DYSLEXIA
AND
RELATED DISORDERS
Handbook

PLANO INDEPENDENT SCHOOL DISTRICT

Mission

Our Plano ISD learning community will educate, inspire and empower every student to activate his or her unique potential in a dynamic world.

Goals

The Texas Administrative Code §74.28 (State Board of Education Rule) has established the following for district goals:

A school district's procedures must be implemented according to the State Board of Education (SBOE) approved strategies for screening, and techniques for treating, dyslexia and related disorders. The strategies and techniques are described in "Dyslexia Handbook: Procedures Concerning Dyslexia and Related Disorders," a set of flexible guidelines for local districts that may be modified by SBOE only with broad-based dialogue that includes input from educators and professionals in the field of reading and dyslexia and related disorders from across the state. Screening should be done only by individuals/professionals who are trained to assess students for dyslexia and related disorders.

Plano Independent School District provides appropriate services for all students with dyslexia as defined in T.E.C. 38.003 and T.A.C. 74.28 including the revised procedures concerning dyslexia and related disorders.

- K-1 dyslexia screenings
- early intervention
- identification process, conducting formal and informal evaluation,
- appropriate instructional services at each campus
- progress monitoring of reading achievement during and after existing program
- informing parents of available options and services
- technology support of students identified with dyslexia

In accordance with 19 TAC§ 74.28(e) Plano Independent School District provides a multi-sensory evidence-based reading program for students with dyslexia and related disorders that incorporates all the components of instruction and instructional approaches in compliance with the program descriptors defined by the State Board of Education. Educators who deliver the instruction have additional documented dyslexia training aligned to 19 TAC§ 74.28(c) and implement the program with fidelity.

DYSLEXIA DEFINED

As defined in Texas Education Code §38.003:

(1) "Dyslexia" means a disorder of constitutional origin manifested by a difficulty in learning to read, write, or spell, despite conventional instruction, adequate intelligence, and sociocultural opportunity.
(2) "Related disorders" includes disorders similar to or related to dyslexia such as developmental auditory imperception, dysphasia, specific developmental dyslexia, developmental dysgraphia, and developmental spelling disability.

The definition of the International Dyslexia Association (IDA) states:

"Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge."

Adopted by the IDA Board of Dyslexia, Nov. 12, 2002 - The National Institute of Child Health and Human Development (NICHD) also uses this definition.

Dyslexia is a language-based learning disability and refers to a cluster of symptoms, which result in people having difficulties with specific language skills, particularly reading. Students with dyslexia usually have trouble with other language skills, such as spelling, writing, and pronouncing words. Dyslexia affects individuals throughout their lives; however, its impact can change at different stages in a person's life. It is referred to as a learning disability because dyslexia can make it very difficult for a student to succeed academically in the typical instructional environment, and in its more severe forms, will qualify a student for special education, special accommodations, and/ or extra support services (International Dyslexia Association (IDA), 2017).

It is equally important to understand what dyslexia is not. There are many misconceptions and myths about dyslexia, which can make it more difficult for someone with dyslexia to receive help and be understood. It is a myth that individuals with dyslexia "read backwards." Their spelling can look quite jumbled at times not because they read or see words backwards, but because students have difficulty remembering letter symbols for sounds and letter patterns in words. Dyslexia is not a disease, and therefore, there is no cure. With proper diagnosis, appropriate and timely instruction, hard work, and support from family, teachers, friends, and others, individuals who have dyslexia can succeed in school and later as adults (IDA, 2017).

CAUSES

The exact causes of dyslexia are still not completely clear, but anatomical and brain imagery studies show differences in the way the brain of a person with dyslexia develops and functions. Moreover, most people with dyslexia have been found to have problems with identifying the separate speech sounds within a word and/or learning how letters represent those sounds, a key factor in their reading difficulties. Dyslexia is not due to either lack of intelligence or desire to learn; with appropriate teaching methods, students with dyslexia can learn successfully (IDA, 2017).

