Writing Instruction and Intervention for Struggling Writers

Writing Instruction and Intervention for Struggling Writers:

 $Multi-Tiered\ Systems\ of\ Support$

Edited by Michael Dunn

Cambridge Scholars Publishing



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TABLE OF CONTENTS

Preface	. vii
Chapter One What are the Origins and Rationale for Tiered Intervention Programmin Michael Dunn	1 g?
Chapter Two What does the Research Say About Research/Evidence-based (Core) Writing Instruction in General Education Classrooms? Julie E Dockrell and Barbara Arfé	. 16
Chapter Three What does the Research Say about Research / Evidence-based Intensive Intervention Programming for Writing? <i>Amber b. Ray</i>	. 42
Chapter Four Struggling Writers and Students with a Learning Disability in Writing: Similarities and Differences Florence Chenu	. 61
Chapter Five What is Writing Assessment for Tiered Decision Making? John L. Hosp and Erica Kaldenberg	. 70
Chapter Six A Proposal on Tier 3 Instruction in Writing: Increasing Intensity and Targeting Core Skills Teresa Limpo and Marisa Filipe	. 86
Chapter Seven What is a Suggested Framework for Providing Interventions in the Area of Writing to Secondary Students? <i>Wayne A. Callender</i>	. 99

Chapter Eight	113
Multi-Tiered Systems of Support: Case Examples	
Darcy E. Miller	

PREFACE

Some students struggle with writing because of a specific learning disability whereas other students struggle with writing for a variety of other reasons. In this edited volume various reasons for struggling with writing and approaches to identifying and treating writing problems are addressed. For example, contrasting approaches to identifying specific learning disabilities in writing are addressed. The first approach employed offered children in the general education classroom the opportunity to learn to read, write and do math. If they were struggling in writing (or reading or math) at the end of third grade, the school would ask the parents' permission to complete a multidisciplinary evaluation including an assessment of IO and academic achievement to determine if the student was significantly underachieving in writing (or reading or math). Waiting until the end of third grade resulted in a missed opportunity for early intervention and thus this approach became known as a wait to fail method for identifying specific learning disabilities. More recently, educators began creating a new system called response to intervention (RTI). As early as kindergarten, teachers had students complete short assessments of core skills (e.g., letter knowledge) and offered interventions for students who scored low. Curriculum-based measurement (CBM) data were collected during the interventions (e.g., about every fourth session) to document how the student's skills were progressing. If a child did not progress after one or two intervention cycles, an in-school team could use that data showing failure to respond to intervention (RTI) to warrant special education services. Not only academics but also behaviour were often assessed and RTI became known as Multi-Tiered Systems of Support (MTSS) to incorporate both of these aspects of learning. The contributing authors to this book offer a description and practical examples of how a district or school could apply RTI and MTSS for writing.

In chapter 1, Dr. Michael Dunn (Washington State University) describes the rationale for MTSS and tiered intervention programming for writing. In chapter 2 Drs. Julie Dockrell (University College London) and Barbara Arfè (University of Padova, Italy) offer a discussion of what has been learned from research regarding evidence-based (core) writing instruction in general education classrooms. In chapter 3, Dr. Amber Ray (University of Hawaii Manoa) discusses the research about evidence-based intensive intervention programming for writing. In Chapter 4 Dr. Florence Chenu (Université Lvon 2. France) compares and contrasts the differences between struggling writers and students with a learning disability in writing. In chapter 5, Drs. John Hosp (University of Massachusetts Amherst) and Erica Kaldenberg (University of Iowa) offer ideas and practices about writing assessment for tiered decision-making. In Chapter 6 Drs. Teresa Limpo (University of Porto, Portugal) and Marisa Filipe (Centro de Linguística da Universidade de Lisboa, Portugal) suggest choices for managing intensive intervention(s) in possible special education placements. In chapter 7, Dr. Wavne Calendar (Partners for Learning, Idaho) suggests ideas for intensive intervention programming for writing in middle school and secondary school classrooms. In chapter 8. Dr. Darcy Miller (Washington State University) describes some examples of case studies of students' progress through MTSS intensive interventions for writing.

Collectively, the authors, who represent special education researchers in the United States, Canada, and Europe, each bring their own perspectives and expertise to the topic of students who struggle with writing. Although this book is not a definitive discussion of the topic, the chapter authors hope the book offers an enriched starting point for stimulating evidencebased practices for identifying and teaching students who struggle with learning to write for a variety of reasons.

> Michael Dunn, Editor Associate Professor Washington State University Vancouver May 6, 2019

CHAPTER ONE

WHAT ARE THE ORIGINS AND RATIONALE FOR TIERED INTERVENTION PROGRAMMING?

MICHAEL DUNN

Early History of Writing and Disabilities

Writing has a long history (Mark, 2011; Murphy, 2012). What one considers writing (e.g., storytelling), in a permanent product format (e.g., pictures, letters), helps to define writing's historical timeline. The cave paintings of the Cro-Magnon Man date from about 50,000-35,000 years before the common era (BCE). The images were more than just names of things. The images implied language that told a story with sequential events (e.g., a hunting expedition). Written language would later be invented in southern Mesopotamia (Sumer) in 3,500-3,000 BCE. The making of specific marks in wet clay with a reed instrument was called cuneiform. The Egyptians were developing their hieroglyphics at about the same timeframe (3,150 BCE) and may have been developed from Mesopotamian cuneiform. The Sumerians provided a basis for the phonetic systems developed in Phoenicia, Greece. The Sumerians used symbols impressed onto wet clay. These pictographs recorded the journey of grain to various trade destinations, for example.

