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English Language Arts Curricular Interventions and Achievement in Advanced First Grade Learners from Underserved Backgrounds

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English Language Arts Curricular Interventions and
Achievement in Advanced First Grade Learners from Underserved Backgrounds

by

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A capstone submitted in partial fulfillment of the requirements for the degree of
Master of Arts in Education.

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Abstract

This capstone curriculum project seeks to answer the question: *How do English Language Arts (ELA), culturally responsive curricular resources impact academic achievement in our advanced first-grade learners from historically underserved populations?* The connection between implementing an advanced English language arts (ELA) *Jacob's Ladder* poetry unit utilizing the Integrated Curriculum Model (ICM) and learning outcomes of students from historically underserved backgrounds, including twice-exceptional (2e), and racially, culturally, linguistically, and economically diverse (RCLED) learners are measured through growth from the preassessment to summative assessment. High-rigor curricula, culturally responsive teaching methods that tap into neuroscience, and differentiated instruction with entry points for all students are implemented. Attention is given to providing appropriate scaffolding and challenge based on learners' readiness. A review of current literature, which includes exploring The Young Scholars Model, Hammond's culturally responsive teaching and the brain, and resources vetted through the National Association for Gifted Children (NAGC) and Jacob Javits Gifted and Talented Students Education Act provided evidence-based resources from which to develop effective differentiated interventions for students from historically underserved populations. Based on student achievement data, this unit could be implemented at scale to support learners at the district, state, and national levels.

Keywords: Gifted and Talented, Advanced Academics, Curriculum, Rigor, Culturally Responsive Teaching, Academic Excellence Gap, Achievement Gap, Neuroscience, Underserved Populations, Engagement, Zone of Proximal Development

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CHAPTER ONE

Introduction

Teachers are expected to differentiate for a wide variety of student needs in our classrooms. While learners with low achievement are explicitly targeted for learning interventions that help them meet English Language Arts (ELA) benchmarks, learners with advanced needs are often working on tasks below their ability. They do not receive appropriate interventions as often because they are proficient at meeting standards and are thus perceived as having less urgent needs. Worse, high-potential learners from historically underserved populations, which may include those from diverse cultural, linguistic, and economic backgrounds, are at risk of not being identified through traditional methods used in gifted programs (Horn et al., 2021).

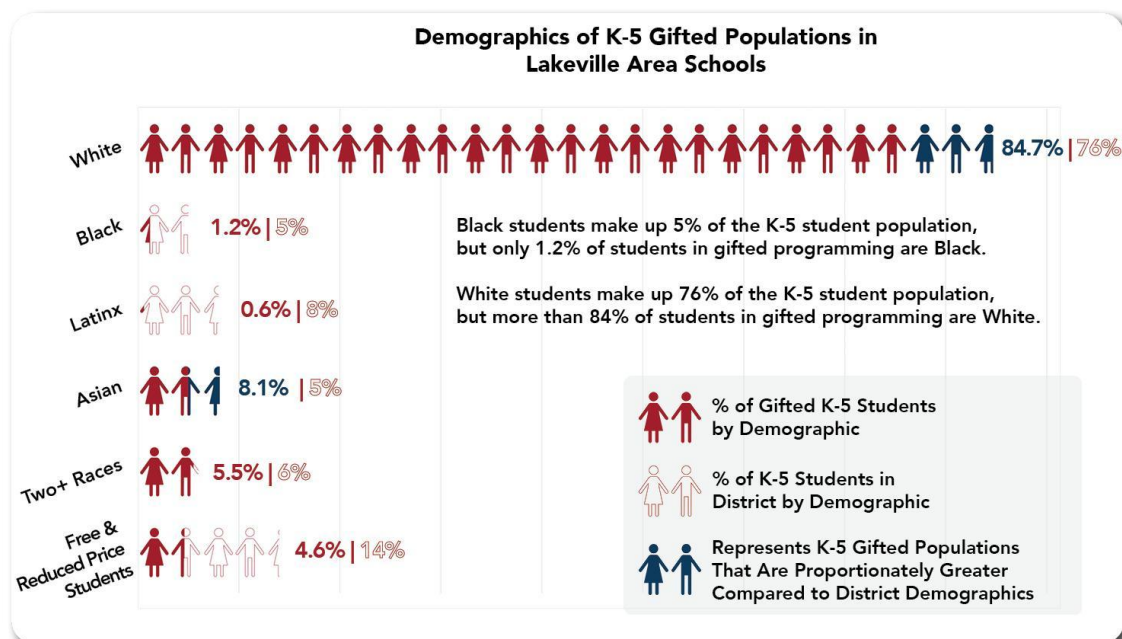
In my district, this is most prominent in students from Latino, Black, and low-income groups. For example, as the infographic (see figure 1) from Barron (2021) shows, in the 2019 - 2020 school year, Latino and Black students were underrepresented in Kindergarten - Grade 5 gifted programming. Likewise, students receiving free and reduced-priced lunch represented 14% of K-5 learners, but only 4.6% of learners in gifted programming. This is the largest discrepancy and one that often intersects with race. Meanwhile, white and Asian students were overrepresented in K-5 gifted programs. Beyond improving identification, curriculum is an important area that can be leveraged to support underrepresented students. Therefore, a question emerged: *How do English Language Arts (ELA), culturally responsive curricular resources impact academic achievement in our advanced first-grade learners from historically underserved*

populations?

Horn et. al, (2021) also noted twice-exceptional (2e) students. These intellectually gifted children have one or more learning disabilities. While their disabilities have been historically discovered and accommodated, their strengths often remain masked and unrecognized. 2e learners may include advanced students who are also dyslexic, have emotional behavior disorders (EBD), are on the autism spectrum (A+), have attention deficit hyperactivity disorder (ADHD), and more.

Figure 1

Demographics of K-5 Gifted Populations in Lakeville Area Schools



Barron, A. (2021)

Students from underrepresented populations' advanced abilities may never be recognized due to biased assessments, lack of advocacy from caregivers and teachers, and a misunderstanding of how giftedness presents in these students. Teachers and caregivers may have low expectations of these students, which in turn can influence these learners to have low expectations for themselves. Historically, gifted opportunities have been limited

to a small group of predominantly middle to upper-class white, and more recently, some Asian learners. Yet, there is evidence that these curricular interventions have the potential to include more students while maintaining academic rigor. The Young Scholars (YS) Model addresses the lack of linguistic, socioeconomic, and cultural diversity in gifted programming by providing a wider pathway for learners through more equitable identification processes, training classroom teachers on rigorous instruction practices, and fostering collaboration between them and gifted specialists (Horn et al., 2021).

As a YS specialist, my role as defined by Horn et al., (2021) consists of three a's: *advocate* for these learners, recognizing and nurturing their potential; provide *access* to experiences and resources that develop gifted capacity; and *affirm* their potential to become self-sufficient. This is done through talent development, which, according to Siegle et al., (2016) focuses on a profile of learners' abilities and strengths across specific domains. Talent development provides opportunities for these aptitudes to be observed. From there, interventions to develop emerging talent are provided. This differs from IQ testing, which has often kept underserved students out of gifted programming.

Our Young Scholars Model provides universal fall screening across grades K-2 in our sites. From there, students from historically underrepresented backgrounds are provided targeted interventions to help them prepare for our grades 3-5 gifted program and advanced high school academics. These learning experiences focus on frontloading high-rigor critical and creative thinking opportunities in science, ELA, and math. Classroom teachers want to help all learners succeed but are constrained by underfunded school systems, large class sizes, wide-ranging needs, increasing demands, and a lack of time to critically explore and plan potential curricular interventions that will meet the

needs of advanced learners from underserved backgrounds. In my YS specialist role, I coach, collaborate, and co-teach with classroom educators, providing whole-class and small-group kindergarten through second-grade curricular interventions, for the benefit of historically underserved students and all learners. While many underserved students have been left behind in our past gifted identification processes, therefore losing opportunities for advanced academics in upper elementary school and beyond, the YS model and changes within our gifted programming system-wide are working to address this historical inequity.

Literacy is the cornerstone of all learning and a key to unlocking future potential. Therefore, my area of focus was implementing a rigorous and effective English Language Arts (ELA) curriculum that was engaging and supported culturally responsive teaching (CRT) practices. For my capstone project, I created a four-week Jacob's Ladder poetry unit, consisting of three 30-minute lessons per poem for a total of 12 lessons. These whole-class lessons have a low floor (opportunity for all learners to engage with the content) and a high ceiling (capacity for differentiated instruction to push all learners into appropriate higher-order thinking levels, providing extra challenge for those whose capacity is beyond grade-level. Appropriate scaffolding and acceleration provided all students with differentiated opportunities to apply their learning. Hammond's (2015) information processing quadrant of the Ready for Rigor Framework in combination with the Learning for Justice standards supported culturally responsive instructional methods while ensuring adequate rigor and promoting a multicultural, inclusive learning environment. While these lessons were implemented in a whole-class setting, I chose high-potential first-grade young scholars as the focus of this intervention. High-potential

learners are those whose gifts may remain uncovered without early identification and explicit learning interventions. I worked with these students in small groups and whole class settings, creating the opportunity for significant impact on their academic trajectory through collaboration with classroom teachers.

Gifted education strategies can benefit all learners when implemented with scaffolds to support learners who are performing below expectations and stretching the thinking of those who can move beyond the benchmark standard through increasing depth and complexity (aka differentiation). Appropriate ELA interventions in both small-group and whole-class settings can create synergy within these contexts, improving outcomes for all learners. Therefore, implementing appropriate English Language Arts (ELA), culturally responsive curricular resources was an intervention I utilized to engage advanced first-grade learners from historically underserved populations.

In this chapter, I elaborated on the components of my research question, exploring its context within my role as a YS specialist, its personal significance, and how advanced ELA and culturally responsive teaching resources might impact learners. I addressed systemic issues that have left many racially, culturally, linguistically, and economically diverse learners behind and explored interventions that helped to close the academic excellence gap. This gap is the discrepancy between the percentage of middle to high-income historically served and lower-income historically underserved students who reach advanced levels of academic performance because of inequities in resources, quality instruction, and opportunities.

Context

Gifted education has come under scrutiny of late due to its historic

underrepresentation of Black, Latino, English learner (EL), culturally diverse, and economically disadvantaged students. Mirroring what we see nationwide, our district has students from underserved groups consistently absent in advanced academic programs. In the past, gifted education has relied heavily on IQ tests to identify students who need services.

Ford (2004) explained that psychoeducational and psychological assessments have a history of complaints about differential treatment of diverse groups. She notes that standardized tests have reinforced barriers for students from underserved backgrounds due to bias both in how they are used and statistically, explaining that these measures may treat learners from underserved groups unfairly or discriminate against them.

While some would like to dispense with gifted programming in a misguided attempt at equity, this would exacerbate the academic excellence gap by removing targeted opportunities for advanced learners, including diverse learners within our current gifted programming. Rather than eliminating gifted services, we must provide a wider pathway, ensuring more ELs, students of color, 2e learners, and low-income students showing high potential are served in advanced programs. In the same way that a Multi-Tiered System of Supports (MTSS), also known as Response to Intervention (RtI), is implemented to target students whose needs are below benchmark levels, it is our duty to provide the same support to learners whose needs exceed benchmark levels. The Young Scholars Model is an early (K-2) intervention for these learners in our school district. Through universal identification lessons, students are selected and given needs-based interventions. Rather than high-stakes testing, identification is done through student work samples and teacher nominations.

Likewise, we are implementing local norms to include more students through our gifted services identification. Local norms base entry on needs and achievement at the site level, versus district or national norms, which may not be representative of that building's population. This helps us to deliver a strategic advanced curriculum aligned to each site's needs. Further, we use the HOPE Scale, a teacher rating scale, which was developed to facilitate more equitable identification of learners from low-income families for gifted services (Peters & Gentry, 2010). Another layer of advocacy beyond the hope scale is teacher referrals, which can include work samples and additional observational data.