CHARACTERISTICS OF DYSLEXIA

The following difficulties may be associated with dyslexia if they are unexpected for the individual's age, educational level, or cognitive abilities:

- difficulty with phonological awareness processing the sounds of speech, including segmenting, or breaking spoken words into individual sounds,
- difficulty identifying and manipulating sounds in syllables
- difficulty with rhyming words,
- variable degrees of difficulty learning the names of letters and their associated sounds,
- difficulty with learning and reproducing the alphabet in correct sequence (in either oral or written form),
- difficulty decoding nonsense or unfamiliar words,
- difficulty reading single words in isolation,
- difficulty with recognition of sight words
- over reliance on picture clues, guessing at words
- inaccurate oral reading,
- difficulty reading fluently (slow, labored reading)
- difficulty with learning to spell,
- variable degrees of difficulty with reading comprehension,
- avoidance of reading,
- limited vocabulary due to reduced reading experience,
- reliance on listening rather than reading,
- variable difficulty with aspects of written composition,
- difficulty with volume of reading and written work,
- frustration with amount of time required for reading
- difficulty with notetaking, and
- family history of similar problems.

Some students are able to succeed with learning early reading and spelling tasks (especially if they have strong visual memory skills); however, they begin to experience problems when the requirements of reading/understanding complex texts and writing with complex language skills increase in the intermediate or upper grades.

ASSOCIATED ACADEMIC DIFFICUTIES AND OTHER CONDITIONS

Besides academic struggles, some students with dyslexia may exhibit other complicated conditions and/or behaviors. The most common co-occurring disorder with dyslexia is attention deficit disorder. As a result, many students with dyslexia perform erratically from day-to-day and make inconsistent errors. Anxiety is the most common emotional symptom for students with dyslexia. Constant frustration and confusion in school contribute to the fear of failure, thus causing dyslexics to avoid whatever frightens them. This avoidance behavior is often mistaken for laziness. Students with dyslexia often experience lower self-image and feel inferior to their peers. Depression can result from negative thoughts about themselves. Motivation can be a critical factor contributing to the success or failure of instructional practices. These additional conditions can have a significant impact on the effectiveness of instruction.

Therefore, all of the factors that may affect learning must be considered when identifying and providing instruction for students with dyslexia. ADHD or symptoms of anxiety, anger, depression, or low self-esteem may lower a student's motivation and engagement in learning. Educators are responsible for providing an environment that motivates and engages the student with dyslexia and complicating conditions (TEA, *The Dyslexia Handbook*, 2014).

DYSLEXIA SCREENER

TEC §38.003 requires kindergarten students be screened at the end of the school year and first grade students screened no later than January 31.

Dyslexia screening is a tool for identifying students who are at risk for this reading disability; this means that the screening does not "diagnose" dyslexia. Rather, it identifies "predictor variables" that raise red flags, so parents and teachers can intervene early and effectively.

Richard Selznick, Dyslexia Screening: Essential Concepts for Schools and Parents 2015

Screener Criteria

Kindergarten	First Grade
Phonological Awareness Phonemic Awareness Sound-symbol Recognition Letter Knowledge Decoding Skills Spelling Listening Comprehension *EOY MAP Foundational Strand*	Phonological Awareness Phonemic Awareness Sound-symbol Recognition Letter Knowledge Decoding Skills Spelling Listening Comprehension *MOY MAP Foundational Strand* *Reading Rate (Reading record cwpm)* *Reading Accuracy (Reading record reading level)*

Parents will be notified if their child falls below the screening cut points. Students who fall below the screening cut points may require short-term, targeted intervention with regular progress monitoring to determine if additional evaluation is needed. The services offered to students who are reported to be at risk of dyslexia or other reading difficulties aligns with the requirements of ESSA, which requires school to implement comprehensive literacy instruction featuring "age-appropriate, explicit, systematic, and intentional instruction" (ESSA, 2015).