The use of language in education began in ancient history as oral discourse (Raymond, 2004). Pictures became symbols for names and terms. These symbols then changed into letters and words. The people who were most engaged in decoding these types of writings (e.g., the wealthy, religious classes) represented the educated class in society. There was no concept or practice of learning differences or disability identification. Rather, disability was viewed as what could be seen (e.g., behavioral disorders, mental illness, physical deformities, etc.). A person would need to have a severe case of disability to be noticed; medical interventions would be the response, not education. These people were viewed as evil and often eliminated. The few people with developmental

Chapter One

disabilities who survived sometimes served as jesters or clowns. In contrast, Hebraic traditions as described in the Bible demonstrated a practice of benign protection. People with disabilities, like others, were created by God and should be accorded respect and inclusion in society. When Moses resisted God's call for him to lead the Israelites out of Egypt due to having slow and hesitant speech, the Lord responded, "Who is it that gives man speech? Who makes him dumb or deaf? Who makes him clear-sighted or blind? Is it not I, the Lord? Go now; I will help your speech and tell you what to say" (Exodus 4:10-13).

Religious orders played a key role in the Middle Ages (Winzer, 1993). From the early Common Era and through the Renaissance and Reformation (100-1700 C.E.), religious beliefs and cloistered monasteries provided a safe refuge for people with disabilities such as blindness and intellectual disorders. Yet, not all held these views and practices. Luther and Calvin did not feel a responsibility to help people with disabilities. To many in the Reformation, these people represented demonology, superstition, and yet capable of divine revelations. If people did not find shelter with nuns and monks, they often became beggars, court jesters, or fools. People with emotional disorders often faced torture, exorcism, or were the subject of witch-hunts.

During the Enlightenment, peoples' attitudes about disability began to change (Salend and Duhaney, 2011). French philosophers such as Rousseau and Locke advocated for everyone's rights to be protected. Locke's (1689) writing entitled An Essav Concerning Human Understanding suggested that we all enter the world "tabula rassa," as a blank slate on which day-to-day happenings write our life's experiences. Rousseau viewed these ideas as childhood's being a timeframe for education to help children's and people's thinking. Diderot, often considered the father of special education, advocated for people with disabilities being helped through education. Diderot was keenly interested in children whose disability involved the loss of one of the senses. He advocated that other intact senses could be a means to help accommodate the needs of people with disabilities. Itard (1802) published his account of finding a Wild Boy of Averon wandering in the forest suspected of having an intellectual disability. Itard experimented with systematic intervention programming to demonstrate that the such people can improve to some level in their skills. These philosophers and their contemporaries advocated that a person's fate did not have to be defined at birth. Education, training, and intervention programming could make a difference to improve the lives of people with possible or known disabilities.

The beginning of the 19th century represented a new level of research and thought about disability and learning disability specifically (Hallahan and Mock, 2003). Franz Gall, a German phrenologist, researched the brains of people who had experienced physical injuries to the head and concluded that specific regions represented specific functions. As the years progressed, Bouillaud, Broca, and Wernicke continued the practice of research on the brain and identified specific parts for particular functions: above and forward of the left ear, Broca's area managed speech; above and behind the left ear, Wernicke's area represented managing comprehension of text. Broadbent and Kaussmal also researched the processes of reading difficulty and concluded too that decoding was a challenge for their case study subjects even though their sight, intellect, and speech were normal.

Berlin, an ophthalmologist, coined the term dyslexia in 1884, which he preferred in lieu of the term "word blindness." Morgan (1896), an English physician, published a case study about a child with congenital "word blindness." During this same period, Hinshelwood, a French physician, completed a case study of a patient from 1894-1903. Hinshelwood concluded that the cause of the reading disability was located in the left angular gyrus. Hinshelwood's (1917) research commented on reading disability being present more often in males. Also, it was implied that there was a strong possibility of heritability in having a reading disability. Hinshelwood concluded that reading disability was rooted in the difficulty of visual memory for letters and words. He advocated for students to have explicit practice with individual letters and words to improve.

The Early 20th Century

The early 20th Century initiated a focus on testing methods for students with disabilities. The French Ministry of Public Instruction asked Alfred Binet and Theophile Simon (1916) to develop a test to assess a student's mental age, which would help identify students who would not succeed in public school. Binet, Simon, and others viewed intelligence as a fixed trait that could be quantified (intelligence quotient, or IQ). Other researchers developed variations as their own tests. David Weschler (1949) developed the Weschler Intelligence Scales for Children (WISC); various editions would evolve in later years and become one of the most-employed IQ tests with children. The belief was that IQ tests could help rank children in terms of ability, which contributed to the creation of the concept of mild disability—students who could manage in regular education programming with some accommodations or modifications.

In the 1920s, Samuel Orton, a neuropathologist in Iowa City, Iowa, observed a two-week intervention for 14 students with apparent mild disabilities in reading. Although they struggled with reading, their IO scores were in the near-average or above-average range. Orton (1937) concluded that IO was not necessarily a good indicator of true intellectual capacity, a view widely accepted today. Orton appreciated Hinshelwood's beliefs but disagreed with many too. Orton felt the prevalence of a reading disability was more like 10%, not Hinshelwood's 1 per 1,000. Orton also believed that the processes of reading involved more of the brain's parts than just the angular gyrus. Orton contended that students with a reading disability lacked cerebral dominance; their brains rotated and flipped the correct orientation of letters in the brain's memory, which contributed to reversals of letters and words in both reading and writing. Orton's suggested intervention programming emphasized explicit phonics and blending instruction in a multisensory approach, similar to another reading disability researcher of his era, Grace Fernald (1943), who suggested students should be offered visual, auditory, kinesthetic, and tactile (VAKT) activities in learning letters and words. Students could be shown a three-letter card (B A T). They would see (visual) the word, say it (auditory; or hear the intervention teacher say it), and move their finger (kinesthetic) to trace the shape of each letter as they touch it (tactile) on each letter card.

Marion Monroe was Orton's research associate at the clinic (Hallahan and Mock 2003). As she worked with student participants, Monroe analyzed students' reading so as to find the patterns of errors they made. While two students may make an equal number of errors, their types of mistakes could be qualitatively very different. A test score would not provide the entire explanation for a student's reading challenges.