Given that most subject areas rely heavily on strong reading and writing skills, this was a wise place to provide early interventions that helped to reverse the academic excellence gap. If culturally responsive teaching strategies and best practices for gifted education are interwoven into our K-2 ELA curricular interventions, we have a better chance of engaging young scholars and increasing their achievement.

Personal Significance

Learners from low-income families often have barriers to the aforementioned three a's (advocacy, access, and affirmation). This was true for me, coming from a lower middle-class family, with a mom who was 16 at the time of my birth. Although I did not have significant cultural or linguistic barriers, these often intersect with economic needs. I have always had an interest in working with diverse populations. For my student teaching experience, I volunteered to work out of state at a school labeled "at risk," serving predominantly Latino, EL students in Las Vegas, NV. From there, I worked in autism, EL, and gifted programs. These experiences inspired me to advocate for learners

from underserved backgrounds, whose needs were often critical.

As the parent of a highly gifted learner, now 18, who showed high achievement from her earliest years, I have had to advocate for her unique learning needs across her K-12 career. My husband and I sought out appropriate educational settings, including a school that implemented clustering of gifted learners with differentiation in the early grades, and a school within a school for students achieving at the 99th percentile in math and reading for grades three through five. The school with clustering and differentiation had a small group of gifted learners placed in a traditional classroom with a highly qualified teacher. She implemented gifted teaching and learning strategies such as practicing differentiation and modifying curriculum to meet the spectrum of needs in her classroom. For advanced learners, this meant adding depth and complexity and moving at a faster pace with instruction. In addition, students were subject-accelerated in reading and math as needed.

The school within a school, housed at a site where I also worked, taught a full grade level ahead in content to meet the needs of this special population. I noticed the discrepancy between our regular school population and those represented in the highly gifted program. I wondered why our students of color and English learners were not distributed similarly in the gifted school to their numbers in our district population. This sparked my passion to advocate for these learners in our advanced programming. It led me to seek out a gifted education certification and to study culturally responsive teaching, equity, and social justice topics. A major difference between learners most often identified for gifted programming from those who are not has to do with advocacy, access, and affirmation. Students with parent and teacher advocates have the advantage of

their talent being recognized and served early on. Access to enrichment opportunities is often tied to families' financial situation, leaving some students out of valuable educational experiences, vacations, and even books in the home. Lastly, students whose gifts and talents are not recognized and affirmed are less likely to see themselves as scholars and to nurture their gifts. The expertise I built found a purpose when our district leaders embarked on building the inaugural Young Scholars Model at two of our elementary schools. I applied for the position and became the YS specialist at our initial implementation sites, those with the highest concentration of low-income, EL, and culturally diverse learners. Our goal in YS is to close the academic excellence gap for students whose high potential could otherwise go unrecognized. This is done through more inclusive, universal identification processes and early curricular interventions. These occur in kindergarten through second grade, capitalizing on a critical period in learning, where we can have tremendous impact on students' academic trajectories.

Positionality Statement

Some significant aspects of my identity in relation to the capstone are my race, political affiliation, and class. The most impactful aspect of my identity was being from the lower middle class and sometimes enduring financial hardship during my first 20 years of life. Growing up, I identified with and had strong bonds with my mixed-race cousins and diverse neighbors whose working-class status intersected with that of my family. As I grew older, joined the military, earned a college degree as a first-generation student, and moved my way up the class ladder, I never forgot the lessons of having less. This bias cuts both ways. I identify with my learners and their caregivers who have financial barriers as I once did. I am also put off by those in my current, privileged class

and beyond who take advantage of those with less money and power. These biases impact my advocacy for students but may cause unfair judgment of those who come from money and privilege.

My working-class upbringing has also affected my politics. I am a firm believer in equal rights for all people, personal freedom (so long as it does not infringe on others' rights), and a fair economic system. Those with less power and privilege have historically had their voices silenced and been oppressed by unfair economic practices. Without a living wage, workers must endure poor conditions just to survive. Without adequate healthcare, essential goods, and education, our most vulnerable populations experience unnecessary hardship. This extends to the children whom I serve. In this way, my political leanings make me a passionate advocate for those from marginalized groups, and a cynic when evaluating those with excessive money and power. Now that I am a part of a more privileged class, I have a better understanding of how this stratum functions. I work to evaluate others in it as individuals, as I would those from other groups, rather than making broad generalizations.

Researcher Positionality

My identity as a white person has provided numerous benefits. I have never felt like my race limited me professionally or personally. However, I have observed and heard direct reports from Black, Latino, and American Indian friends and family about racist encounters they have had. Some instances such as being followed by the clerk in a store, pulled over by the police for no obvious reason, or being called racial slurs have not been a part of my experience. While I have empathy for those who have experienced racism, my race and background have excluded me from these negative experiences, lessening

my capacity to identify with my racially and culturally diverse learners.

Advanced English Language Arts Curriculum

A robust K-2 advanced ELA curriculum covers a variety of reading, writing, listening, and speaking skills, which align to state and national standards. However, these lessons are more complex, eliciting higher intellectual demand from students. Likewise, differentiation was a foundational element of instruction, as it should be in all classrooms. Differentiation facilitates higher-order instruction and learning in students' Zone of Proximal Development (ZPD), or the area of learning where students can work with support, which lies between what they can do unaided and what they cannot do (Vygotsky, 1978).

Framework: Lakeville Area Schools Literacy Plan

Our school district's literacy framework, created by Lakeville Area Schools (2022), is what I aligned my unit of study to. In addition, I consulted various gifted frameworks to address the unique needs of our young scholars. The Young Scholars Model and Integrated Curriculum Model (ICM) may facilitate gifted learner engagement, rigor, and evidence-based practices.

Culturally Responsive Teaching

Hammond's (2015) *Culturally Responsive Teaching and the Brain: Promoting Authentic Engagement and Rigor Among Culturally and Linguistically Diverse Students*, is a foundational text in our school district. The aim of this book is to implement the Ready for Rigor Framework in order to close the achievement gap. This framework focuses on four areas that facilitate student engagement and deeper learning, including awareness, learning partnerships, information processing, and community of learners and

learning environment. The area of the framework that most aligns with my ELA goals is information processing. Hammond has combined brain-based science with teaching and learning strategies in order to capitalize on the best of both to better meet the needs of historically underserved learners. Key aspects of information processing include: using teaching methods from oral traditions to help students process new content; using culturally relevant examples and metaphors connected to learners' cultural background; providing authentic opportunities for content processing; teaching cognitive routines that utilize the brain's natural learning systems; implementing formative assessments and feedback to increase learners' capacity; and providing challenge within their zone of proximal development (Hammond, 2015).

Summary

By integrating Hammond's (2015) Ready for Rigor and Lakeville Area Schools' (2022) frameworks to support advanced ELA curriculum in chapters two through four, I hoped to facilitate a strong response to the question: *How do English Language Arts (ELA), culturally responsive curricular resources impact academic achievement in our advanced first-grade learners from historically underserved populations?* This question could inform future action in our Young Scholars Model at the two initial implementation sites by shaping evidence-based instructional practices, and laying a curricular foundation that is scalable across our district. If we have a repertoire of vetted ELA resources that are aligned to peer-reviewed literature and evidence-based practices in gifted and talented, and culturally responsive teaching and learning, then our students will have better opportunities and outcomes.

The variables in this question are teacher capacity, students' achievement,

students' cultural backgrounds, specific curricular resources, and culturally responsive teaching practices that are implemented across settings, and how they affect young scholars' learning and achievement. Another variable is the intersection of these practices and to what degree they are individually impacting student outcomes. Finally, since these learners spend the majority of their time with their classroom teachers, these instructional hours are yet another variable. In order to understand best practices in English language arts (ELA) I reviewed foundational literature on how we teach reading in the US, MN standards, and Response to Intervention (RtI) strategies to build upon my background knowledge.

The main topics in chapter two, the literature review, are ELA primary foundations, ELA gifted and talented frameworks, advanced primary instructional approaches and curriculum, and culturally responsive teaching in advanced education. ELA foundations support all learners' reading proficiency. ELA gifted and talented frameworks as well as advanced ELA primary instructional approaches and curriculum are evidenced-based methods from which to build quality gifted programming. Lastly, culturally responsive teaching in advanced education provides personalized, engaging, content that allows learners to tap into their funds of knowledge (Vygotsky, 1978). Meanwhile, Hammond's culturally responsive methods (2015) also capitalize on the way learners' brains process information.

Chapter three outlines my project, a poetry unit composed of 12 evidence-based advanced lessons that were created with low-income students in mind. These lessons can be delivered in whole-class and small-group settings as they have a low floor and a high ceiling. The Minnesota English Language Arts standards and Learning for Justice

standards are woven into each of the four poems the unit implements. Aspects of Hammond's information processing quadrant from the Ready for Rigor culturally responsive teaching framework are also embedded throughout the unit.

Finally, chapter four addressed the impact of the literature review and capstone project on my work and the field of culturally responsive advanced education. This project addresses the needs of high-potential learners from historically underserved backgrounds by providing rigor and engagement in ways that connect to students' prior knowledge. It will serve as a foundational curriculum for our first-grade learners in schools with our highest racially, culturally, linguistically, and economically diverse populations. It will also be available for all K-1 teachers at our other elementary sites to implement as they see fit. The broader literature review will benefit our staff and other educators in professional development opportunities. If I share this with academic publications, it will reach a wider audience, hopefully exposing them to new ideas that can be implemented across the nation.

CHAPTER TWO

Literature Review

My literature review first delves into literacy foundations, including frameworks such as the one used in our district and others in advanced education. Advanced primary curriculum and instruction that is culturally responsive are other important components. These elements will guide my five-week poetry curriculum unit for my Capstone Project. Effective primary-grade curriculum is rooted in English Language Arts (ELA), including language and word study, reading, and writing. Educators must keep up with current research as well as state-mandated learning standards in order to provide evidence-based instruction. Beyond that, school districts may integrate personalized learning, culturally responsive teaching practices, and digital literacy into their literacy frameworks to meet the needs of today's learners. Meanwhile, teachers who implement engaging, differentiated instruction, in addition to the aforementioned components, will be more successful.

Through study and synthesis of current research, this chapter considers the question: *How do English Language Arts (ELA) culturally responsive curricular resources impact academic achievement in our advanced first-grade learners from historically underserved populations?* Because these students have additional needs for rigor to meet their high potential, and to support their cultural and linguistic diversity, we next explore gifted and talented best practices and conclude with culturally responsive teaching. Given the historic underrepresentation of learners from racially, culturally, linguistically, and economically diverse (RCLED) backgrounds in advanced programming, and the fact that these populations are growing, it is imperative to address

the academic excellence gap, which is the disparity between students from groups who consistently outperform other groups academically. Students selected for advanced academic opportunities often benefit from affluence, access to resources and activities both in and out of the classroom, and caregiver advocacy (Plucker & Peters, 2016). Meanwhile, students whose families lack resources are locked out of social, athletic, and enrichment opportunities. Over time, these disparities widen opportunity and excellence gaps. One way to narrow these gaps is to provide early intervention to RCLED learners. The literature review seeks to distill best practices from ELA, gifted and talented, and culturally responsive teaching to build a first-grade poetry unit to meet the needs of historically underserved learners, those who have not been well represented in advanced academics.

ELA Primary Foundations

Evidence-based instructional practices provide the best infrastructure to facilitate English language arts learning, ensuring high-quality instruction for all. While there have been disagreements about the best way to teach students *how* to read, there has also been consensus on national and state learning standards as well as how to best support students at various stages in their reading acquisition.