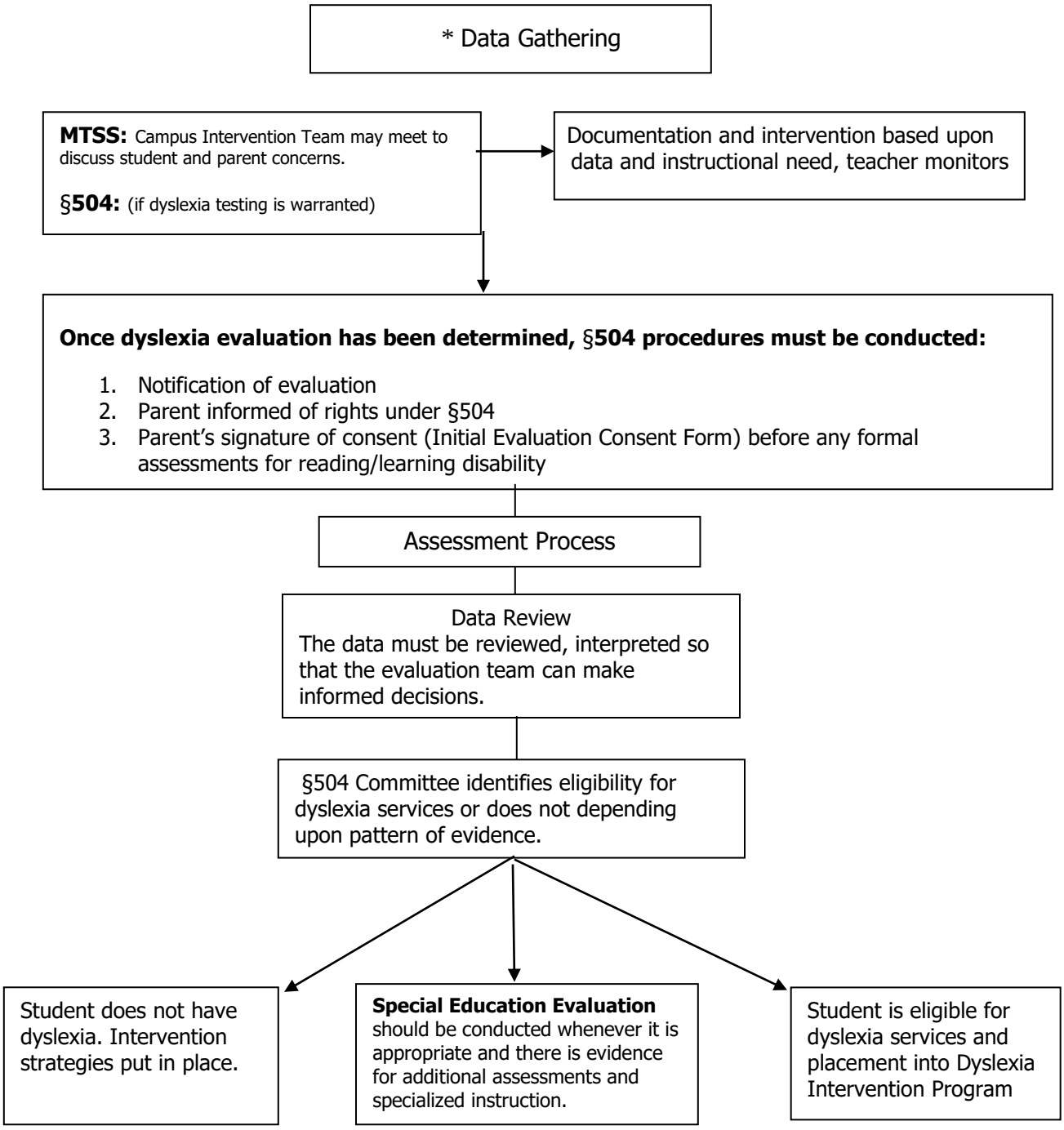
PROCEDURES FOR FORMAL EVALUATION OF DYSLEXIA

The Plano Independent School District follows the policies and procedures outlined in the Texas Education Code §38.003 (a) and assesses students "at appropriate times." The appropriate time depends upon multiple factors including the student's reading performance; reading difficulties, poor response to supplemental scientifically reading instruction; teachers' input, parent/guardians' input.

Parents/guardians have the right to request a referral for dyslexia evaluation. The campus is obligated to review the student's data (formal and informal) to determine whether there is reason to suspect the student has a disability. If a disability is suspected, the student will be evaluated following the guidelines from either IDEA or Section 504.

Parents/guardians are notified of a proposal to assess a student for dyslexia and informed of their rights under §504, the Rehabilitation Act of 1973. Parent permission must be obtained before formal evaluation can take place. For §504 evaluations. TEA advises districts to follow the timelines as established for special education evaluations (*evaluations must be completed within 45-instructional days from the time of consent*).