Monroe (1932) pioneered the concept of a reading index, the difference between a student's expected versus actual reading achievement. The reading index, Monroe and Orton believed, would help identify the specific help each child needed. As Monroe continued working at the clinic, she began tutoring Samuel Kirk in diagnosing and remediating students with a reading disability. Kirk's research and work with students rendered that he too believed in the need for assessments that could distinguish students with abilities versus disabilities. Samuel Kirk (1961) published his Illinois Test of Psycholinguistic Abilities, which many educators used into the 1970s. Barbara Bateman (1965), one of Kirk's doctoral students, proposed a definition for learning disability as, "an educationally significant discrepancy between estimated potential [IQ] and actual level of performance [academic ability]" (220). This quickly became a defining feature of learning disability: IQ/achievement discrepancy. Bateman's research in intervention programming, with Monroe's and Orton's, noted two key educational practices: students with a learning disability have interindividual differences, and assessment needs to guide instruction.

By the mid-1960s, the US government devoted more interest in education. President Johnson signed the Elementary and Secondary Act (ESEA; United States 1965). The first section of the law (Title 1) aimed to help children who struggled with in reading, writing, and mathematics (e.g., students with possible learning disabilities). President Nixon signed ESEA amendments in 1969 which included Title IV to help address the needs of students with disabilities.

The next milestone law for special education was signed by President Ford in 1975 entitled the Education of all Handicapped Children Act (EAHCA; United States, 1975). This law provided improved practices and services for children with disabilities by guaranteeing a free and appropriate public education (FAPE), a multidisciplinary evaluation to define the student's strengths and weaknesses, creation with parental input and yearly review of an individual education plan (IEP), placement in the least restrictive environment (LRE) type of classroom appropriate to their needs, free or reduced-cost lunches, a system of due process for parents to resolve disputes with the school, and federal funds to help states provide for the educational needs of students with disabilities.

While EAHCA offered in many ways a new bill of rights for children with disabilities, lingering questions about assessment and instruction remained. The law did not clarify issues around assessment for learning disability, for example. The US Department of Education (1977) decided to adopt a definition which stated:

The term "specific learning disability" means a disorder in one or more of the psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, speak, read, write, spell, or to do mathematical calculations. The term does not include children who have LD which are primarily the result of visual, hearing, or motor handicaps, or mental retardation, or emotional disturbance, or of environmental, cultural, or economic disadvantage (U.S. Office of Education 1977, 65083).

This definition was not operationalized so as to define what tests or scores a student would need for learning disability identification. Each of the 50 states were left to choose their own tests and scoring criteria for learning disability identification. Some states employed a regression formula table. Other states used a calculation of a minimal IQ/achievement discrepancy of 15 points; others states required at least 18 points discrepancy. A student may be eligible in one state with 15 points but then move to another state and lose special education services because 18 points were needed.

challenge persisted with learning disability referral, Another assessment, and providing intervention programming: the practice of wait to fail (Volkmer, Galuschka, and Schulte-Körne 2019). As public schools and the concept of learning disability referral developed over time. educators felt the need to first offer children the opportunity to succeed with reading, writing, and math in kindergarten to third grade. Teachers preferred to wait until later in third grade to refer children for assessment and possible special education. Even when a teacher referred a severe case, the student's assessment score results would often not meet the criteria needed for special education placement partly because standardized tests such as IO do not have a sufficient floor to evaluate early-elementary skills. This wait-to-fail practice over time grew into a more macro-scale issue as schools developed a trend of increasingly referring, assessing, and placing students in special education in later grades, even middle and high school. Various factors may have been at play. Teachers may have become more hesitant to refer over time. The gap between rich and poor grew even wider in the 1970s and in the years that followed; there is a correlation between low income and academic ability. Children may have developed more academic needs which were harder to remediate in elementary school as well as compared to increasing academic demands of middle and high school grades. Challenges with assessments, referral processes, and students' academic needs were prompting a need for change.

Beginnings of Response to Intervention

By the late 1970's, school districts were ready to explore new intervention and assessment methods to address the growing challenges they faced (Fucks, Mock, Morgan, and Young 2003). In 1980, Iowa's Heartland Education Association became the first district to employ an alternative operationalized method: one based on students who struggled with a skill such as writing, reading, and/or math and if they progressed with intensive intervention programming. If so, they would return to the general education classroom and manage with their improved skills. If not, the intervention progress-monitoring data would demonstrate the student's low ability and little or no progress over time (a dual discrepancy); this would provide the data to warrant special education placement and longterm programming. Minneapolis Public Schools and Pennsylvania began exploring similar types of practices too. Educators became increasingly favorable to these progressive practices.

In 1982, the National Research Council convened a panel (Heller, Holtzman, and Messick 1982) to review issues around instruction, assessment, and placement for students with disabilities. Their summary suggested that the validity of special education classification be based on three criteria: (1) the general education programming will be adequate for learning to occur; (2) the special education program will improve student outcomes to warrant classification; and (3) the assessment process will be accurate and meaningful.

In 2002, President George W. Bush convened the President's Commission on Excellence in Special Education in Washington, D.C. Educational practitioners and researchers came together to have forum discussions about the need for change. The result of the discussions was the agreement that a type of "response to intervention" method would be a progressive alternative to IQ/achievement discrepancy (Gresham 2002, 467). In the 2004 reauthorization of the Individuals with Disabilities Education Improvement Act (IDEIA), states were offered the option of using response to intervention (RTI) as a method for special education classification. Although the reauthorization of the Elementary and Secondary Act in 2002 (retitled the No Child Left Behind Act) did not mention RTI, the 2015 reauthorization did (retitled the Every Student Succeeds Act) and used the newer title of multi-tiered systems of support (MTSS; Sugai and Horner 2009) to add the behavioral aspect to RTI's focus on academic challenges that students can face in school.

Multi-Tiered Systems of Support: An Example Framework for Writing

With reading and writing so intertwined, students can begin their interactions with making letters and words in early childhood and more formally in preschool, kindergarten, and first grade (Graham, MacArthur, & Hebert, 2018). Traditionally, writing instruction in planning and generating sentences as well as connected text begins in second grade and continues through the years that follow into adulthood. Universal screening for writing, then, would be applicable at second grade. Coker and Ritchey (2013) concluded that completing universal screening in January of reading (e.g., Dynamic Indicators of Early Literacy Skills [DIBELS], Phoneme Segmentation Fluency [PSF], Nonsense Word

Fluency [NWF], and Letter Name Fluency [LNF] subtests [DIBELS]) and writing (e.g., letter writing, sound spelling, word spelling, and sentence writing) together provided for better classification accuracy of students as either being at grade level or needing intensive (scored below 80%) or strategic (scored 81-90%) intervention.