How We Teach Reading in America

In order to address the broad needs of early readers, I will explore instructional methods, align them to Minnesota ELA standards, and incorporate them into a leveled service model that considers the spectrum of readers' needs from struggling to advanced. The "reading wars", which pit phonics against Whole Language (also called Balanced Literacy) instruction have deep roots. Burk & Hasbrouck (2023) note how these

approaches to teaching reading have been the mainstay of American education, yet, the National Assessment of Educational Progress (NAEP) found in 2022 that 67% of children lacked reading proficiency. Worse, these scores, when disaggregated, showed persistent gaps in reading competence over racial, socioeconomic, English learner, and disability status (Burk & Hasbrouck, 2023). The authors stated that while reading proficiency has not improved in 30 years, there is strong evidence that the Science of Reading (SOR) can help around 95% of students read at or near grade level. They further discussed how for decades, across multiple disciplines, the science of reading has emerged as a consensus of research, which informs exactly how children learn to read and the kinds of instructional practices that are most effective for students, including those who struggle with reading.

Castles, Rastle, and Nation (2018) pointed out how the Science of Reading is a structured, code-based approach to reading instruction. It is also sequential, explicit, and systematic. While the earlier-mentioned approaches are rooted in education literature, the SOR has foundations in the brain-based disciplines of cognitive science, psychology, and neuroscience research. This evidence-based approach takes into account learners' developmental stage in reading skills attainment and provides appropriate instructional time and strategies to meet individual needs. Reading fluency, comprehension, and decoding skills are key aspects, but each is taught systematically to ensure maximum skill acquisition. Castles, Rastle, and Nation (2018) noted that a truly balanced literacy approach would incorporate best practices from the SOR and move past the "reading wars" in order to successfully address the crisis of reading incompetence.

Minnesota English Language Arts (ELA) Standards

The Minnesota (MN) Department of Education (2023) sets forth standards for English language arts instruction. These standards include reading, writing, speaking, viewing, listening, media literacy, and language. All standards are assessed in the classroom through formative and district-created assessments. In addition, the Minnesota Comprehensive Assessments (MCAs) measure individual capacity with Minnesota's academic standards. Our district's literacy framework, by Lakeville Area Schools (2022), aligns with the MN standards in ELA. It covers reading workshop: shared, close, guided, and independent reading, language and word study: spelling, phonemic awareness, phonetic principles, structural analysis, and vocabulary development. It also covers writing workshop: modeled writing, shared writing, guided writing, and independent writing.

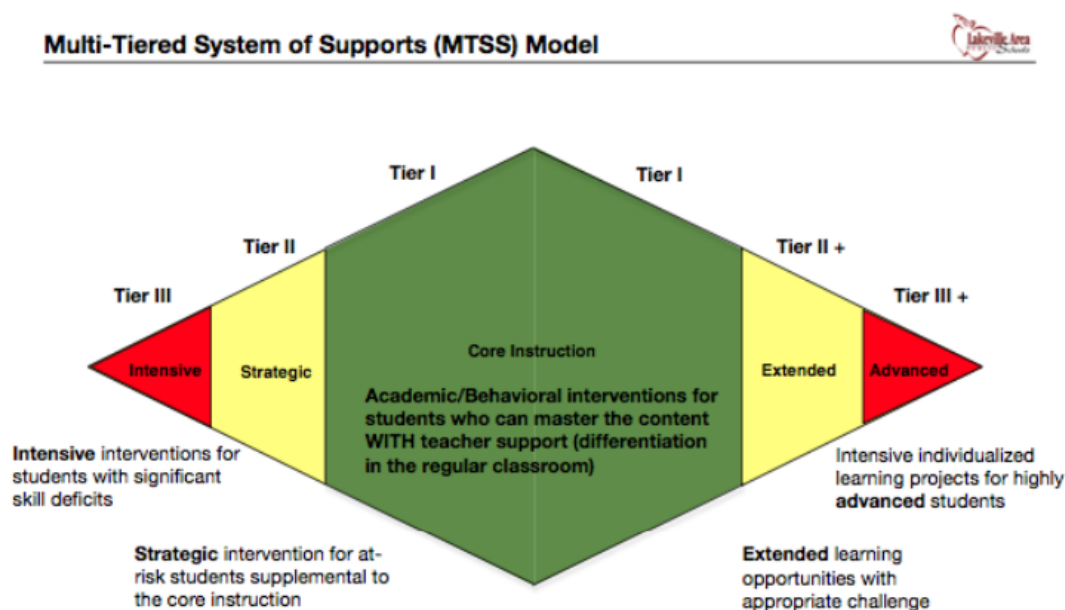
Multi-Tiered System of Supports (MTSS)

Each site implements ELA curriculum within a Multi-Tiered System of Supports (MTSS), also known as Response to Intervention (RtI). These interventions provide a framework where teachers evaluate student performance when provided evidence-based instruction (Lembke, McMaster, & Stecker, 2009). For struggling students, increasingly intense academic intervention is provided across a continuum of universal, strategic, and intensive instruction. So long as the intervention significantly increases instructional intensity, with fidelity and consistency, Coyne et al. (2018) suggested that evidence-based supplemental reading intervention implemented within MTSS frameworks can beneficially impact key reading outcomes. Lakeville Area Schools (2022) uses the double-diamond MTSS model (see Figure 2).

Coyne et al. (2018) went on to say that this aligns with a Levels of Service (LOS) gifted model, developed by Treffinger, which is also supported by the National Association for Gifted Children's (NAGC) Gifted Programming Standards which recommends a continuum of services to meet the needs of gifted learners across levels. Each of these three systems is meant to provide targeted interventions to meet the needs of both struggling readers and students with advanced capabilities. For the purposes of my literature review, I focused on the upper tiers of student needs. Rather than identifying “gifted or nongifted” learners, Treffinger (1998) sought to understand students’ individual needs and match them to appropriate instructional interventions. Hence, a broader, ongoing identification approach is used to address students’ strengths, talents, interests, and learning preferences.

Figure 1

Multi-Tiered System of Supports



Lakeville Area Schools (2022)

According to Coxon et al. (2018), these tiered systems typically consist of four levels. Level 1 services are for all learners and include flexible grouping, high-rigor critical and creative thinking skills, enrichment, talent development, social-emotional learning (SEL), progress monitoring, student voice and choice, and culturally responsive teaching. Level 2 services include many learners and consist of small group interventions, mixed group instruction across one or more grade levels, targeted enrichment, independent study options, and monitoring of academic progress. Level 3 interventions are for some students and may include targeted SEL supports, gifted pull-out programs, and content acceleration. Level 4 services are for the few students who show profound needs for academic rigor, which are met via a full-time gifted program or grade acceleration. Plucker and Peters (2016) noted that when RTI models place gifted and talented needs on the learning continuum, it fosters a strengths-based approach that brings attention to advanced learners' needs, not just the needs of special education or remedial students. It opens pathways for tiering lessons and curriculum compacting to plan for advanced learners. This also facilitates talent-spotting in classroom teachers, whereby they may proactively look for advanced abilities in more learners, advocate for these students, and differentiate to meet their advanced needs.

Rigor, defined by Hess (2009) in *Hess' Cognitive Rigor Matrix & Curricular Examples: Applying Webb's Depth-of-Knowledge Levels to Bloom's Cognitive Process Dimensions - ELA* encompasses four levels of rigor on the y-axis, defined as Depth of Knowledge (DOK). Level 1 is Recall and Reproduction, Level 2 is Skills and Concepts, Level 3 is Strategic Thinking/Reasoning, and Level 4 is Extended Thinking. Bloom's Revised Taxonomy is integrated with Hess' matrix with the DOK levels on the x-axis and

includes Remember, Understand, Apply, Analyze, Evaluate, and Create. Each of these classification systems promotes increasing levels of cognition. For example, level one of this integrated approach may manifest as recalling, noticing, or locating basic facts and details within a text as well as reading aloud with fluency and accuracy. The most complex level expectations may include synthesizing information across multiple texts or sources as well as delivering an alternate theme, new knowledge or perspective, or a new voice.

Capstone Implications

While national and state learning standards have their place, taken together with the balanced literacy and phonics instruction of the past 30 years, they have netted poor results. In order to answer the question, *How do English Language Arts (ELA), culturally responsive curricular resources impact academic achievement in our advanced first-grade learners from historically underserved populations?* We must find a way to integrate the best of these practices into instruction that incorporates the Science of Reading (SOR) so that we can capitalize on how the brain enables us to learn to read. This is most impactful for our struggling readers. It is also a critical intervention for historically underserved advanced learners, who may have a language and/or background knowledge gap. The SOR's focus on building deep content knowledge across disciplines is similar to the way most gifted education curriculum is implemented.

Frontloading learners with explicit instruction on new vocabulary connected to a text, and spending multiple lessons with one text versus using many texts to show one or two skills, fosters meaningful learning and builds deep knowledge. When done within a Levels of Service gifted model, which mirrors MTSS, this helps all learners, including

those from culturally and linguistically diverse (CLD) backgrounds to work in their Zone of Proximal Development (ZPD). The ZPD is a level of rigor that pushes students to the edge of their capacity without being too challenging to complete. If I root my curriculum in evidence-based ELA practices and gifted frameworks that serve learner needs, I can provide a rigorous curriculum for advanced learners from historically underserved populations. When students are challenged, they have a better chance of increasing their achievement and ability. This leads to our unpacking of gifted and talented ELA frameworks, curriculum, and instruction.

ELA Frameworks in Gifted and Talented Instruction

In order to provide standards-aligned instruction, I explored literature connected to ELA and gifted education. The National Association for Gifted Children's publication by Johnsen, Dailey, and Cotabish (2022) outlined various programming standards and validated the models I implemented in my project. The Integrated Curriculum Model (ICM) developed by VanTassel-Baska (1986) aligns with Horn et. al's, (2021) Young Scholars Talent Development Model, which helped to lay a strong foundation for evidence-based teaching and learning.

National Association for Gifted Children (NAGC) Standards Alignment

The NAGC acknowledges that there are multiple definitions of giftedness. However, Gagne popularized a differentiated model of giftedness and talent (DMGT) (Roessingh & Bence, 2017). Gagne believed that innate gifts may develop into talents through the developmental process. These gifts and talents place a child among the top 10% of age peers in their area of expertise. Gagne noted cognitive and linguistic precocity, insatiable curiosity, quickness, need for challenge, and extraordinary memory

capacity as common characteristics of gifted children. In addition, overexcitabilities and sensitivities are often part of the gifted milieu, whereby gifted children and adults have higher than average reactions to stimulation shown by intellectual, imaginal, emotional, psychomotor, and sensual excitabilities (Roessingh & Bence, 2017).

In the NAGC's most recent publication, Johnsen, Dailey, and Cotabish (2022) laid out six evidence-based standards, which are foundational to creating and implementing quality Pre-K through grade 12 gifted and talented programming. The six programming standards consist of 35 student outcomes. These standards align with the standards and accountability movement that began in the 1980s and provide consistency at the national, state, and local levels in core competencies. The six NAGC programming standards are Learning and Development, Assessment, Curriculum Planning and Instruction, Learning Environments, Programming, and Professional Learning. For the purposes of my literature review, I will focus on the Curriculum Planning and Instruction standard. Differentiation is a key aspect of gifted and talented education since this student population shows accelerated learning, high depth of knowledge, and complexity in learning. Therefore, Johnsen, Dailey, and Cotabish (2022) noted that these learners' advanced needs necessitate differentiation around intentional alterations to assessments, curriculum, and teaching processes. For this reason, we will delve deeper into differentiation later in the chapter. The authors go on to discuss an appropriate curriculum framework.

The NAGC curriculum framework connects school district goals to outcomes aligned with their PreK - 12 Standards. Examples of these goals could be to promote critical and creative thinking skills through inquiry and problem-based learning, develop

advanced skills and concepts in areas of strength at a pace to match learner readiness, and use inquiry models to name a few (Johnsen, Dailey, & Cotabish, 2022). The curriculum should align with state standards, but at a higher grade level, beyond proficiency.