DECISION PROCESS FOR DYSLEXIA AND OTHER RELATED DISORDERS IDENTIFICATION, INTERVENTION, AND PLACEMENT



* Parents (or guardians) may request dyslexia assessment and should contact the campus dyslexia specialist or campus 504 coordinator to request a meeting. The campus committee, working with the parent, will make the final decision in all testing needs.

DATA Gathering

- Vision screening
- Hearing screening
- Speech and language screening through a referral process
- Academic progress reports (report cards)
- Teacher reports of aptitude, behavior, and problems
- Parent conferences
- Results of the state student assessments as described in the Texas Education Code, §39.022
- Results of the K-2 universal screener as required in TEC §38.003
- Results of district assessments (MAP, CogAT)
- Results of testing for limited English proficiency
- Results of classroom assessments
- Results of accommodations and interventions provided by classroom teachers
- Outside evaluations
- School attendance
- Parent/Teacher surveys

The academic history of each student provides the school with cumulative data that is needed to ensure that underachievement is not due to lack of appropriate instruction in reading.

Additional Data for English Language Learners

- Home Language Survey
- Results of oral language proficiency test
- Texas English Language Proficiency Assessment System (TELPAS)
- Instructional interventions to address language needs (ELDS)
- Information regarding previous schooling inside/outside of U.S.
- Knowledge of student's literacy skills in native and second language
- Type of language program model provided and language of instruction

Before formal dyslexia assessments begin with ELLs, students should be brought to MCAT and LPAC to ensure language is not an issue.

Areas for Evaluation

Academic Skills	Cognitive Processes
• Letter knowledge • Reading single words in isolation • Decoding unfamiliar words accurately • Fluency/rate and accuracy • Reading comprehension • Spelling • Listening comprehension • Written language • Written expression • Mathematical calculation • Mathematical reasoning • Math facts fluency	• Phonological/phonemic awareness • Phonological memory • Rapid naming • Verbal memory • Quantitative ability • General ability • Vocabulary • Verbal comprehension • Similarities/differences • Cognitive development

Bilingual Evaluation

Assessments in Spanish parallel assessments in English for bilingual students.

Academic Skills	Cognitive Processes
Aprovechamiento: #1-Identificación de letras y palabras #2-Problemas Aplicados #3-Ortografía #4-Comprensión de textos #5-Calculo #6-Expresión de lenguaje escrito #7-Análisis de palabras #8-Lectura oral #9-Fluidez en lectura de frases #10-Fluidez en datos matemáticos #11- Fluidez en escritura de frases	• Word discrimination • Phonological segmentation • Phonological blending • Number memory forward • Number memory reversed • Word memory • Sentence memory • Nonverbal reasoning • Cognitive development

Data-Driven Meeting of Knowledgeable Persons

A team of knowledgeable persons reviews, discusses, and interprets quantitative and qualitative data. If the team determines that the data does not give the members reason to suspect that a student has dyslexia, a related disorder, or other disability, the team may suggest additional support or intervention. If the team suspects that the student has dyslexia or a related disorder, the team considers the type of instruction that would best meet the student's needs.

Standard protocol dyslexia instruction includes critical, evidence-based components of and delivery methods for dyslexia instruction. Standard protocol dyslexia instruction is not specially designed instruction, but programmatic instruction delivered to a group of students.

Specially designed instruction is defined under IDEA as "adapting…the content, methodology of delivery of instruction" to a child eligible under IDEA. In some cases, the data may suggest that the needs of a student require a more individualized program than offered through standard protocol dyslexia instruction. When this is the case, there is reason to suspect that special education services may be necessary for the student *(The Dyslexia Handbook, 2018, p. 22).*

If the team suspects the student has dyslexia but does not believe that special education is necessary to meet the student's needs, the team refers the student for eligibility evaluation under Section 504.

If the team determines that the data lead to suspicion of disability and special education services are necessary, the team suggests the student be considered for a full evaluation under IDEA.