As a mastery measure, having students write a story would be one universal screening example as it is typically the genre of focus at this grade level and collectively represents writing skills such as planning, spelling, sentence generation, editing, etc. Assessing a student's writing of connected text typically includes a score for content (e.g., answering Graham and Harris' [1989] WWW, W=2, H=2 story questions) and quality (e.g., a score for how well the student composed finessed sentences, syntax, grammar, etc.). The WWW questions for story content include: who, when, where; what happened, what happened next, how did the story end, and how did the characters feel? Another curriculum based measurement (CBM) example for quality could be correct writing sequences (CWS; two words appearing next to each other are found to be correct in their punctuation, capitalization, spelling, and syntactical and semantic usage; McMaster & Espin, 2007; Videen, Deno, & Marston, 1982). Other CBM-Writing examples are: WW = words written; WSC = words spelled correctly: CLS = correct letter sequences: CIWS = correctminus incorrect word sequences; LW = legible words; and ML/CWS = mean length correct word sequences. Hosp, Hosp, and Howell (2016) analyzed data, which resulted in a table of normed CBM scores for writing. To compare students' scores to these norms, the teacher would ask the students in the class to think about what they want to write about for one minute and then create their text during the next three minutes. The teacher may note how much students have written at minute three so as to compare scores with the norms, and then offer students more time (e.g., 2-7 more minutes) to qualitatively later review what they could produce as a more finessed text. To have a valid universal screening assessment profile for each student, it has been shown that three CBMs can demonstrate an average level of writing ability at that time (e.g., a Monday/Wednesday/ Friday during a week in January of second grade). Teachers can review other resources about CBM-Writing at the Intervention Central (2018), the National Center for Response to Intervention (NCRTI; 2018), and AIMSweb (2018) sites.

Data-Based Decision Making: Universal Screening Scores in Tier 1

Educational researchers offer schools a number of CBM choices for universal screening. In the opinion of this author, story writing for secondgrade students is a good mastery universal screening measure. Once students have completed three CBM-Story Writing samples, the teacher would score each text for content (e.g., students' having answered Graham Graham and Harris' [1989] WWW questions) and quality (e.g., each text's score for correct writing sequences: or, the teacher's score for each text as compared to Smarter Balanced [2018] exemplars). The teacher would then aim to ordinally rate students in a list with three categories: students who are at grade level in their writing ability (e.g., likely the top 25% of the class); students who are emerging (e.g., the middle 26-74% of the class); and students who are struggling (e.g., the bottom 25% of the class). With a class of 24 students, the group proportions might then be six students at grade level, 12 students who are emerging in their skills (e.g., answer some WWW questions and have a basic story sequence but lacking in detail), and six students who are struggling and write only a line of text or less. The school could provide each child's parents/guardians with the average score from the universal screening assessments to demonstrate ongoing school-home sharing of information.

Per the MTSS framework, the next step for the teacher, second-grade level team of teachers, and/or division K-3 teachers is to meet with the inschool team and review the students' texts and data scores. An in-school team comprises a group of educators (e.g., the principal [chair of the committee], a special education teacher, a general education teacher, the school psychologist, the speech and language pathologist, and a behaviormanagement specialist) who meet weekly to review students' CBM data and help teachers and the school develop next-step instructional and assessment plans. The in-school team should consider a number of topics and questions. Are the classroom practices and materials representative of writing instruction across the school district and beyond? Is there professional development offered in the school or elsewhere which could help the teacher(s) offer new activities to promote students' improvement in writing? Are there new curricula or materials (e.g., mobile devices) that could help the teachers and students? If the in-school team concludes that students' CBM scores for writing could improve through changes in classroom practices and materials, that should be provided as soon as possible and new CBM scores be collected from students for the teacher and in-school team to review in three months. Concurrently during these

three months, the teacher and in-school team should offer all students in the class more focused strategy instruction (e.g., mnemonic strategies for writing) with multiple examples from the teacher and guided feedback. These practices will offer struggling and emerging writers helpful ideas for general education/Tier 1 classroom accommodations, which can benefit all students.

By the end of March in second grade, students should complete a second set of universal screening CBMs of story writing content and quality. Ideally, the strategy instruction from the past three months will have helped all students improve and render fewer students as struggling with writing. These children who are demonstrating a dual discrepancy (i.e., low achieving and little or no progress over time) should be offered a more intensive intervention.

Intensive Intervention Programming for Writing: Tier 2

For students who persist with writing difficulties after Tier 1 programming, instruction, and accommodations, intensive intervention is warranted. The format can take one of three options that MTSS advocates suggest. The first is a standard protocol method where the school or district purchases a publisher-made set of intervention activities and assessments (e.g., the writing components of Read180). The teacher is provided with a publisher-created administration manual and script that provides a sequence of what activities are to be done and when, as well as the directions. From the National Center for Response to Intervention or WhatWorksClearninghouse websites, as two examples, educators can review which programs have a research/evidence base. These purchased curricula provide administration guides, activities, and assessment materials, but they do not provide an MTSS assessment framework of what CBM scores constitute sufficient progress with an intervention or not, the total timeline of an intervention, nor do these materials provide for decision-making rules about special education eligibility. The school or district must define these criteria

A second intervention option is referred to as the problem-solving model. The general education teacher would present a given student's CBM data/assessment profile with some exemplars of student work to the in-school team. They can then design an intervention to help the student improve. An example set of intervention components for 45-minute sessions could be: three minutes for the intervention teacher and student to meet and greet; five minutes to review a portion of a published text for the student to hear and with the teacher analyze how the text reads and is organized; five minutes to practice spelling of a few words from the text; five minutes to create some sentences and work to make the first drafts more elaborate by adding adjective, adverbs, connecting words (e.g., and, but, or); and then 32 minutes to learn/practice the focus writing strategy (e.g., a mnemonic strategy) being offered to the student in the intervention. Again using story writing as an example, the student would count the number of words written at the end of each daily session and chart this number on a graph. This should help intrinsically motivate the student to improve the score each successive day. With the increasing number of words written over time, they should provide for more elaborate sentences and a more finessed final draft. The teacher can also score each completed story for content and quality. As with the standard protocol method, the school or district needs to define what level of change in CBM scores over time constitutes success with the intervention, the timeline of the intervention, and what CBM data constitutes special education eligibility.