Compacting content to accelerate the pace of learning is another effective way to meet gifted students' needs. VanTassel-Baska and Baska (2019) noted that despite its popularity in general education today, differentiation that specifically addresses complexity, depth, acceleration, creativity, challenge, and abstraction in student work began in gifted education. Inclusion of other cultures and perspectives is important as are discussion strategies like Socratic seminar. Gifted curricular materials should not be created from scratch, pointed out Johnsen, Dailey, and Cotabish, (2022), but vetted through the Jacob Javits Gifted and Talented Students Education Act. Curriculum projects funded by the Javits Act demonstrated effective differentiated interventions for students from poverty (VanTassel-Baska, 2017). These materials also meet the NAGC curriculum standards, having been field tested with gifted learners for effectiveness (Johnsen, Dailey, & Cotabish, 2022). Therefore, they go on, these resources provide a base for advanced curriculum development in all core subject areas.

Evidence-Based Gifted Curricular Models

Two curriculum models, the Parallel Curriculum Model (PCM) and the Integrated Curriculum Model (ICM), are well-established and aligned with the NAGC standards and the curriculum features they recommend. For this reason, it may be beneficial to use them rather than creating a new curriculum. I also explored the Young Scholars Model, which implements culturally responsive, evidence-based gifted education instructional strategies and curriculum to support historically underrepresented students such as those from

racially, culturally, linguistically, and economically diverse (RCLED) backgrounds.

Parallel Curriculum Model. Tomlinson et al.'s (2009) Parallel Curriculum Model (PCM) is a heuristic model consisting of four dimensions/parallels, which can be implemented in combination or individually, including the core curriculum, the curriculum of identity, the curriculum of connections, and the curriculum of practice. The core curriculum is the basis for the other curricula and is to be combined with the other dimensions as chosen. This core curriculum should align with national, state, and local standards. The curriculum of connections prioritizes the interconnectedness of concepts across disciplines. The curriculum of practice extends the core curriculum, building domain-specific expertise in student practitioners. The curriculum of identity promotes self-understanding and self-definition, the core curriculum is a catalyst for this exploration. Units cover multiple content areas and the rigor should be matched to student needs (Tomlinson et al., 2009).

Integrated Curriculum Model (ICM). This model was developed with funding from the Jacob Javits Gifted and Talented Students Program (Javits) by VanTassel-Baska (1986). The Javits program's (2019) emphasis is on serving students historically underrepresented in gifted and talented programs, especially the economically disadvantaged, English learners (EL), and disabled students in an effort to reduce the academic excellence gap. This gap shows significant differences in high achievement between these groups when compared to those from higher income, white, and/or some Asian backgrounds.

VanTassel-Baska's (1986) research takes a historical approach to the evolution of three gifted instructional models that have proven effective in different contexts and

across grade levels. VanTassel-Baska argued that the three models should be considered together in a comprehensive gifted program. The three dimensions of the ICM are advanced content, high-level product and process work, and intra- and interdisciplinary concept development to build knowledge. Given its alignment with Javits' mission to serve learners from the backgrounds that I work with, this is a model I heavily consulted. The content in this model is aligned with national and state standards, but goes beyond the standards' expectations, implementing texts and activities that meet expectations set for students at higher grade levels. We explore specific ELA curricular resources later in the chapter. In the ICM, ELA elements move from concrete (character, plot, and setting) to abstract (theme, motivation, and structure) (Johnsen, Dailey, & Cotabish, 2022). For all content areas a higher-level macro concept, which has meaning across subject areas, provides an interdisciplinary dimension to create deeper understanding. This is part of the Taba Model of concept development (West Keur, 2019). Concepts like systems, change, scale, and models and their underlying generalizations undergird the content and build higher-order thinking skills. Johnsen, Dailey, and Cotabish (2022) said these concepts are applied across both subject areas and grade levels, in connection to how they apply to students' lives. This affective layer is woven into activities, questions, and assessments that emphasize student reflection, relating the curriculum to students' lived experiences.

Young Scholars (YS) Talent Development Model. The YS Model seeks to address the underrepresentation of RCLED learners in gifted and talented programs by ensuring equal access to gifted services and advanced academic opportunities. Limited teacher referrals, overreliance on test scores, and low expectations of and for these learners are cited by Horn et. al, (2021) as barriers to entry into advanced academics. For

over two decades, the YS model has focused on four components including, Find and Identify; Essential Elements; Nurture, Guide, and Support; and Committed Professionals. Find and Identify uses performance assessments to draw out and demonstrate students' advanced thinking, problem-solving, and/or reasoning skills. Essential Elements consist of continuous professional development for teachers, caregiver partnerships, and student enrichment opportunities throughout the school year and summer. Nurture, Guide, and Support involves the identification of and support for advanced potential in learners through curricular and instructional resources that require advanced thinking, problem-solving, and reasoning. Committed Professionals is the final component of the model, whereby a schoolwide investment from all educators is made to find and nurture the high potential in students from historically underserved backgrounds (Horn et al., 2021).

The Young Scholars (YS) Model overlaps in many ways with the preceding NAGC-recommended frameworks, especially the ICM. YS curriculum should be planned within a rigorous and organizing framework that enhances learner engagement (Horn et al., 2021). According to VanTassel-Baska (2017), the YS model was shown in differentiated curriculum and instructional studies to significantly increase gains in concept development and critical thinking in gifted students from poverty. Low-income students, and those who are from minority groups, experience marginalization at school due to clothing, mannerisms, and friend group. This can exclude them from social interactions with children outside of these groups and limit their sense of belonging. These learners often prefer concrete learning and practical knowledge application that is connected to their background knowledge. They also have strengths in fluid intelligence

and nonverbal ability. Many prefer to verbalize their thinking and will build elaborative skills orally. Writing is a challenge for these learners and it usually takes them many more years of practice to build proficiency (VanTassel-Baska, 2017). These realities necessitate a culturally responsive teaching approach, which is also explored in this literature review.

Challenging opportunities that embed scaffolds foster learning and growth (Horn et al., 2021). Curricular units, which provide a comprehensive experience, are more valuable for student learning and knowledge-building than stand-alone experiences. Conceptual learning and understanding promote interdisciplinary connections. YS curriculum is impactful when teachers deliver meaningful and relevant content that allows for student choice and interests. Real-world problems looked at from multiple perspectives help students to build capacity and agency in their communities. Diverse people and topics allow students to see themselves and how both everyday and historically significant people come from all racial, class, and cultural backgrounds. Learners can see similarities and differences in themselves and others whether they know them or learn about them from texts. Lastly, Horn et al. (2021) highlighted activities such as the Socratic seminar, a process of student questioning and dialogue, covered in my ELA curricular resources section, to unpack the driving questions so integral to helping students make meaning of all that they are learning.

A big difference between YS and the other frameworks is that YS is a talent development paradigm versus a gifted child paradigm. According to Dai and Chen (2013), essentialism or developmentalism are the competing perspectives in these frameworks. The essentialist view of the gifted child assumes innate indelible qualities and relies on test scores to prove this. Once a student has the gifted label, they are entitled

to advanced academic services forevermore. Those learners who have not shown high test scores are not “gifted”, even if they show the capacity to perform at the same level as identified gifted students through achievement and task performance, thus necessitating advanced opportunities. Talent Development casts a wider net, allowing for a variety of pathways to advanced services, not just test scores (Dai & Chen, 2013). Talent development nurtures gifted behaviors in domain-specific aptitudes and developmental trajectories. Rather than a permanent state, “giftedness” is a process of becoming more advanced through practice in areas of strength. Rather than being fixed, talents are emergent and nurturable.

This aligns with our current understanding of mindset, which Dweck divided into fixed and growth mindsets (Robertson, 2020). Those with a fixed mindset believe intelligence and talent to be fixed or unchangeable. A growth mindset, which has gained a broad evidence base since the 1990s, holds the opposing view, that our intelligence and capacity can be nurtured and grown over a lifetime (Robertson, 2020). This is in direct conflict with the gifted child paradigm, which states that intelligence is fixed. Robertson (2020) went on to say that our full potential is unknowable; with effort and support, we can develop capacity over a lifetime, especially if we can overcome obstacles and setbacks. This aligns with a talent development paradigm.

Capstone Implications

In order to provide rigorous, robust, culturally responsive advanced ELA instruction, evidence-based curricular models were researched in the literature review, some aligned with the talent development paradigm and others with the gifted child paradigm. Those that seek to engage learners from diverse backgrounds, providing

differentiation and scaffolds to meet their unique needs will help to answer my question: *How do English Language Arts (ELA), culturally responsive curricular resources impact academic achievement in our advanced first-grade learners from historically underserved populations?* Building upon these gifted curricular frameworks, I delved into specific curriculum and instructional strategies that would help culturally and linguistically diverse gifted learners to succeed at their highest academic potential.

Advanced ELA Primary Instructional Approaches and Curricula

Standout gifted and talented ELA curriculum and instruction in the literature included subject-specific checklists with examples to elevate lessons, explicit teaching of critical and creative thinking skills, and Socratic seminars. These examples accounted for appropriate scaffolding while pushing students to the edge of their capacity. While each resource had interesting and valuable aspects, in order to have a high impact on primary-grade learners, the inclusion of developmentally appropriate skills such as fine motor, sorting, movement, and appropriate social-emotional learning were important elements to include in curriculum design.

Curriculum in Talent Development

In addition to much of the recommendations for instruction laid out in the previous frameworks, Olszewski-Kubilius et al. (2018) discussed the integration of psychosocial skills, which must be embedded in the curriculum. If curriculum opportunities do not explicitly address the skills students need to be successful and how to apply them across their learning careers, students will be hampered in reaching the highest levels of achievement. Mirroring Dweck's growth mindset, students must be taught and supported in their efforts and perseverance, hard work, and the self-esteem

which comes with appropriate academic challenge (Olszewski-Kubilius et al., 2018). Goal setting, long-term projects, time management, classroom discussions, biographical studies, and social-emotional connections support the understandings and habits needed for scholars to be successful over time. The authors noted how this learning is critical for advanced learners who may not have the supports and opportunities in place that students from traditionally identified backgrounds receive.

Performance-based products prepare students for the real-world projects they may one day create in the workforce. In ELA, these authentic products could be standout pieces of writing from one or a variety of genres; they might also show up as a script for a movie or play. This deep learning allows students to explore key concepts and make personal connections through the products they create (Olszewski-Kubilius et al., 2018).

While higher-order thinking skills, real-world applications to problem-solving, and creative thinking are a mainstay of engaging gifted curriculum, Reis, Gentry, and Park have endorsed these practices for all children, as cited in (Roessingh & Bence, 2017). Our Young Scholars model provides small-group pull-out lessons for identified young scholars as well as whole-class lessons. In this way, we can better serve more learners through collaboration with classroom teachers and there are more opportunities for talent-spotting to identify young scholars. Appropriate rigor, enrichment, independent inquiry, and self-directed learning opportunities will benefit most learners. Likewise, Roessingh and Bence (2017) noted that gifted children often benefit from instructional strategies used with more typical learners. As part of our school district's framework for ELA, we focus on evidence-based primary grade practices that support advanced learners. In line with our district's reading and writing workshop structure, Roessingh and

Bence's (2017) research lays out specific supports to develop early written literacy skills in gifted students. Fine motor skills are one of these areas. Using play dough, stringing beads, paper folding, coloring, and playing with pickup sticks is good for all children as they build muscle memory to support handwriting. Likewise, sorting by shape and size lay a foundation for reading, which has upper and lower-case letters (Roessingh & Bence, 2017).