Section 504 Committee Evaluation Eligibility

- the student's exhibiting characteristics associated with dyslexia (difficulty with accurate or fluent word reading, spelling, decoding)
- difficulties result from deficits in phonological processing components
- the student's unexpected lack of appropriate academic progress,
- the student's having adequate intelligence, the ability to learn,
- the student's receiving conventional instruction, and
- the student's lack of progress not being due to socio-cultural factors such as language differences, inconsistent attendance, and lack of experiential background.

COMPONENTS OF THE STANDARD PROTOCOL DYSLEXIA INSTRUCTION

While the components of instruction for students with dyslexia include good teaching principles for all teachers, the explicitness and intensity of the instruction, fidelity of the program, grouping formats, and training/skill of the teachers are wholly different from core classroom instruction (*TEA Dyslexia Handbook*, 2018).

Critical, Evidence-Based Components of Dyslexia Instruction 19 TAC §74.28 (e)

- Phonological awareness is the internal sound structure of words. An important aspect of instruction enables students to detect, segment, blend, and manipulate sounds in spoken language.

- Sound-symbol association (phonics) instruction that utilizes the letter-sound plan in which words that carry meaning are made of sounds, and the sounds are written with letters in the correct order. Students with this understanding can blend sounds associated with letters to decode words and can separate words into component sounds to spell and write effectively.

- Language structure encompasses syllabication (six syllable types), orthography (written spelling patterns), morphology (the study of meaningful units of language such as prefixes, suffixes, and roots), semantics (ways that language conveys meaning), syntax (sentence structure), and pragmatics (how to use language in a particular context).

    - "Syllabication must be directly taught in relation to the word structure" (Birsh, 2018. P. 26).

    - Orthography instruction should be integrated with phonology and sound-symbol knowledge.

    - Morphology involves learning how morphemes combine to form words.

    - Syntax includes a set of principles that dictate sequence and function of words in a sentence such as grammar, sentence variation, and mechanics of language (Birsh, 2018, p. 26).

- Reading fluency incorporates directed proficiency in reading patterns of words accurately and with meaning to support comprehension.

- Comprehension instruction includes extracting and constructing meaning through the interaction of the reader with the text; process-oriented instruction involves the procedures of appropriate strategies for students to utilize when meaning in text breaks down.

While it is necessary that students are provided instruction in the above content, it is also critical that content is delivered with consistent, research-based practices (*TEA Dyslexia Handbook*, 2018).

Delivery of Dyslexia Intervention

- Simultaneous, multisensory instruction (VAKT) uses all learning pathways in the brain simultaneously in order to enhance memory and learning (Birsh, 2018, p.26).

- Systematic and cumulative instruction requires the organization of material to follow the order of language. "Concepts taught must be systematically reviewed to strengthen memory" (Birsh, 2018, p. 26).

- Explicit or direct instruction is organized and presented in a way that follows a logical sequential plan, fits the nature of language (alphabetic principle) with no assumption of prior skills or language knowledge, and maximizes student engagement. "The teacher demonstrates the task and provides guided practice with immediate corrective feedback before the student attempts the task independently" (Mather & Wendling, 2012, p. 326).

- Instruction meets the specific learning needs of the student in a small group setting and contains all of the *Components of Instruction* mandated in 19 TAC §74.28;

- Diagnostic teaching requires continual assessment of students' needs so that content can be mastered to the degree of automaticity.

TAC §74.28 (e) requires that teachers who treat students with dyslexia be trained in instructional strategies that use individualized, intensive, multisensory, phonetic methods and a variety of writing and spelling components. This includes training in critical, evidence-based components of dyslexia instruction such as phonological awareness, sound-symbol association, syllabication, orthography, morphology, syntax, reading comprehension, and reading fluency. In addition, they must deliver multisensory instruction that simultaneously uses all learning pathways to the brain, is systematic and cumulative, is explicitly taught, uses diagnostic teaching to automaticity, and includes both analytic and synthetic approaches.

Plano ISD implements several programmatic approaches in multisensory instruction and intervention.

Touchphonics system, used primarily in early literacy tiered intervention for young students identified with dyslexia or at-risk of dyslexia, has been tested and proven in reading laboratories at Brigham Young University. This multisensory program provides students with an alternative approach to phonics, word structure, and spelling. Touch-Units® make decoding concepts attainable by involving four modalities: visual, auditory, kinesthetic, and tactile. Through manipulation of the Touch-Units, students can identify sounds, link sounds to letters, recognize patterns, build, spell, and write words before finally reading words in context.