A third type of intervention design is the hybrid method. Educators can use a mix of standard-protocol and problem-solving components for intervention session activities. With any of these three methods, a student's continuing to be dually discrepant after one intervention round should be followed by a second intervention different in design so as to offer at least two opportunities for improvement. If a student persists to be dually discrepant after a second intervention, the in-school team should consider special education placement as a possible next step.

Summarizing Intervention Programming and Deciding Next Steps: Tier 3

Schools and districts have at least four choices for what Tier 3 may entail. First, providing a different type of intervention (e.g., a cognitive skills intervention to help improve attentional and memory skills). Second, offering a timeframe for the student to complete a diagnostic assessment (e.g., writing components of the Woodcock-Johnson Tests of Achievement) before considering another intervention phase or change of placement. Third, considering special education eligibility (e.g., reviewing curriculum based measurement [CBM] scores from Tier 2) for possible special education Program (IEP) and actual placement in special education. Each option offers an added benefit to the MTSS process. Collectively, they may represent a summative set of practices as Tier 3: an alternative intensive intervention with diagnostic assessment, review of all of the data,

and if appropriate, development of an IEP and placement in special education.

Conclusion: Implications for Practice

Multi-Tiered Systems of Support (MTSS) offers educators a progressive method for early intervention, as well as a system-wide review of curricula, assessment, and teacher practices and a renewed focus on teacher collaboration. The use of curriculum-based measurement (CBM) offers teachers and students a means to see change in skill levels over time and have assessment data that are classroom-activity focused. While the use of IQ and other standardized tests are typical methods for special education eligibility decision making, they may be a part of diagnostic assessment if an in-school team chooses to employ them.

MTSS advocates have offered what an intervention and assessment framework can entail (e.g., universal screening, CBM, data-based decision making). Educators at the school and district level have the opportunity to infuse their own professional judgement about intervention timelines, benchmark criteria for universal screening, a student's being defined as dually discrepant, change needed following an intervention to meet success, and data components that define special education eligibility or not, as a few examples. Students' interactions with the learning process at school is a complex endeavor. Teacher and curriculum expectations, activity choices, assessment designs, a child's physiological changes over time, home environment, parental attitudes, amongst many other factors make instructional and assessment design challenging to perfect. There likely will never be a definitive MTSS framework provided to educators. Ongoing discussions about MTSS topics will infuse integrity into the educational system and enrich the learning and growth of their students.

References

AIMSweb. 2018. Retrieved from https://www.aimsweb.com/

- Bateman, Barbara. 1965. An educational view of a diagnostic approach to learning disorders. In J. Hellmuth (Ed.), *Learning disorders* (Vol. 1, pp. 219–239). Seattle, WA: Special Child Publications.
- Binet, Alfred, and Théodore Simon. 1916. *The Development of Intelligence in Children*. Baltimore: Williams & Wilkins.
- Fernald, Grace. 1943. *Remediation Technics in Basic School Subjects*. New York: McGraw-Hill.

What are the Origins and Rationale for Tiered Intervention Programming? 13

- Fuchs, Doug, Devery Mock, Paul Morgan, and Caresa Young. 2003. Responsiveness-to-Instruction: Definitions, Evidence, and Implications for Learning Disabilities Construct. *Learning Disabilities Research & Practice*, 18, 157-171.
- Gall, Franz, and Johann Spurzheim. 1809. Reserches sur le système nerveux en général, et sur celui du cerveau en particulier (Studies on the nervous system, with particular attention to the brain). Paris: Schoell.
- Graham, Steve, Charles MacArthur, & Michael Hebert, eds. 2018. *Best Practices in Writing Instruction. Third Edition.* New York: Guilford Press.
- Graham, Steve, and Karen Harris. 1989. A component analysis of cognitive strategy instruction: Effects on learning disabled students' compositions and self-efficacy. *Journal of Educational Psychology*, 81, 353–361.
- Gresham, Frank. 2002. Responsiveness to intervention: An alternative approach to the identification of learning disabilities. In R. Bradley, L.
- Danielson, Louis and Daniel Hallahan (Eds.), *Identification of learning disabilities: Response to treatment* (pp. 467-519). Mahwah, NJ: Erlbaum.
- Hallahan, Daniel, and Devery Mock. 2003. A brief history of the field of learning disabilities. In H. L. Swanson, K. R. Harris, and S. Graham (Eds.), *Handbook of Learning Disabilities* (16-29). New York: the Guilford Press.
- Intervention Central. 2018. Retrieved from https://www.interventioncentral.org/
- National Center for Response to Intervention. 2018. Retrieved from https://www.rti4success.org/
- National Research Council (U.S.), Kirby A. Heller, Wayne H. Holtzman, and Samuel Messick. 1982. *Placing children in special education: a strategy for equity*. Washington, D.C.: National Academy Press.
- Hinshelwood, James. 1917. Congenital Word Blindness. London: H. K. Lewis.
- Michelle Hosp, John Hosp, and Kenneth Howell. 2016. *The ABCs of CBM: A Practical Guide to Curriculum-Based Measurement*. New York: Guilford Press.
- Intervention Central. (2018, December 7). Retrieved from https://www.interventioncentral.org/sites/default/files/pdfs/pdfs_blog/ wright_Learning_Spark_Blog_29_March_2013_Grs_1_5_Identfy_Writing_Difficulties_NORMS_Table.pdf