Early literacy learning shifts into academic literacy learning that requires support. In writing the need for scaffolds in the way of templates, paragraph frames, and prompts for using signal words and phrases must be implemented if we wish to make significant improvements in it said Roessingh & Bence (2017). The study utilized multiple writing, vocabulary, and spelling rubrics from various experts, including Gentry et al. (2014). The data revealed that instruction in spelling and printing were the most critical need areas. Likewise, attention to text structure/organization, signal words, prewriting activities with templates to scaffold the writing process, and letting students sketch and color were invaluable. Finally, embedded vocabulary instruction, including academic language learning rooted in Latin and Greek must be integrated to lay the foundation for understanding upper elementary science and social studies content (Roessingh & Bence, 2017). Connecting language and literacy to differentiation strategies and interdisciplinary learning methods addresses the needs of gifted and talented learners, allowing them multiple pathways to content learning (Mora-Flores & Kaplan, 2022). Language arts background, especially vocabulary development is essential, especially for racially, culturally, linguistically, and economically diverse (RCLLED) students whose academic

vocabulary may need frontloading to prepare them for other disciplines as they progress in their education.

Based on primary-grade literacy blocks and existing literature around best instructional practices, the *Elevating Instruction: A Planning Tool* was evaluated by Kreamer et al. (2019); its purpose is to improve reading instruction for all learners in the classroom, including advanced students. It was created as part of a Javits-funded research study focused on identification and services for students from underrepresented groups demonstrating gifted potential. This tool breaks down four aspects of instruction with an emphasis on rigor in order to build essential skills for students to become lifelong readers, including Promote Authentic Choice, Encourage Student Agency and Ownership, Support Meaningful Peer Interactions, and Collect and Use Formative Data (Kreamer et al., 2019). The authors include tables for each component, which provide a simplified format for teachers to include these practices. They ask teachers pointed questions about each and offer suggestions for how one can effectively address that component with students. Some examples include greater choice in what students write about or how they approach an assignment as well as self-assessment tools like rubrics and anchor charts, sentence starters, checklists, or questions to foster meaningful peer interactions, and differentiating for readiness based on formative data. These components can be utilized one at a time or integrated as needed to elevate literacy instruction for advanced K-2 readers.

William and Mary Language Arts. The Young Scholars Model, Horn, et al., (2021) argued, relies heavily on the evidence-based resources developed for advanced learners, especially those from populations historically underserved in gifted, whom YS

exists to serve. Many of these resources were developed and funded through the aforementioned Jacob K. Javits Gifted and Talented Students Education Program under the US Department of Education. For the purposes of this study, I focused on William and Mary's language arts materials (part of the ICM framework), among them were Jacob's Ladder Reading Comprehension and Affective Programs, including fiction, nonfiction, and poetry. Many of these texts may incorporate multicultural aspects and all can be differentiated by tiering the content for student readiness. VanTassel-Baska (2017) noted the features of the Integrated Curriculum Model (ICM) design that directly supported the academic gains documented across multiple studies, including a YS study in grades K-2, which implemented Jacob's Ladder ELA curriculum. Pre and post-unit assessments were used to show growth.

Specific ELA scaffolds included the hamburger model, vocabulary web, and literature web for writing and language arts (School of Education Center for Gifted Education (n.d.)). The hamburger model for persuasive writing in K-2 opens with an introduction, followed by three supporting reasons for the author's opinion/point of view, and ends with a concluding statement. Vocabulary Webs deconstruct words by source (sentence and where found), examples, definitions with synonyms and antonyms, and analyses including parts of speech, stems, origin, and word families. Literature Webs deconstruct a reading into five components: keywords, ideas, structure, images/symbols, and feelings. For learners with less exposure to complex texts, this deeper exploration leads to better understanding.

The VanTassel-Baska et al. (2000) study of the impact of William and Mary units on schools had mixed results. While this framework was viewed positively by teachers

and administrators, a lack of uniform implementation and underutilization of the performance-based assessment made it difficult to qualify the impact of the intervention. Focus-group data from students, teachers, and parents noted the high rigor compared to regular coursework and the improvement of reading habits, comprehension, engagement, and writing skills by students. A critical aspect of success at each of the two school sites was the perceived role of the principal. This aligns with Horn et al.'s (2021) emphasis on "committed professionals", especially principals, who set the tone for their sites and enable teachers to nurture high potential in their students from underserved populations.

Jacob's Ladder. The William and Mary School of Education Center for Gifted Education (n.d.) developed a supplement to the William and Mary language arts units, Jacob's Ladder, which targets reading comprehension skills in advanced learners. Its primary series is composed of three skill ladders connected to high-quality literature readings in poetry and short stories where students move from lower-order, concrete thinking skills to higher-order, critical thinking skills. There are three types of academic ladders (Stambaugh & VanTassel-Baska, 2021). Implications and consequences, making generalizations, and themes are the focus areas in grades K-1. An example of a ladder is the movement from sequencing to cause and effect to consequences and implications. Like the higher-level, critical thinking skills focus in the William and Mary language arts units, Jacob's Ladder skills are based on Paul's Elements of Reasoning Model and extend through grade nine. Ladder rungs are organized to increase complexity in intellectual demand. While developed for advanced learners, this low-floor and high-ceiling approach can enhance reading comprehension for all learners when appropriate scaffolds are applied as needed.

Critical and Creative Thinking Skills. Horn et al. (2021) recommended nine creative and critical thinking skills for young scholars. *Questioning*, the foundation of the Socratic seminar, which is discussed further in this chapter is a key strategy to encourage deep thinking. Emphasis on student questioning over teacher-generated questions supports engagement and personalized learning. *Fluency, Originality, Flexibility, and Elaboration* are fostered through divergent thinking activities. *Visualization* builds planning and predictive skills. *Mind Mapping* allows students to demonstrate the interconnections between topics and ideas. *Point of View* invites students to step into another person or group's perspective and consider multiple ways of thinking and problem-solving. *Analogies* build pattern recognition skills and connections about relationships between the things being compared. *Encapsulation* distills a topic to its most succinct explanation. *Decisions and Outcomes* foster consideration of options and forecasting of potential outcomes based on decisions (Horn et al., 2021). These strategies are important for the development of lifelong learners who we are preparing to become our leaders and innovators.

Ahmed (2014) found that when targeted critical thinking (CT) training using Paul's Elements and Standards of Reasoning (E&S) was implemented across low and high-ability high school learners, English as a foreign language (EFL) student writing composition improved in the key areas studied: analysis of author's argument, clarity of writing, use of supporting information, and organization, as measured with a progressive series of rubric assessments of their grammar, writing, and syntax. These learners formerly lacked the CT skills necessary to compete domestically or internationally. For the benefit of all student learning, Ahmed recommended that all teachers incorporate CT

skills into their curriculum, with extra focus on writing for EFL learners as this is their most challenging ELA area.

Socratic Seminar. Different models of critical thinking in the classroom: Paul's Socratic Questioning model, Adler's Paedeia Socratic Seminar program, Van Tassel-Baska's Epistemological Concept model, and Lipman's Philosophy for Children program were the focus of Keng's (1996) study. Critical thought fostered by teachers in these models and guided inquiry in the classroom are discussed as the priority in the conception and organization of educational activities. Paul's Reasoning Model focused on the analysis of world views, similar to the ancient Socratic model of the learner as a critical questioner who can generate reasoned arguments while seeking a reflective rational life.

Socrates believed, according to Horn et al. (2021), that people could discover what their own beliefs were and the basis for them by actively questioning others' ideas. Through the Socratic seminar, teachers facilitate discussion of open-ended questions, often generated by students. Questions can also be in response to readings, media, or artwork. In a Socratic circle, students must be able to defend and question their own thinking while listening to others' perspectives. Others' viewpoints may shape or change a student's thinking. Learners may find varying degrees of agreement or disagreement. Overall this technique builds critical thinking competence as practitioners are thinking through oral expression (Horn et al., 2021). The oral tradition prevalent in most world cultures is recognized, honored, and developed in this format, fostering a culturally responsive, inclusive classroom discussed further in the literature.

Keng (1996) highlighted VanTassel-Baska's focus on ideas and themes across systems of knowledge vs. individual segments. The Socratic method when used in the epistemological model focuses on key ideas, themes, and principles within and across domains of knowledge, including science and ELA. The authors note that teachers are facilitators and must be vigilant, not talking too much, explaining and clarifying, or asking shallow questions like, "What do you think about that? How do you feel about that?". They should learn to listen to students, encouraging them to evaluate and reflect on what has been said in the classroom. Since the result of this difficult undertaking is improving student lives and creating responsible citizens by challenging them to think critically about their behavior and beliefs, Ken (1996) concluded it was worth the effort.

Capstone Implications

I found multiple approaches in the literature to support advanced learners from underserved populations. In order to facilitate higher-order thinking skills, real-world applications to problem-solving, and creative thinking, which are mainstays of engaging gifted curriculum, the importance of choice and scaffolds was emphasized. By providing graphic organizers such as vocabulary and literature webs, sentence stems, and writing models we can set the stage for knowledge building. Likewise, infusing open-ended questions and student dialogue will foster deeper understanding. Finally, providing lifelong creative and critical thinking skills is foundational to a well-rounded early advanced academic experience. This led to the final component of my literature review, culturally responsive teaching for diverse advanced learners. This critical topic involves breaking down historic inequities in gifted education and implementing practices that serve racially, culturally, linguistically, and economically diverse (RCLED) learners.

Culturally Responsive Teaching in Advanced Education

As America becomes more diverse, teaching must evolve to best meet the needs of all learners. Gifted and Talented education has followed historic trends of inequity for RCLED learners in education. It has highlighted the dominant individualistic culture. Vygotsky's (1978) Social Constructivist Theory connects to culturally responsive teaching practices, which are rooted in collectivist values from RCLED learners' home cultures. Numerous authors have pointed out how social interactions can bolster an individual's critical thinking processes to help them better understand challenging concepts. By tying Vygotsky's well-established theory to current multicultural, brain-based, culturally responsive teaching methods, instruction can be more effective and engaging for learners who have historically been marginalized in our schools.

Equity in Advanced Academics

Quality education for its citizenry is a pillar of thriving nations. In America, said Plucker and Peters (2016), a low priority is placed on advanced education. There is also a widening wealth gap, such that at least 60% of our K-12 students do not have the economic resources to support supplemental talent development opportunities outside of public school. Hence, students who lack access to adequate transportation, or whose parents are limited in their ability to devote time and/or money to provide these costly extracurriculars, lose out on valuable opportunities that their more affluent peers are frequently provided. Basic life experiences that many take for granted such as going to the library, zoo, museum, farmer's market, or arts events are often not provided to students living in poverty, the group typically found to have the most barriers to enrichment experiences (Castellano, 2007). These students, Castello (2007) says, may

not actualize their gifts due to peer and community influences as well as the social and economic pressures they face. The mismatch between home and school for advanced and highly intelligent learners shows up in “Street life” and tight bonds with their peer group, which often take precedence over academic pursuits (Castellano, 2007). Caregivers' expectations of duty to family, home culture, and language may compete with those of school and the socialized environment of these learners. This contrasts with upper-class and upper-middle-class families' access to fully funded schools, safe neighborhoods, and access to scholarly mentors, whether that be teachers, coaches, or family members (Castellano, 2007). Peters & Plucker (2016) explain how this fuels the opportunity gap, which over time leads to the academic excellence gap, whereby the 60%, who are predominately economically vulnerable, fall further behind the 40% from economically stable families, who also tend to be more homogenous in terms of race and ethnicity. Those at the bottom of the excellence gap in the K-12 learner population are the fastest-growing portion of our K-12 students (Plucker & Peters, 2016). The authors suggest front-loading should be the foundation of all excellence gap interventions. Front-loading can include vocabulary instruction or teaching of connected concepts to provide foundational knowledge before the start of a lesson or unit.