Take Flight Comprehensive Dyslexia Program, developed by Luke Waites Center for Dyslexia and Learning Disorders at Texas Scottish Rite Hospital for Children, incorporates the five components of multisensory reading instruction: phonological/phonemic with strategy-oriented instruction for decoding, encoding, word recognition. Emphasis on alphabetic principle helps students develop understanding of word/ letter associations, sequencing and manipulating of letters, discovering relations between vowels and consonants, which in turn, provide tools in decoding and analyzing words. *Take Flight* integrates morphology, syntax, and semantics with intensive, highly concentrated instruction that maximizes student engagement, uses specialized methods/ materials, and produces strong gains in reading.

Dyslexia specialists are required to attend a two-year *Take Flight Training Program* in order to implement therapist level of instruction. Plano ISD conducts an in-house training program, which closely aligns with the training components of TSRH. Highly skilled qualified instructors (QIs) who have gone through extensive, additional training delivered the training instruction. Plano ISD's training program is dyslexia-therapists level and requires 200 course hours, 10 instructional video critiques, numerous book reports and article reports. In addition, specialists are required to keep track of instructional hours with students. Once they have completed the course training requirements, accumulated 700 instructional hours with three groups from start to finish, they will be eligible to sit for the certification exam to become a certified academic language therapist. The district currently has specialists at all elementary and middle schools with training in the Take Flight Program. Specialists have become either certified academic language therapists or currently working on course and instructional hour training requirements.

If students require instruction that is more specialized and cannot be successful in the multi-faceted *Take Flight Comprehensive Program*, they will be provided instruction using The ***New Herman Method*** approach. This method encompasses phonological awareness, graphophonemic knowledge, sight word recognition, and vocabulary through sequential instruction. Based on the Orton-Gillingham multisensory approach, the instruction includes internal linguistic structure of words, which sequentially and systematically teaches students reading, spelling, handwriting, and composition skills.

***Rite Flight**: **Rate**,* based on current scientific research from the Luke Waites Center for Dyslexia and Learning Disorders at Texas Scottish Rite Hospital for Children is coupled with the *New Herman Method* program for fluency instruction. Fluency instruction promotes the recognition of letter clusters within words where students follow a repeated reading schedule that introduces words in isolation, then phrases, and finally in stories. Instruction is sequential based upon phonetic patterns from basic to more complex patterns, which enhance efficient transfer of word recognition.

Rite Flight: Comprehension from the Luke Waites Center for Dyslexia is implemented as the comprehension component of instruction that is coupled with the *New Herman Method* program. This program emphasizes building vocabulary, understanding word relationships, and figurative language in reading passages. Students use graphic organizers, illustrated cards, and texts to distinguish facts from an author's opinion, paraphrase and/or retell reading passages, make inferences, comparisons, and contrasts within texts. Achieving the goal of comprehension requires explicit instruction and direct teaching of comprehension strategies, modeling, feedback, and practice with connected reading.

***Esperanza*:** The Esperanza program is a Spanish multisensory structured language approach for reading, writing, and spelling authored by Elsa Cárdenas-Hagan. It was first developed in 1996 to provide systematic, sequential, and explicit instruction to Spanish-speaking students who need intervention in Spanish literacy. The program includes critical evidence-based components of dyslexia instruction and is provided to bilingual students who are identified with dyslexia.

Texas Student Data System

Students identified with eligibility for dyslexia services are reported through the Public Education Information Management System (PEIMS) (TEC §42.006(a-1)). Plano ISD flags students with dyslexia through TEAMs, which then uploads into PEIMS.

Educator Professional Learning

TAC §232.11 requires educators who teach students with dyslexia to have CPE training in new research and practices in educating students with dyslexia. The Region X website hosts Texas Dyslexia Identification Academy where teachers can customize their professional development path by choosing one or more modules to attend.

