1. How do middle school content area teachers define differentiated instruction for content literacy? (GRQ1)
2. How do middle school content area teachers differentiate content literacy instruction for struggling readers in their classrooms? (GRQ2)
3. What do content area teachers need to be able to effectively implement or sustain differentiation for content literacy in their classrooms? (GRQ3)

Study Name: Differentiation for Content Area Literacy: Middle School Content Area Teachers' Perceptions and Practices

Participant Pseudonyms:

_____

_____

FG Date: _____ FG Time: _____

FG Location: _____

Questioning based on Krueger and Casey's "Questioning Route" (2009, p. 35-61).

Krueger, R.A. & Casey, M. A. (2009). *Focus groups: A practical guide for applied research* (4th ed.). Thousand Oaks, CA: Sage.

Welcome: Thank you for agreeing to take time to talk with me to discuss differentiation for content literacy. My name is Beth Oswald and I am a doctoral student at Walden University. I am also a teacher at Southland Middle School.

Overview of topic: I am interested in learning about your experiences with differentiation for content literacy and suggestions for its implementation and sustainability.

Reminders: As was laid out in the informed consent form, our discussion is being tape recorded so I do not miss any of your comments. Your participation in this study is voluntary. If you decide to join the study now, you can still change your mind during the study. If you feel stressed during the study you may stop at any time. You may skip any questions that you feel are too personal.

Any information you provide will be kept confidential. I will not use your information for any purposes outside of this research project. Also, I will not include your name or anything else that could identify you in any reports of the study. I also ask that

you would maintain the confidentiality of your fellow group members when you leave here today.

Ground Rules: There are no "right" or "wrong" answers. I expect that you will have differing thoughts and points of view. Please share your thoughts even if they differ from what other group members have shared.

Don't feel like you have to respond only to me. If you want to follow up on something another group member has said, you want to agree or disagree, or give an example of something someone else has said, feel free to do that.

I am here to ask questions, listen, and make sure everyone has the chance to share. I am interested in hearing from each of you. If you are talking a lot, I may ask you to give others the opportunity to share with the group. Or the opposite, if you are not saying much, I may call on you for your input. I just want to make sure each of you has a chance to share your ideas.

If you have a cell phone, please put it on quiet mode, and if you need to answer it, step out to do so.

Let's begin by learning about each of you:

1. Tell me about yourself—how you first came to be in education, what subject do you teach, and how long you have been with the district. **(Opening question)**

I have provided each of you a sheet or paper and a pen. On the paper, jot down three words or phrases that come to mind when you hear "differentiated instruction for content literacy."

Allow time for thinking and writing.

2. Now let's share what you wrote. When you hear "differentiated instruction for content literacy" what comes to mind for you? **(GRQ1) (Key question) [definition of DI for content literacy]**

Impromptu probes as needed for additional information/clarification.

3. What do you think makes differentiating for content literacy effective for struggling readers? **(GRQ2) (Key question) [implementation of DI for content literacy].**

Impromptu probes as needed for additional information/clarification.

Now I would like to think back over previous experiences with differentiation for content literacy. Wait time.

4. Share with me a strategy that you feel really helped you to differentiate for content literacy in your classroom. **(GRQ2) (Key question) (Positive before negative) [implementation of DI for content literacy]**

Impromptu probes as needed for additional information/clarification.

5. Share with me an experience relating to the implementation of differentiated literacy instruction that you feel was not successful. **(GRQ2) (Key question) [implementation of DI for content literacy]**

Follow-up: How would you describe the problem with that experience?

Impromptu probes as needed for additional information/clarification.

6. How would you characterize the district's efforts to provide PD and support to its teachers for differentiation for content literacy? **(GRQ3) (Key question) [what is needed to implement and sustain DI for content literacy]**

Follow-up: What has been best in the past? **(Positive question first)**

Follow-up: What has been most lacking?

7. If you could have one thing (tangible or intangible) that would help you better differentiate for struggling readers in your classroom, what would it be? **(GRQ3) (Ending question) [what is needed to implement and sustain DI for content literacy]**

I am going to give a brief summary of what was discussed today.