Programs like Young Scholars and Project Excite, which provide early advocacy, supplemental enrichment, and accelerated programming for high-potential, underrepresented minority students can help learners fill in learning gaps and prepare them for later advanced learning opportunities in gifted, honors, and advanced placement courses. Olszewski-Kubilius's (2018) most recent findings affirm that early identification and front-loading can help bridge the achievement and excellence gap. In a 14-year study,

Project Excite students consistently outperformed their low-income, Black, and Latino peers; they also came close to the performance levels of Asian, non-low-income, and white students. Olszewski-Kubilius (2018) said that compared to their minority peers in ninth grade they were more likely to be placed in above-grade-level math courses.

In addition, universal testing to screen for high-achieving students and local norms provide all learners the opportunity to demonstrate their skills. Local norms, said Plucker and Peters (2016), go further by providing advanced opportunities to the top 10 percent of learners at a site, versus only those who meet national testing standards. This is especially beneficial for students in schools with the largest number of students from low-income and minority backgrounds as it allows for more talented students to receive services that can nurture their advanced potential and learning needs. If these students are provided with additional support, local norms may impact excellence gaps. Likewise, ability grouping has been shown to boost the number of underrepresented learners identified as advanced over time. When teachers can narrow the range of achievement within their classrooms, they can better target individual needs. These groups should be flexible and strengths-based with a focus on closing excellence gaps. Ongoing professional development in the identification of advanced learners and differentiation of instruction to challenge them was also noted as a way to increase academic excellence.

As of 2015, the Every Student Succeeds Act (ESSA) included the decades-old federal Javits grant program, codifying it as a more permanent program, and eliminating its need for constant reauthorization. Javits sought to uplift outstanding talents across all economic strata, cultural groups, and in all areas of human endeavor. Since the ESSA put focus on low-income students, limited English proficient learners, and students with

disabilities, it has the potential to close excellence gaps. Project Bright Horizon (1993), a program out of Arizona, has compiled significant data and resources for identifying underserved learners. Advanced attributes may include verbal abilities, learning characteristics, motivational characteristics, social abilities, leadership, and creativity.

Castellano (2007) says that combatting the sometimes discordant messages between home and school communities is best done by providing a culturally and linguistically sensitive curriculum that builds students' cultural identity but is rooted in gifted education foundations. Infusing cultural history and background, social and emotional well-being, and partnering with local organizations or peer mentors can motivate and guide gifted learners from underrepresented communities.

Ford et al. (2018) created a bill of rights for gifted children of color, which is an equity-based, multicultural, culturally responsive set of guidelines to meet the needs of these learners who have been underserved in gifted education. Its goal is to remove barriers in order to have these learners' gifts and talents recognized, affirmed, and developed in order to recruit and retain them in gifted education.

Culturally Responsive Academic Interventions

As with most of their contemporaries, Lawson Davis et al. (2020) said that the hallmark of advanced student curriculum is rigor; when combined with their culturally responsive teaching (CRT) framework, which is rooted in the work of Gloria Ladson-Billings, this creates a learning environment that enables and empowers success in advanced learners from all cultural backgrounds. Their framework aligns well with Ford's bill of rights for gifted children of color and is founded on relationships, representation, rigor, and relevance. Since rigor has been clearly defined in this chapter,

we will discuss the other components of the framework. *Relationships* with students that emphasize high expectations are key to student success. Likewise, connecting with students' families and communities helps to build trust. *Representation* of students' cultures and races through visual, literary, and material means fosters a sense of belonging. It affirms and validates their identity as scholars, something Hollie also emphasized in his CRT work. *Relevance* aligns educational experiences with students' lived experiences, in order to increase learner engagement and create a sense of meaning (Lawson Davis, Fears Floyd, & Jones, 2020).

Hollie's (2018) definition of culturally and linguistically responsive pedagogy is the validation and affirmation of learners' home language and culture with the goal of building and bridging the students to high achievement in the academic and mainstream cultures. Connecting to learners' home cultures while providing guided and scaffolded instruction leads to academic independence. The main differences between the majority of culturally and linguistically diverse (CLD) students, who are "dependent learners" and not getting the support they need to facilitate cognitive growth, and "independent learners", according to Hammond (2015), is that the former are not encouraged to work through productive struggle. They rely on the teacher to carry the majority of the cognitive load in learning tasks, are insecure about new tasks, and need scaffolds to complete a task. They also give up easily and are not proactive in seeking teacher support. Conversely, the "independent learner" sometimes relies on the teacher to carry a portion of the cognitive load, implements strategies for taking on new tasks, tries new tasks without scaffolds, uses cognitive strategies to get unstuck, and can retrieve

information from long-term memory. Therefore, our goal as teachers is to create independent learners.

Hispanic and Latino students are the second largest ethnic group educated in US public schools, and their population is growing fast (Castellano, 2018). Poverty and/or English Learner (EL) status may also disproportionately impact these students. In order to better meet the needs of Hispanic and Latino learners, Castellano (2018) emphasizes the importance of affirming students' sense of identity and relationship building. He points out how authenticity, empathy, and a nurturing environment that is tailored to individual students' interests and academic needs will facilitate their success. In line with other experts in the field, he promotes higher expectations, access to quality learning opportunities, and educational equity.

Ford et al. (2018) noted that gifted students of color have the right to culturally relevant curriculum and instruction. When considering the question, *How do English Language Arts (ELA), culturally responsive curricular resources impact academic achievement in our advanced first-grade learners from historically underserved populations?* the author's insistence that the right to authentic and multicultural content in all subject areas, which is rigorous and reflects their cultural, racial, and linguistic background and heritage aligns with the aim of this literature review. Among many other "rights", this curriculum should promote cultural, racial, and linguistic pride, encouraging and honoring student views. It is important for all children to see images of themselves and others in literature (McNair & Edwards, 2021). Beyond the students' own culture, they say that Bishop's (1990) article "Mirrors, Windows, and Sliding Glass Doors" metaphorically described multicultural literature for children as windows into different

worlds, sliding glass doors that allow the reader to become part of the author's created world, and mirrors that reflect our own experience back to us. According to Hahn et al. (2020), interest inventories, choice boards, and independent studies can be used to link student passions to the curriculum and make the learning process more engaging. In literacy, choices may range from changing the setting of the story and explaining how this change would affect the story and why, presenting a monologue from one character's perspective and how they view the main character, or with a partner answer the following questions about a character: What motivates her? How does her internal conflict help us understand the theme? How is symbolism used by the author? If we build background knowledge, capitalize on student interests, and gradually release scaffolded supports we can plan culturally responsive instruction to benefit diverse learners and capitalize on their areas of strength (Hahn et al., 2020).

Social-emotional learning is another important consideration Ford et al. (2018) provide guidance on, including the right to teachers who understand the unique challenges of being a gifted student of color and have formal training in the socio-emotional needs of gifted children of color. Educators who provide academic support when these learners underachieve, fail, and/or make mistakes, help them to understand the area(s) in which they are gifted and talented, and teach them how to self-advocate to increase their access to appropriate instructional and support services are necessities to an equitable, multicultural, and culturally responsive curriculum and learning environment.

Higher-order thinking skills are important for all learners, though dependent learners need explicit scaffolds to structure learning into concrete chunks (Hammond,

2015). Hammond's culturally responsive teaching mindset is rooted in Vygotsky's (1978) Social Constructivist Theory, which highlighted collaboration and social interaction as integral components of the learning process. These social interactions, when combined with individuals' critical thinking processes, led to an understanding of challenging concepts. Vygotsky dubbed this space where learning occurs the Zone of Proximal Development (ZPD) where students have appropriate challenge that is not too easy or too difficult. Working collaboratively makes it easier for children to learn in this zone. Like Vygotsky, Hammond (2015) brings in scaffolding, a supported learning process that gets students to the next level of comprehension with peer or adult guidance. Hammond said that productive struggle is crucial for dependent learners to gain independence. Educators' calm, focused encouragement can help them to keep going, what Hammond calls a "*warm demander*".

In order to capitalize on the brain's cognitive processes, this literature review will focus on the *Information Processing* quadrant of the Ready for Rigor Framework, which also includes *Awareness*, *Learning Partnerships*, and *Community of Learners and Learning Environment* (Hammond, 2014). Within the context of affirmation, instructional conversation, validation, and wise feedback, *Information Processing* teaching practices seek to build learners' intellectual capacity in order to enhance their engagement. Providing appropriate challenges, implementing oral traditions methods and authentic opportunities to process new content, and teaching students cognitive routines that capitalize on the brain's natural learning systems are part of information processing.

Cognitive routines, said Hammond (2014), are learning moves a student uses to process information, especially with creative problem-solving and higher-order thinking.

Since they are explicitly taught and practiced, they become rote for learners. Similarities and differences, whole to part, perspectives, and relationships present different cognitive routines/habits of mind that build new neural pathways and intellectual capacity. Once these cognitive routines are automatic (internalized and connected to strong cues), students become independent learners.

Capstone Implications

Providing equitable opportunities for historically underserved gifted learners is a large part of the work that must happen in advanced academics. Of equal importance to teaching and learning practices, the literature around culturally responsive teaching supports best practices to answer the question *How do English Language Arts (ELA), culturally responsive curricular resources impact academic achievement in our advanced first-grade learners from historically underserved populations?* Recurring themes speak to the importance of building relationships with learners and their families, and providing a multicultural curriculum representative of the students we serve that is rigorous and relevant. By providing a socially and emotionally safe environment we enhance students' sense of belonging, which allows their brains to better engage with content. By taking into account the brain's ways of processing content, we can increase learner engagement and knowledge-building capacity.

Summary of the Literature Review

A strong English language arts curriculum is rooted in historical best practices that blend balanced literacy which includes reading, writing, speaking, viewing, listening, media literacy, and language as laid out by state standards in the field of education with understanding of how the brain learns to read. Rooted in psychology and neuroscience,

this system, the Science of Reading (SOR) capitalizes on the brain's learning patterns, explicitly and systematically teaching fluency, comprehension, and phonics to ensure maximum skill acquisition. Vocabulary and spelling are other important components of comprehensive ELA frameworks. In tandem with state standards, the National Association for Gifted Children (NAGC) created programming standards to ensure the needs of advanced learners are met. This organization has done extensive research to uncover evidence-based teaching and learning practices that support rigorous programming to develop higher-order thinking skills in advanced learners. Multiple sources in the review of literature echoed their recommendations for appropriate curricular resources to answer the question *How do English Language Arts (ELA), culturally responsive curricular resources impact academic achievement in our advanced first-grade learners from historically underserved populations?*

Culturally Responsive Teaching (CRT) is another important avenue for meeting the needs of underserved students. Relationships, representation, rigor, and relevance are key foundations. Culturally responsive teachers validate and affirm learners and build a sense of belonging in classroom communities. They provide a multicultural curriculum and classroom decor that represents the children in their care. CRT practices capitalize on neuroprocessing mechanisms to promote rigorous learning opportunities and teachers hold high expectations for RCLED learners. By creating relevant learning experiences, teachers engage students, increasing their chances for success.

Next Chapters

While this chapter focused on ELA foundations, especially for gifted learners from historically underserved communities, the next will detail my capstone project.

Chapter three explores a culturally responsive unit of study for first-grade learners in poetry. Based on the literature review, I will utilize evidence-based gifted frameworks and curricular resources to build my unit within our district's literacy framework.

CHAPTER THREE

Project Description

Overview

Through the review of literature in Chapter Two I discovered evidence-based English Language Arts (ELA) teaching and learning practices that align with our state standards and local instructional frameworks. Furthermore, I learned about resources for my curriculum project that best served the needs of advanced learners from historically underserved groups such as racially, culturally, linguistically, and economically diverse (RCLD) learners. Hammond's (2015) ideas regarding culturally responsive teaching and its connections to neuroscience and Horn's (2021) Young Scholars (YS) Model, which provides a comprehensive structure for finding and nurturing potential in learners historically overlooked in gifted programming further enhanced this capstone project.