Technology Integration Plan

Senate Bill 866 (82nd Texas Legislature) states, "The agency shall establish a committee to develop a plan for integrating technology into the classroom to help accommodate students with dyslexia." The Plano ISD Technology Department has created a tech plan on their website that includes the following: website decluttering extensions, audiobooks, text to speech, digital annotation, oral administration of tests, dyslexia-friendly gaming tools. https://www.pisd.edu/domain/12477

Progress Monitoring

Specialists routinely monitor all students who are currently in the multi-sensory program and send home progress reports for each reporting period. After completing the multisensory dyslexia program, campus specialists monitor progress of dyslexia students through eighth grad**e** to ensure student achievement growth and success. Campus academic specialists continue to conduct progress monitoring for students who are not reading on grade level instructionally and require ongoing accommodations through high school as needed. The district progress monitoring includes assessing fluency and comprehension with the *Qualitative Reading Inventory*, assessing spelling with *Test of Written Spelling*, and evaluating writing with a written sample. If specialists recognize any problems, they may suggest additional accommodations, interventions, or further evaluations.

For students who are in high school and have not had multisensory instruction within the past two years, require few accommodations to be successful in the classroom and assessments, specialists will monitor by grades only for each grading period as long as students are in the district. If specialists recognize fluctuations in grades, then additional accommodations may need to be considered.

Post-Secondary

Plano ISD is not required to assess for postsecondary accommodations. “According to the Office of Civil Rights, neither the high school nor the postsecondary school is required to conduct or pay for a new evaluation to document a student’s disability and need for accommodations. Consequently, the responsibility will fall to the student.”

Texas Education Code §51.9701Assessment for Dyslexia. Unless otherwise provided by law, an institution of higher education, as defined by Section 61.003, may not reassess a student determined to have dyslexia for the purpose of assessing the student's need for accommodations until the institution of higher education reevaluates the information obtained from previous assessments of the student.

Dysgraphia Defined

Dysgraphia is best defined as a neurodevelopmental disorder manifested by illegible and/or inefficient handwriting due to difficulty with letter formation. This difficulty is the result of deficits in graphomotor function (hand movements used for writing) and/or storing retrieving orthographic codes (letterforms) (Berninger, 2015). Secondary consequences may include problems with spelling and written expression. The difficulty is not solely due to lack of instruction and is no associated with other developmental or neurological conditions that involve motor impairment. (TEA Dyslexia Handbook, p. 59)

CHARACTERISTICS OF DYSGRAPHIA

The following difficulties may be associated with dysgraphia if they are unexpected for the individual's age, educational level, or cognitive abilities:

- Variably shaped and poorly formed letters
- Excessive erasures and cross-outs
- Poor spacing between letters and words
- Letter and number reversals beyond early stage of writing
- Awkward, inconsistent pencil grip
- Heavy pressure and hand fatigue
- Slow writing and copying with legible or illegible handwriting
- Difficulty with written spelling
- Low volume of written outputs as well as a problem with other aspects of written expression

Despite the widespread beliefs that handwriting is purely a motor skill or that only multisensory methods are needed to teach handwriting, multiple language processes are also involved in handwriting. Handwriting draws on language by hand (letter production), language by ear (listening to letter names when writing dictated letters), language by mouth (saying letter names), and language by eye (viewing the letters to be copied or reviewing for accuracy the letters that are produced from memory (Berninger & Wolf, 2016).

Dysgraphia can be due to the following:

- Impaired feedback the brain is receiving from the fingers
- Weaknesses using visual processing to coordinate hand movement and organize the use of space
- Problems with motor planning and sequencing
- Difficulty with storage and retrieval of letter forms

Dysgraphia is not:

- Evidence of a damaged motor nervous system
- Part of a developmental disability that has fine motor deficits (e.g., intellectual disability, autism, cerebral palsy)
- Secondary to a medical condition
- Associated with generalized developmental motor or coordinator difficulties
- Impaired spelling or written expression with legible handwriting

PROCEDURES FOR FORMAL EVALUATION OF DYSGRAPHIA

Procedures for dysgraphia evaluation will follow the guidelines as outlined in dyslexia evaluation through either Section 504 or IDEA. The first step begins with gathering and documenting data on the Observation Checklist of written work.