- Itard, Jean Marc. 1802. *The Wild Boy of Aveyron: An Historical Account of the Discovery and Education of a Savage Man*. London: Richard Philips.
- Locke, John. 1689. The Works of John Locke, vol. 1 (*An Essay concerning Human Understanding* Part 1). London: C. and J. Rivington and Partners.
- Mark, James. 2011. Writing. Retrieved from https://www.ancient.eu/writing/
- McMaster, Kristen, and Christine Espin. 2007. Technical features of Curriculum-Based Measurement in writing: A literature review. *The Journal of Special Education*, 41(2), 68–84.

https://doi.org/10.1177/00224669070410020301

- Monroe, Marion. 1932. Children who cannot Read. Chicago: Chicago University Press.
- Morgan, William. 1896. A Case of Congenital Word Blindness. British Medical Journal, 2, 1378.
- Murphy, James. 2012. A Short History of Writing Instruction: From Ancient Greece to Contemporary America. New York: Routledge.
- Orton, Samuel. 1937. *Reading, Writing, and Speech Problems in Children*. New York: W. W. Norton.
- President's Commission on Excellence in Special Education. (2002) A New Era: Revitalizing special education for children and their families. Retrieved December 12, 2018, from

http://www.gpo.gov/fdsys/pkg/CHRG-107shrg80787/html/CHRG-107shrg80787.html

- Raymond, Eileen. 2004. *Learners with Mild Disabilities: A Characteristics Approach*. Boston, MA: Allyn and Bacon.
- Salend, Spencer, and Laurel Duhaney. 2011. Historical and Philosophical Changes in the Education of Students with Exceptionalities. In Anthony Rotatori, Festus Obiakor, and Jeffrey Bakken (Eds.) History of Special Education. Advances in Special Education, 21, 1-20. Bingley, UK: Emerald Group Publishing Limited.
- Sugai, George, and Robert Horner. 2009. Defining and Describing Schoolwide positive behavior support. In Wayne Sailor, Glen Dunlap, George Sugai, and Robert Horner (Eds.), *Handbook of positive behavior support* (307-326). New York: Springer.
- United States. Public Law 94-142, Education for all Handicapped Children Act of 1975, 89 Stat 773. Reports, Bills, Debate and Act. [Washington] :[U.S. Govt. Print. Off.], 1975.

What are the Origins and Rationale for Tiered Intervention Programming? 15

- United States. Elementary and Secondary Education Act of 1965 : H. R. 2362, 89th Cong., 1st Sess., Public Law 89-10. Reports, Bills, Debate and Act. [Washington] :[U.S. Govt. Print. Off.], 1965.
- United States. Every Student Succeeds Act of 2015, Conference Report H. Rept. 114-354, 114th Congress. Reports, Bills, Debate and Act. [Washington] :[U.S. Govt. Print. Off.], 2015.
- United States. Individuals with Disabilities Education Improvement Act of 2004, Pub. L. No. 108-446, 118 Stat. 2647. Reports, Bills, Debate and Act. [Washington] :[U.S. Govt. Print. Off.], 2004.
- United States. No Child Left Behind Act of 2001, Pub. L. No. 107-110, 115 Stat. 1425. Reports, Bills, Debate and Act. [Washington] :[U.S. Govt. Print. Off.], 2001.
- U.S. Office of Education. 1977. Assistance to states for education of handicapped children: Procedures for evaluating specific learning disabilities. *Federal Register*, 42(250), 65082-65085.Washington, DC: U.S. Government Printing Office.
- Videen, Joan, Stan Deno, and Douglas Marston. 1982. Correct word sequences: A valid indicator of proficiency in written expression (Vol. IRLD-RR-84). University of Minnesota, Institute for Research on Learning Disabilities.
- Volkmer, Susanne, Katharina Galuschka, , and Gerd Schulte-Körne. 2019. Early Identification and Intervention for Children with Initial Signs of Reading Deficits - A Blinded Randomized Controlled Trial. *Learning* and Instruction, 59, 1-12.
- Wechsler, David. 1949. *Wechsler Intelligence Scale for Children*. New York: The Psychological Corporation.
- What Works Clearinghouse. 2018. Retrieved from https://ies.ed.gov/ncee/wwc/
- Winzer, Margaret. 1993. *The History of Special Education: From Isolation to Integration*. Washington, DC: Gallaudet University Press.

CHAPTER TWO

WHAT DOES THE RESEARCH SAY ABOUT RESEARCH/EVIDENCE-BASED (CORE) WRITING INSTRUCTION IN GENERAL EDUCATION CLASSROOMS?

JULIE E DOCKRELL AND BARBARA ARFÉ

Background

Writing is a complex, higher-order skill that develops over time through interactions between the child's skills and their cognitive resources, the instructional context, and the demands of the writing task. Producing a piece of written text requires the writer to generate ideas and represent them in a symbolic form. It serves both as means of personal meaning making and supports learning (Bangert-Drowns, Hurley, & Wilkinson, 2004). While the purpose of writing is to transmit information (of different kinds), the process of writing is underpinned by a number of different cognitive and linguistic processes (Hayes, 2012). Thereby lies the challenge to teaching writing in classrooms; without the building blocks to produce text, children are limited in their ability to produce coherent descriptions and arguments, yet the ultimate purpose of writing is the act of communication in all its myriad forms and genres. Teachers are, typically, aware of the conventions of written communication and the use of writing in the classroom, but, as we shall discuss given the complexities of the writing process and the needs of diverse learners, the teaching of writing is a challenge. In this chapter, we consider these basic building blocks and how models of writing can inform their role in children's developing writing proficiency. We also consider the tension in writing instruction between learning to write and writing to communicate.