The literature demonstrated how VanTassel-Baska's (1986) Integrated Curriculum Model (ICM) for gifted learners, when implemented through the Jacob's Ladder Reading Comprehension Program, serves as an appropriate foundation for a culturally responsive poetry unit. This guided my approach to designing this project and answering the question *How do English Language Arts (ELA), culturally responsive curricular resources impact academic achievement in our advanced first-grade learners from historically underserved populations?* These resources helped me to create an engaging poetry unit of study for my students that was rigorous and culturally responsive.

Gifted English Language Arts (ELA) Frameworks

Our district utilizes a Multi-Tiered System of Supports (MTSS), which includes core instruction, with extended, and advanced learning opportunities for students whose

needs are beyond benchmark expectations (Lakeville Area Schools, 2022). Our YS model operates as a tier II intervention, providing extended learning opportunities with appropriate challenge for all K-2 learners, with a specific focus on advanced RCLED students. Based on the literature, Jacob's Ladder, which utilizes the Integrated Curriculum Model (ICM) by The College of William and Mary/Van Tassel-Baska, was chosen as the primary curricular resource from which to build lessons for the curriculum project due to its positive results demonstrated across studies in the literature at increasing ELA skills in advanced RCLED learners.

Culturally Responsive Pedagogical Practices

Hammond's evidence-based research emphasizes how the brain learns in the context of a culturally responsive classroom. Rooted in positive relationships and collaborative learning, culturally responsive teaching helps to reduce stress in the classroom so that learning can occur.

The Information Processing component of Hammond's (2015) Ready for Rigor Framework relies on instructional strategies that help students effectively process information. These include Ignite, Chunk, Chew, and Review. Each capitalizes on brain science to enhance learning. Ignite helps to gain students' mental attention. It may include using novelty, structured conversation, or music. Chunk delivers the brain right-sized pieces of information that learners can connect to their current skills and knowledge from their home culture (funds of knowledge), making content digestible. Chew enables active processing of new information and may include unstructured think-time to deepen understanding. The final Review component brings opportunities to apply new learning. These are important aspects of my instructional technique.

Project Plan

My project was a four-week poetry unit, utilizing the Jacob's Ladder Reading Comprehension Program (2018) for advanced learners. Over the course of the unit, I covered four poems. The content was delivered across three 30-minute lessons for each poem, for a total of 12 lessons per class. I used the Google Workspace platform for ease of sharing with classroom teachers, specifically integrating Google Slides and Google Docs. The steps in my curriculum development process were based on Lakeville Area Schools' District Unit Design Template, which covered essential content standards/Benchmarks and DOK, with aligned learning targets; Key Understandings, Big Ideas, Lesson Focus or Goals of the Unit; Key Academic Language/Vocabulary; and Essential Questions. I also incorporated components from Hammond's Ready for Rigor Framework and the Learning for Justice Social Justice Standards (2023) to support culturally responsive instructional practices.

Setting and Participants

The first-grade classes at my YS implementation sites and their teachers were my participants. The setting of my project was two of the eight elementary schools in our district, which is located in a third-ring suburb of Minneapolis. This group consisted of 9 classrooms of approximately 25 students with 9 homeroom teachers. These schools were selected as YS sites because they had the highest percentage of free and reduced-price lunch recipients and the most diverse student bodies in our district. Based on data from the Minnesota Department of Education (2023), Table 1 depicts a sampling of our student populations.

Table 1***Minnesota Report Card - Minnesota Department of Education***

2023 Site Data	School A	School B
Total Students	506	751
Students Who Received Free and Reduced-Priced Lunch	33.0%	26.8%.
English Learners (EL)	10.1%	6.3%
Black Students	10.3%	8.8%
Hispanic or Latino Students	10.7%	6.8%
White Students	66.6%	72.7%
Other Ethnicities	5%	5%
Two or More Races	5.5%	7.1%

These whole-class lessons utilized tiered instruction and scaffolding to differentiate for the spectrum of student needs in each classroom in consultation with classroom teachers. Likewise, the YS specialist's goal was to collaborate with classroom

teachers to facilitate their carrying forward the advanced academic curriculum and instructional strategies learned in this unit to other lessons.

Timeline and Preparation

Over the course of nine weeks, I developed this unit. Week one consisted of creating the unit plan, while weeks two through seven were used to develop lessons and associated instructional content for each poem. During week eight assessments were developed. Final edits were done in week nine.

Over the course of four weeks, three 30-minute lessons per poem were delivered, for a total of 12 lessons per class to cover four poems. I staggered these across the nine classrooms so that each class received its lessons within a four-week block.

Assessment

Formative assessments were delivered using student sheets to monitor the understanding of individual lessons. The formative assessments occurred during each lesson and reinforced the concept students were learning that day. Performance assessments were interspersed throughout the unit, allowing students to integrate and apply the concepts they were learning and to show their understanding. They included individual writing samples. Lastly, a summative/final assessment was based on broad learning targets. This assessment evaluated students' understanding of rhyme, cause and effect, and creative writing.

Summary:

In order to positively impact achievement in advanced learners from historically underserved backgrounds, vetted gifted and talented ELA resources delivered in a culturally responsive manner must be utilized. Because Jacob's Ladder has shown

evidence for positively impacting the achievement of these students across multiple studies and was created for whole-class or small-group instruction, it was an excellent resource to build this poetry unit from. Jacob's Ladder is also well-aligned to national and MN state learning standards, fitting nicely into our grade-level English language arts scope and sequence. Incorporating Hammond's (2015) Ready for Rigor Framework to build partnerships with students, capitalizing on the brain's information processing stages within a safe learning environment that moves students from dependency on the teacher to independent learning made this an engaging experience for first-grade students.

Chapter four explores the impacts of the capstone learning process on myself as well as the students, colleagues, and families I work with. It also covers impacts on the advanced academic field.

CHAPTER FOUR

Conclusion

Introduction:

My project, described in Chapter Three, outlined a rigorous, culturally responsive first-grade poetry unit built upon evidence-based resources utilizing the Integrated Curriculum Model (ICM) and helped to answer the question: *How do English Language Arts (ELA), culturally responsive curricular resources impact academic achievement in our advanced first-grade learners from historically underserved populations?* The unit and associated resources were shared on our district website as part of a curriculum hub to support teachers in delivering rigorous content that can be used with all learners, especially those with advanced learning needs. The implementation of tiered assignments facilitated differentiation, accommodating various levels of student readiness. Classroom teachers also utilized grouping strategies and scaffolds to foster appropriate levels of challenge with support for learners. The use of formative, summative, and performative assessments throughout the unit enabled teachers and students to check for understanding, guiding appropriate interventions.

Chapter four emphasizes critical learnings from the capstone process, a reflection on the literature review, benefits & possible implications and limitations of the project, and communicating and implementing the results. Critical learnings have shaped me as a writer, researcher, and learner. The literature review highlighted how high-rigor, culturally responsive, differentiated curriculum and instruction can increase academic achievement in learners from historically underserved populations. In consultation with

my content experts, I explored the benefits of the project as well as how to best communicate and implement my results.

Significant Learnings in the Capstone Process:

Engaging in comprehensive research helped me to have a broad understanding of the literature, including points of agreement and conflicting perspectives. From there, I distilled essential ideas that served my research question. This led me to be a more effective and precise writer, synthesizing my understandings and communicating them to a broad audience. The technical aspects of writing a capstone paper were the most challenging part of this process, and I am grateful for the guidance of knowledgeable professors in helping me to improve my academic writing skills. Something unexpected in this process was that there are few studies out there that specifically explored gifted learners from historically underrepresented populations and included quantitative data. This gap makes me want to explore this topic further through action research. Also, I was disappointed that I could not find as many resources in the last decade around gifted curriculum as there had been in the previous decade.

Reflection on Literature Review:

The main takeaway from the review of literature is that advanced curriculum and instruction, which is differentiated, culturally responsive, and based on how the brain learns creates educational synergy. By incorporating the best of these disciplines, I was able to design an engaging, rigorous English language arts (ELA) poetry unit aligned to state and district learning standards. It took multiple resources to develop this curriculum and a significant investment of time. Going forward, I hope that myself or others in the

field can develop curricular resources which do this in a standalone format that is easy to distribute and implement at scale as this is a gap in the current market.

The Jacob K. Javits Gifted and Talented Students Education Program (2019) and its associated legislation began in 1988. Since this time it has supported the identification of gifted and talented students, especially those from historically underrepresented populations (2e (twice exceptional), racially, culturally, linguistically, and economically diverse learners). Javits has conducted evidence-based research and compiled evidence-based resources and strategies that support the needs of gifted and talented learners. VanTassel-Baska and Stambaugh's (2017) *Jacob's Ladder Reading Comprehension Program*, which I implemented in my project, is Javits recommended, as is its Integrated Curriculum Model (ICM) (VanTassel-Baska, 1986). These resources are also vetted by the National Association for Gifted Children (Johnsen, Dailey, and Cotabish, 2022).

Each poem in my Jacob's Ladder unit moves from lower-order comprehension skills in ELA to higher-order critical reading and thinking skills, making it accessible to all learners when appropriate scaffolding is implemented. In addition to higher-order thinking skills, ICM capitalizes on traditional gifted and talented education pedagogy. Overarching concepts, process-product, and advanced content are its components. These are also interwoven throughout my poetry unit.

Jacob's Ladder and ICM pair well with Hammond's (2015) understanding of culturally responsive teaching and brain science in education. By capitalizing on how the brain learns as well as students' home cultures, teachers are better able to engage and educate learners. When done within the container of a socially safe classroom where

students experience a sense of belonging, these techniques are exponentially impactful. Some of Hammond's (2015) information processing tools that were integrated into the unit are providing appropriate challenge, using methods from the oral traditions, bridging new content to learners' background knowledge, and providing talk time for students to authentically process content.

Because these lessons are meant to be delivered in both small-group and whole-class settings, differentiation was a necessity. Heacox's (2009) book, *Making Differentiation a Habit: How to Ensure Success in Academically Diverse Classrooms* provided practical strategies based on educational research and connected to Response to Intervention (RtI), supporting personalized learning. The main method of differentiation implemented in the unit was tiering for readiness as it can be implemented with minimal classroom collaboration, while other forms of differentiation require more extensive planning.

Benefits & Possible Implications and Limitations of the Project:

Due to its strong evidence base, VanTassel-Baska and Stambaugh's (2017) *Jacob's Ladder Reading Comprehension Program* has been proven to reach all learners and challenge advanced learners due to its low floor (the content starts at a depth and complexity accessible to most learners) and high ceiling, (there is increasing challenge to the point where advanced learners are working just outside of their abilities with teacher-support to handle the rigor). It is also well-aligned with national, state, and local learning standards. The inclusion of best practices from culturally responsive teaching makes this project relevant to the realities of modern teaching. Because of increased diversity in our student populations, we need to innovate, providing engaging instruction

that challenges all learners. By sharing this work with academic journals, I can increase awareness of the challenges, opportunities, and resources that will help them to meet the needs of their students. One limitation of the project is that I have not done action research. This is something that I could do in the future to demonstrate the effectiveness of the curriculum on student achievement.

Communicating and Implementing Results:

In addition to publishing in academic journals, I created a district curriculum hub from which all elementary classroom teachers can study and implement learning resources, including those from my capstone project. I will coach, coteach, and collaborate with teachers at my sites to support them in utilizing the resources and strategies laid out in the capstone paper and project.

Summary:

This process strengthened my interest in lifelong learning. Through the research process, I was able to develop new understandings and reinforce pedagogical practices that endure. By examining my history and biases, I was better able to recognize blindspots that could impede my interactions with students, colleagues, and caregivers. I look forward to further developing an action research plan that could provide data to show the impacts of the unit I developed in this project. I also plan to garner feedback from stakeholders who implement and/or collaborate on this unit in order to improve upon the work.