8. Is this an adequate summary? **(Ending question)**

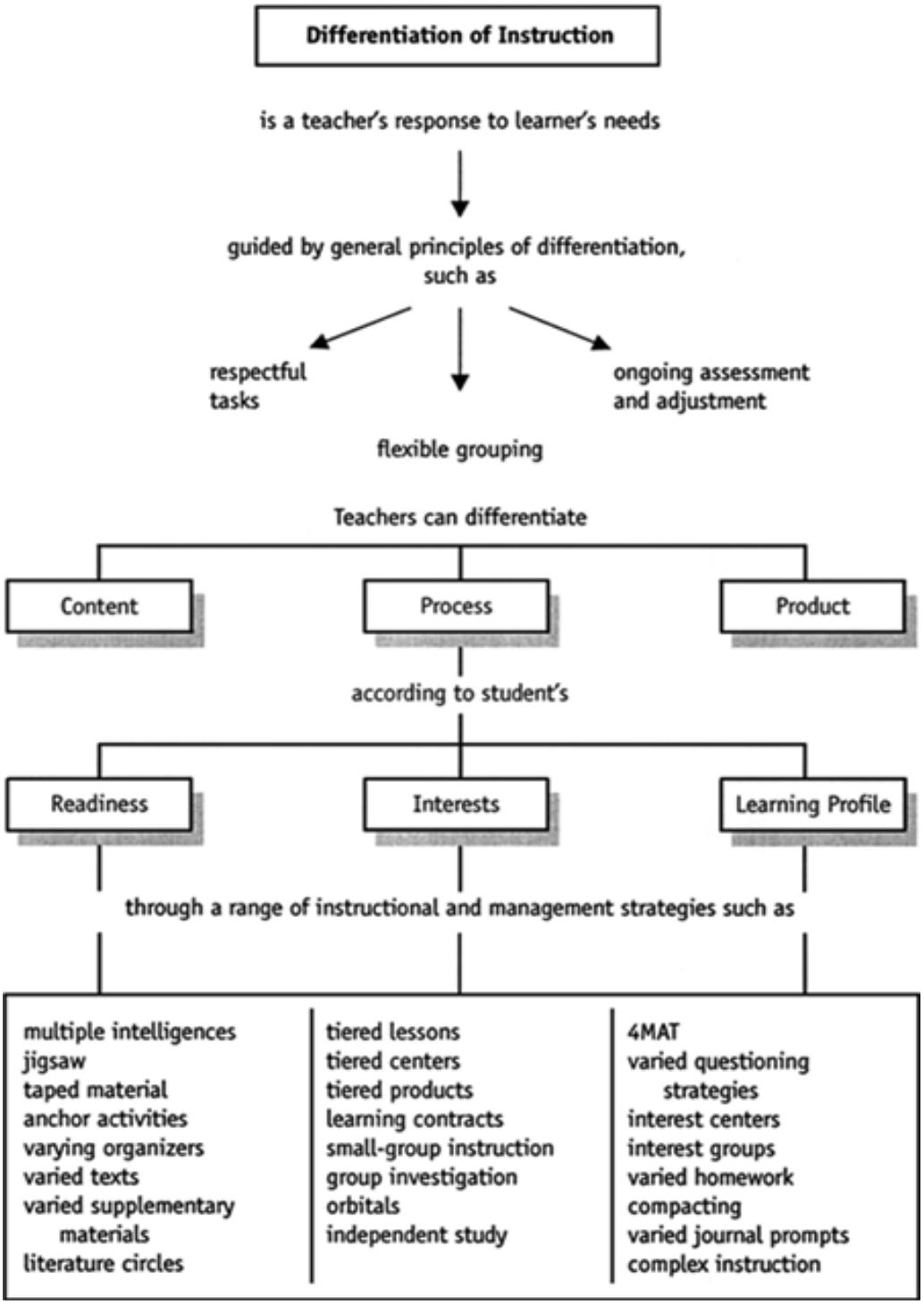
9. As we come to a close, is there anything else you would like to share with me about differentiation, content literacy, or the other related topics discussed today? Is there anything I missed? **(Final question)**

Thank you for taking the time to share today. I know that your time is valuable and I appreciate you spending it to discuss differentiated content literacy instruction.

Notes:

Reflections:

Appendix D: Tomlinson's Definition for Differentiation of Instruction



Appendix E: Guskey's Five Levels of Professional Development Evaluation

Evaluation Level	What questions are addressed?	How will information be gathered?	What is measured or assessed?	How will information be used?
1. Participants' reactions	Did they like it? Was their time well spent? Did the material make sense? Will it be useful? Was the leader knowledgeable and helpful? Were the refreshments fresh and tasty? Was the room the right temperature? Were the chairs comfortable?	Questionnaires administered at the end of the session	Initial satisfaction with the experience	To improve program design and delivery
2. Participants' learning	Did the participants acquire the intended knowledge and skills?	Paper & pencil instruments Simulations Demonstrations Participant reflections Participant portfolios	New knowledge and skills of participants	To improve program content, format, and organization
3. Organization support and change	Was the implementation advocated, facilitated, and supported? Was the support public and overt? Were problems addressed quickly and efficiently? Were sufficient resources made	District and school records Minutes from meetings Questionnaires Interviews with participants Participant portfolios	The organization's advocacy, support, accommodation, facilitation, and recognition	To document and improve organizational support To inform future change efforts

	available? Were successes recognized and shared? What was the impact on the organization? Did it affect the organization's climate and procedures?			
4. Participants' use of new knowledge and skills	Did participants effectively apply the new knowledge and skills?	Questionnaires Structured interviews Participant reflections Participant portfolios Direct observations Video or audio tapes	Degree and quality of implementation	To document and improve the implementation of program content
5. Student learning outcomes	What was the impact on students? Did it affect student performance or achievement? Did it influence students' physical or emotional wellbeing? Are students more confident as learners? Is student attendance improving? Are dropouts decreasing?	Student records School records Questionnaires Structured interviews Participant portfolios	Student learning outcomes: cognitive, affective, psychomotor	To focus and improve all aspects of program design, implementation, and follow-up. To demonstrate the overall impact of professional development

(Guskey, 2002. pp. 48-49)