Significant advances have been made in our understanding of the developing components of written text production in children (Wagner et

What does the Research Say About Research/Evidence-based (Core) Writing Instruction in General Education Classrooms?

al., 2011), the demands these place on the cognitive system to produce written text (Dockrell & Connelly, 2015), and which writing interventions are effective (Graham, Gillespie, & McKeown, 2013). There is also evidence of a close link between classroom teaching and the writing produced by students (Fisher, Myhill & Twist, 2010), and instructional quality is uniquely related to children's written composition over and above child-level predictors (Kim, Al Otaiba, Sidler, & Gruelich, 2013). However, there is less information about the ways in which mainstream teachers approach the teaching of writing and which factors underpin their writing instruction. There are also concerns that school writing focuses on writing products and not the processes that underpin successful text generation and the purposes of writing. Indeed, school writing has been described an 'ill-defined domain' (Purves, 1992).

In this chapter, we begin by examining teachers' writing practices, we then consider frameworks which can inform writing instruction, evidence identifying effective writing instruction, and finally outline implications for a core writing curriculum in the context of what is known about effective writing instruction.

Teachers Teaching Writing

Increased concerns about the writing skills of pupils in schools and various governments attempts (for example UK Department for Education, 2016; USA Common core standards) to raise writing skills have highlighted the importance of effective teaching of writing. Teaching of writing can be considered across three dimensions: what is taught, how it is taught, and the intensity of the instruction. However, given the large individual and demographic differences in school populations any consideration of developing a comprehensive approach to writing requires an understanding of what teachers already do when they teach children how to write. There have been two broad approaches to addressing these issues: direct observation in classrooms and indirect collection of teachers' reported practices. The indirect approach has been the more common (see Graham & Rijlaarsdam, 2016) and we begin by considering teachers reports on their approaches to the teaching of writing.

A number of early studies, primarily from the USA, have described teachers' reported practices with respect to teaching writing (Cutler & Graham, 2008; Graham, Harris, Fink-Chorzempa, & MacArthur, 2003; Graham et al., 2008; Richards, Sturm, & Cali, 2012). Studies have varied as to whether they targeted teachers in one grade, all of elementary school (Cutler & Graham, 2008) or middle/high school (Graham, Capizzi, Harris,

Hebert, & Morphy, 2014), the number of teachers who responded to the survey (N = 10 to N = 220 completing questionnaires or interviews), and whether respondents were targeted strategically or were representative of a random sample of school teachers (see for example Graham et al., 2014). Methods to elicit teachers' views have also differed. In some cases, teachers have been interviewed, others have completed surveys: moreover, surveys have varied in the questions asked and the types of responses required. Despite these differences in samples and survey questions, a number of general findings are evident. Writing instruction varies considerably across school settings in content, methods, and in the amount of time that teachers allocate to writing instruction (Cutler & Graham, 2008; Graham, Harris, & Chorzempa, 2002; Richards et al., 2012). For example, in one of the largest samples of teacher respondents, Applebee and Langer (2011) found that students in middle and high schools were not engaged in much extended writing and only 50% of the observed English classes included specific writing-related instruction. The authors concluded that in these 'best case scenarios,' students would have on average just over three minutes of instruction a day related to explicit writing strategies. Similarly, Richards and colleagues (Richards et al., 2012) reported on the nature and frequency of 107 first, third and fifthgrade general education teachers in Michigan and found significant variation in the teachers' reported practices in terms of writing activities, writing instruction, writing types, and the writing environment. Despite this variation, there was indicative evidence of changes across grade for both activities and instructional practices. Importantly, teachers reported using a variety of evidence-based practices, but they applied most of those practices infrequently and often unsystematically (Graham et al., 2014).

More recently Graham and Rijlaarsdam (2016) have collected research papers drawing on evidence from around the globe. This collection of research studies captured some similarities, but also many differences, in approaches to writing instruction. For example, while teachers in the USA often found teaching writing challenging and reported being inadequately prepared to teach writing (Graham et al., 2014; Graham, Harris, et al., 2008; Graham, Morphy, et al., 2008); this was not the case in England (Dockrell, Marshall, & Wyse, 2016). Overall differences between the countries were often a matter of degree, but also in some cases a matter of methods. Flemish teachers of fifth and sixth grade pupils spent about 65 min a week (about 13 min a day) on writing, and instruction in writing mainly focused on the teaching of writing skills such as spelling grammar, planning and self-regulation (De Smedt, Van Keer, & Merchie, 2016) while teachers in Beijing, Macao, and Taipei City generally taught writing only every two to four weeks, with an average lesson lasting over an hour in length (Hsiang & Graham, 2016). This points to an important aspect related to the intensity and distribution of writing instruction. Further, in the Hsiang and Graham study (2016) teachers in the three locations differed on almost every aspect of writing they were asked about, despite similarities in their common cultural background.

Differences are to be expected given political and social differences and their ensuing impact on the curriculum, but one could argue that if the core components of writing were well documented (as in reading, for example see Stuart & Stainthorp, 2015) a greater consistency in the core writing instruction (content, approach and time) would be evident. This was not the case. However, surveys have a number of limitations and may not reflect what is actually happening in the classroom. Teachers may choose to respond because of a particular interest in writing or because they believe they are competent teachers of writing. It is also difficult with surveys to represent pupil, classroom and school differences in a systematic way (see for example Dockrell et al., 2016).

An alternative approach to capturing teachers' writing practices is to observe what is actually happening in the classroom; these studies have the potential to capture effective practices in a way surveys do not. Three specific studies focussing on the teaching of writing in the early years illustrate this point. Puranik and colleagues (Puranik, Al Otaiba, Sidler, & Greulich, 2014) video recorded 21 kindergarten teachers to examine types of writing instructional practices. Classroom observations of writing were divided into two categories: student's practice variables, and teacher's Variables instruction variables. were chosen to align with recommendations of good writing instruction. Large variation was observed in the amount of time teachers spent on writing and in the amount of time the pupils spent writing. Importantly, this variability in classroom writing was mirrored in the children's writing performance; although the sample size of the study prevented testing for significant associations.

In a second study focussing on first grade pupils and their classrooms, Kim and her colleagues collected data from the pupils in 34 classrooms in seven schools and videotaped classroom instruction (Kim, Al Otaiba, Sidler, & Gruelich, 2013). Teachers' instructional behaviour was rated on a four-point scale. Children's language, literacy, and attentiveness were differentially related to their writing quality and to their writing outcomes. Additionally, overall quality of instruction, specifically teacher responsiveness, was important for the quality of the children's written composition. By contrast, the extent to which teachers provided individualized instruction or instruction in spelling or writing was not uniquely related to children's written composition over and above other variables; indeed for spelling and writing the mean teacher responsiveness score was 1.73 and 1.64 respectively which equated to a mean instruction score of below moderately effective (2.0).