REFERENCES

- Ahmed, O. N. (2014). Towards a critical thinking classroom. *Arab World English Journal*, 5(2), 206-220.
- Barron, A. (2021, February 23). *Demographics of K-5 gifted populations in Lakeville Area Schools* [Infographic]. Lakeville Area Public Schools.
https://docs.google.com/presentation/d/1o6b_OW9Cdcfa5bFf1sGG0yCWQO5cjUjuNqkbHBOMNY0/edit#slide=id.p1
- Burk, K., & Hasbrouck, J. (2023). Connecting the science of reading to social justice: Introduction to the special section. *School Psychology*, 38(1), 4–6.
<https://doi.org/10.1037/spq0000536>
- Castellano, J. A. (2007). Gifted and at risk: Navigating the challenges of life. *Understanding Our Gifted*, (Spring), 3-6.
- Castellano, J. A. (2018). *Educating Hispanic and Latino students: Opening doors to hope, promise, and possibility*. Learning Sciences International.
- Castles, A., Rastle, K., & Nation, K. (2018). Ending the Reading Wars: Reading Acquisition From Novice to Expert. *Psychological Science in the Public Interest*, 19(1), 5–51.
- Coyne, M. D., Oldham, A., Dougherty, S. M., Leonard, K., Koriakin, T., Gage, N. A., Burns, D., & Gillis, M. (2018). Evaluating the effects of supplemental reading intervention within an MTSS or RTI reading reform initiative using a regression discontinuity design. *Exceptional Children*, 84(4), 350-367.

<https://doi.org/10.1177/0014402918772791>

- Coxon, S., Bilby, B., Dragoni, M., Holt, S., Lazzelle, L., Toney, C., Winton, B., King, S., & Rhodes, D. (2018, December 13). *Recommendations for providing levels of services for gifted and advanced students*. ERIC Institute of Education Sciences. Retrieved March 26, 2023, from <https://files.eric.ed.gov/fulltext/ED599008.pdf>
- Dai, D. Y., & Chen, F. (2013). Three paradigms of gifted education: In search of conceptual clarity in research and practice. *Gifted Child Quarterly*, 57(3), 151–168.
- Eugenia, M.-F., & Sandra N, K. (2022). Interdisciplinary learning: connecting language and literacy across the curriculum. *Gifted child today magazine*, 45(2), 110-112.
- Ford, D. Y., Dickson, K. T., Lawson Davis, J., Trotman Scott, M., & Grantham, T.C. (2018). A culturally responsive equity-based bill of rights for gifted students of color. *Gifted Child Today*, 41(3), 125-129. <https://doi.org/10.1177/1076217518769698>
- Gentry, M. L., Paul, K. A., McIntosh, J. L., Fugate, C. M., & Enyi, J. (2014). *Total school cluster grouping and differentiation: A comprehensive, research-based plan for raising student achievement and improving teacher practice* (2nd ed.). Prufrock Press.
- Glasgow, N. A., McNary, S. J., & Hicks, C. D. (2006). *What successful teachers do in diverse classrooms: 71 research-based classroom strategies for new and veteran teachers*. Corwin Press.
- Hahn, B., Qualls, K., Alley, T., Fletcher, A., Gordon, K., & Stanley, T. (2020, November).

Curriculum approaches that build learning bridges for diverse gifted students. *Teaching for High Potential*, 18-21.

Hammond, Z. L. (2015). *Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Corwin.

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

Heineke, A. J., & McTighe, J. (2018). *Using understanding by design in the culturally and linguistically diverse classroom*. ASCD.

Hess, K. K. (2009). *Hess' cognitive rigor matrix & curricular examples: Applying Webb's Depth-of-Knowledge levels to Bloom's cognitive process dimensions - ELA*. Center for Assessment. Retrieved April 4, 2023, from <http://khess@nciea.org>

Hollie, S., & Mora-Flores, E. (2012). *Culturally and linguistically responsive teaching and learning: Classroom practices for student success*. Shell Education.

Horn, C. V. Little, C. A. Maloney, K., & McCullough, C. (2021). *Young Scholars Model: A comprehensive approach for developing talent and pursuing equity in gifted education*. Prufrock Press.

Johnsen, S. K., Dailey, D., & Cotabish, A. (2022). *NAGC pre-K-grade 12 gifted education programming standards: A guide to planning and implementing quality services for gifted students (2nd ed.)*. Routledge.

Keng, L. T. (1996). *Critical thinking and Socratic inquiry in the classroom*. ERA - AARE Joint Conference, Singapore, (25-29 November), 1-15.

- Koutrakos, P. (2022). *Mentor texts that multitask: A less-is-more approach to integrated literacy instruction*. Corwin Literacy.
- Kreamer, H. M., Orme, S., Hobson, V., Moran, M., Mahoney, K., Moon, T. R., & Brighton, C. (2019). Elevating instruction: Enhancing literacy practices for advanced readers in primary grades. *Gifted Child Today*, 43(1), 34-45.
<https://doi.org/10.1177/1076217519880590>
- Lakeville Area Schools (Ed.). (2022). *ISD 194: Lakeville Area Schools local literacy plan*. Lakeville Area Schools. Retrieved March 9, 2023, from
<https://www.isd194.org/curriculum/elementary>
- Lakeville Area Schools. (2022). *Multi-Tiered System of Supports (MTSS) model* [Infographic]. Lakeville Area Schools.
- Lawson Davis, J., Fears Floyd, E., & Jones Roberson, J. (2020, November). The 4 rs: A new framework for teaching diverse learners. *Teaching for High Potential*, 17-23.
- Lembke, E. S., McMaster, K. L., & Stecker, P. M. (2009). The prevention science of reading research within a response-to-intervention model. *Psychology in the Schools*, 47(1), 22-35. <https://doi.org/10.1002/pits.20449>
- Learning for Justice (Ed.). (n.d.). *Social justice standards* [Social Justice Standards]. Learning for Justice. Retrieved August 25, 2023, from
<https://www.learningforjustice.org/frameworks/social-justice-standards>
- Minnesota Department of Education (Ed.). (2023, February 6). *Minnesota Report Card*. Minnesota Department of Education. Retrieved April 23, 2023, from
<https://rc.education.mn.gov/#demographics/>

orgId--999999000000__groupType--state__p--9

Minnesota Department of Education (Ed.). (n.d.). *English language arts*.

Minnesota Department of Education. Retrieved March 28, 2023, from

<https://education.mn.gov/mde/dse/stds/ela/>

McNair, J. C., & Edwards, P. A. (2021). The lasting legacy of Rudine Sims Bishop:

Mirrors, windows, sliding glass doors, and more. *Literacy Research: Theory,*

Method, and Practice, 70(1), 202-212.

<https://doi.org/10.1177/23813377211028256>

Mills, G. E. (2018). *Action research: A guide for the teacher researcher* (6th ed.).

Pearson.

Mora-Flores, E., & Kaplan, S. N. (2022). Interdisciplinary learning: Connecting

language and literacy across the curriculum. *Gifted Child Today*, 45(2),

110-112. <https://doi.org/10.1177/10762175211070845>

Olszewski-Kubilius, P., Steenbergen-Hu, S., Thomson, D., & Rosen, R. (2017).

Minority achievement gaps in STEM: Findings of a longitudinal study of

Project Excite. *Gifted Child Quarterly*, 61(1), 20-39. [https://doi.org/](https://doi.org/10.1177/0016986216673449)

[10.1177/0016986216673449](https://doi.org/10.1177/0016986216673449)

Olszewski-Kubilius, P., Subotnik, R. F., & Worrell, F. C. (2018). *Talent development as a framework for gifted education: Implications for best practices and applications in schools*. Prufrock Academic Press, PrufrockvPress.

Peters, S. J., & Gentry, M. (2010). Multigroup construct validity evidence of

the HOPE scale: Instrumentation to identify low-income elementary students

for gifted programs. *Gifted Child Quarterly*, 54(4), 298-313.

<https://doi.org/10.1177/0016986210378332>

- Plucker, J. A., & Peters, S. J. (2016). *Excellence gaps in education: Expanding opportunities for talented students*. Harvard Education Press.
- Project Bright Horizon (Ed.). (1993). *Gifted characteristics checklist for underrepresented populations*. Arizona Department of Education. Retrieved April 8, 2023, from <https://www.azed.gov/sites/default/files/2015/03/projectbrighthorizon-giftedcharacteristicschecklist.pdf?id=550317311130c016dcbfbc85>
- Robertson, S. (2020). Developing Student Success through Persistence: Teaching More Than Content. *Education*, 141(2), 83–100.
- Roessingh, H., & Bence, M. (2017). Intervening in early written literacy development for gifted children in grade 2: Insights from an action research project. *Journal for the Education of the Gifted*, 40(2), 168-196.
<https://doi.org/10.1177/0162353217701201>
- Saifer, S. (2011). *Culturally responsive standards-based teaching: Classroom to community and back* (2nd ed.). Corwin Press.
- School of Education Center for Gifted Education (Ed.). (n.d.). *Jacob's Ladder reading comprehension program*. William and Mary School of Education. Retrieved April 7, 2023, from <https://education.wm.edu/centers/cfge/curriculum/languagearts/materials/jacobsladders/index.php>
- School of Education Center for Gifted Education (Ed.). (n.d.). *Teaching models*. William and Mary School of Education. Retrieved April 4, 2023, from <https://education.wm.edu/centers/cfge/curriculum/teachingmodels/#reason>

- Sims Bishop, R. (1990). *Mirrors, windows, and sliding glass doors*.
Perspectives: Choosing and Using Books for the Classroom, 6(3).
- Smutny, J. F., Walker, S. Y., & Honeck, E. I. (2016). *Teaching gifted children in today's preschool and primary classrooms: Identifying, nurturing, and challenging children ages 4-9*. Free Spirit Publishing.
- Stambaugh, T., & VanTassel-Baska, J. (2021). *Jacob's Ladder Reading Comprehension Program: Grades 1-2* (2nd ed.). Routledge.
- Tomlinson, C. A., Kaplan, S. N., Renzulli, J. S., Purcell, J. H., Leppien, J. H., Burns, D. E., Strickland, C. A., & Imbeau, M. B. (2009). *The parallel curriculum: A design to develop learner potential and challenge advanced learners* (2nd ed.). Corwin Press.
- Treffinger, D.J. (1998). *From gifted education to programming for talent Development*. Phi Delta Kappan 79 (10): 752–55.
- US Department of Education (Ed.). (2019, April 1). *Jacob K. Javits gifted and talented students education program*. US Department of Education. Retrieved April 2, 2023, from <https://www2.ed.gov/programs/javits/index.html>
- VanTassel-Baska, J. (1986). Effective curriculum and instructional models for talented students. *Gifted Child Quarterly*, 30(4), 164-169.
- VanTassel-Baska, J. (2017). Achievement unlocked: Effective curriculum with low-income students. *Gifted Child Quarterly*, 62(1), 68-82.
<https://doi.org/10.1177/0016986217738565>
- VanTassel-Baska, J., & Baska, A. (2019). *Curriculum planning and instructional design for gifted learners* (3rd ed.). Prufrock Press.

- VanTassel-Baska, J., Avery, L. D., Little, C., & Hughes, C. (2000). An evaluation of the implementation of curriculum innovation: The impact of the William and Mary units on schools. *Journal for the Education of the Gifted*, 23(2), 244-272.
- VanTassel-Baska, J., & Stambaugh, T. (2017). *Jacob's ladder reading comprehension program* (2nd ed.). Prufrock Press.
- Vygotsky, Lev (1978). *Mind in Society*. London: Harvard University Press.
- West Keur, R. A. (2019). Teacher expertise: Informing research and development in gifted education. *Gifted Child Today*, 42(2), 91-95.
- Wiggins, G. P., & McTighe, J. (2011). *The understanding by design guide to creating high-quality units*. ASCD.