In the final observation study we discuss, Coker and colleagues examined the relationship between children's writing instruction and writing practice on writing achievement in Grade 1 in the USA (Coker, Jennings, Farley-Ripple, & MacArthur, 2018). Measures of children's spelling, handwriting, vocabulary, and reading were collected and during the year observations of writing practice and writing instruction were captured. As in previous studies, there was significant variation between the classes in terms of the amount of writing instruction and the writing that occurred (range 5.50 minutes a day to 74.25 minutes a day) and over half of the teachers reported they had no writing curriculum. For these Grade 1 students writing instruction was not associated with stronger writing performance. By contrast, generative writing practice, defined as situations where students were expected to write a text of at least a sentence when there was no expected/predefined response, was positively related to stronger writing performance. A limitation of drawing generalizable conclusions from these studies is their narrow focus on early writing instruction (kindergarten and first grade). Writing changes across the school years, and the teaching of writing becomes more complex as the target becomes learning to write different genres or using writing to learn.

An important addition to understanding writing in classrooms is a recent study by Rietdijk and colleagues in the Netherlands (Rietdijk, van Weijen, Janssen, van den Bergh, & Rijlaarsdam, 2018). This study moves beyond questionnaires and observations to contextualise classroom practice, learning time, and teachers' beliefs to create a framework for writing instruction in primary schools within a national context. As in writing instruction occurred less often than previous studies. recommended (Graham et al., 2012), taking place on average three times a month. Moreover, key components of writing instruction such as process writing and writing strategy instruction were often missing: only a small majority of teachers provided feedback on the communicative effectiveness of the children's texts and less than half provided writing assignments that explicitly stated a goal. Nonetheless, the combined measures assessed provided relevant evidence for curriculum innovation within the Dutch context, but additionally highlighted the importance of informing teachers of the teaching approaches available and how to organise these in the classroom.

Teaching Writing

The complexity of the writing process places significant demands on teachers' expertise and teaching time. There are a range of key skills that need to be taught and a range of different ways in which teaching can occur. Overall, both surveys and observational studies indicate that teachers' practices may not be consistent with evidence-based approaches to the teaching of writing. Moreover, the teaching of writing often is occurring infrequently and inconsistently. To support teachers in structuring what is taught and how it should be taught a framework outlining the key components of the writing process should inform practice. A developmental model of writing provides an understanding of writing pedagogy and has the potential to identify developmental differences and points for instruction.

Informing a Framework for Teaching Writing

Models of writing provide teachers with an evidence to inform the focus of their teaching of writing. Models are designed to capture both the skills that children need to produce a written text, the more distal factors that underpin these skills, and the wider task environment (see Graham, 2018). Much of the research examining developmental aspects of writing has focused on the cognitive skills that underpin the writing product, often using Hayes and Flower's (1980) cognitive model of skilled writing as a starting point.

The Underlying Cognitive Skills

At the heart of written language production are the processes of transcription and translation (Hayes & Berninger, 2014). Translation converts ideas into linguistically and grammatically appropriate word strings (Hayes, 2012). These word strings then need to be transcribed into the written product through the application of fluent and accurate transcription processes involved in handwriting/keyboarding and spelling (Hayes & Berninger, 2014, Kim et al., 2011). For novice writers, especially in English, transcription skills are thought to limit the efficiency of translation (see Kent & Wanzek, 2016 for a recent meta-analysis) and so, for example, a lack of fluency in transcription skills has been shown to directly constrain productivity and quality of hand-written texts (Graham, Berninger, Abbott, Abbott, & Whitaker, 1997) and typed texts (Torkildsen, Morken, Helland, & Helland, 2016). However, less is known

about the development of translation skills in developing writers (for exceptions see Abbott & Berninger, 1993; Arfé, Dockrell, & Berninger, 2014; Babayigit & Stainthorp, 2010, 2011). This is a critical gap in our understanding of the developing writing process, as learning to translate ideas into text is the core of writing in the first years of schooling. Part of the challenge in examining the translation process in children has been the lack of objective measures of translation. Research has attempted to overcome this by developing our understanding of the writing process. Thinking about the writing process moves the focus from the children's written products to the act of creating a piece of text. From this perspective, writing is understood as a problem-solving process (planning, translation and revision) which operate interacting with the writer's long term memory and the writing task or task environment (Hayes & Berninger, 2014).

The main cognitive framework(s) which have informed our understanding of writing development are the Simple View of Writing by Juel (Juel, 1988) and its further revised and elaborated version by Berninger (Berninger & Swanson, 1994; Berninger et al., 2002), the Not-So-Simple View of Writing (Berninger & Winn, 2006). While the Simple *View of Writing* describes the writing process as consisting of transcription and ideation processes (the generation of ideas and their organization in sentences and textual structures) the Not-So Simple view of writing, extends the Simple view of writing by including the notion of translation as a separate module or process from idea generation (Berninger, Fuller, & Whitaker, 1996). Translating consists of two components in the developing writer: text generation, the mental transformation of ideas into language at word, sentence and text level, and transcription, which involves spelling and handwriting where words and ideas are represented orthographically. The executive skills of planning and reviewing, which allow the writer to self-regulate her/his writing, develop at a slower pace and only later on, when children have automatized transcription, do these processes impact on writing performance. Planning and reviewing guide written production in the more competent writer, and allow a global (post-) revision of the written product (Berninger et al., 1996).

The two models, the Simple view of writing and the Not-So-Simple view of writing, emphasise how transcription skills, one of the key building blocks of writing, constrain text production in the beginning writer such that inefficient transcription processes represent the main barrier to writing development at this phase of writing development (Abbott, Berninger, & Fayol, 2010; Berninger et al., 1992; Berninger,