- Slow or labored written work
- Poor formation of letters
- Improper letter slant
- Poor pencil grip
- Inadequate pressure during handwriting
- Excessive erasures
- Poor spacing between words
- Poor spacing between letters
- Inability to recall accurate orthographic patterns of words
- Difficulty with writing "b" and "d" (beyond developmentally appropriate times)
- Inability to copy words accurately
- Inability of student to read his/her own writing
- Overuse of short familiar words
- Avoidance of writing tasks
- Difficulty with visual motor integrated sports or activities

Cumulative Data Gathering

- Vision screening
- Hearing screening
- Speech and language screening through a referral process
- Academic progress reports (report cards)
- Teacher reports of aptitude, behavior, and problems
- Parent/Teacher surveys
- Results of the state student assessments as described in the Texas Education Code, §39.022
- Results of district assessments (MAP, CogAT)
- Results of classroom spelling and writing assessments
- Results of accommodations and interventions provided by classroom teachers
- Outside evaluations
- School attendance

The academic history of each student provides the school with cumulative data that is needed to ensure that underachievement is not due to lack of appropriate instruction in handwriting.

Areas for Evaluation

Graphomotor Skills

- Visual motor integration
- Motor coordination
- Visual perception

Academic Skills

- Letter formation
- Letter retrieval
- Handwriting legibility
- Spelling accuracy
- Sight word spelling accuracy
- Written language
- Written expression
- Contextual writing

Cognitive Processes

- Orthographic processing (memory of orthographic pattern/coding of words)
- Cognitive development
- Verbal memory
- General ability
- Vocabulary
- Verbal comprehension

Due to the close relation of dysgraphia and dyslexia, students in the early grades will be evaluated for dyslexia in addition to dysgraphia to ensure there is no evidence for reading deficiencies nor phonological processing deficits. However, anytime there are concerns in reading in addition to writing, dyslexia evaluations will also be conducted.

Instruction for Students with Dysgraphia

Handwriting

The following are research-based elements of effective handwriting instruction. These elements, which apply to both manuscript and cursive handwriting, may not necessarily apply to an entire class but instead may be used to support instructional methods delivered in small groups with students whose penmanship is illegible or dysfluent.

1. Show students how to hold a pencil.
2. Model efficient and legible letter formation.
3. Provide multiple opportunities for students to practice effective letter formation.
4. Use scaffolds, such as letters with numbered arrows showing the order and direction of strokes.
5. Have students practice writing letters from memory.
6. Provide handwriting fluency practice to build students' automaticity.
7. Practice handwriting in short sessions.

Adapted from Berninger et al., 1997; Berninger et al., 2006; Denton, Cope, & Moser, 2006;Graham et al., 2012; Graham, Harris, & Fink, 2000; Graham & Weintrub, 1996.

Spelling

Handwriting supports spelling, a complex process of translating a phoneme (spoken sound) to the corresponding grapheme (orthographic representation) in order to generate written text to express an idea. Orthography is the written spelling patterns and rules in a given language. Students must be taught the regularity and irregularity of the orthographic patterns of a language in an explicit and systematic manner. The instruction should be integrated with phonology and sound-symbol knowledge. Because spelling is meaning driven and draws upon the phonological, orthographic, and morphological aspects of words, students will benefit from systematic, explicit instruction (TEA Dyslexia Handbook, p. 68).

Accommodations for Dysgraphia

Accommodations are not a one size fits all; rather, the impact of dysgraphia on each individual student determines the accommodation. When considering accommodations for the student with dysgraphia, consider the following:

- The rate of producing written work
- The volume of the work to be produced
- The complexity of the writing task
- The tools used to produce the written product

Listed below are **examples** of reasonable classroom accommodations for a student with dysgraphia based on the above considerations:

- Allow more time for written tasks including note taking, copying, and tests
- Reduce the length requirements of written assignments
- Provide copies of notes or assign a note-taking buddy to assist with filling in missing information
- Allow the student to audio record important assignments and/or take oral tests
- Assist student with developing logical steps to complete a writing assignment instead of all at once
- Allow the use of technology (e.g., speech to text software, etc.)
- Allow the student to use cursive or manuscript, whichever is most legible and efficient
- Allow the student to use graph paper for math, or to turn lined paper sideways, to help with lining up columns of numbers
- Offer an alternative to a written project such as an oral report, dramatic presentation, or visual media project (TEA, Dyslexia Handbook, p. 71).

GENERAL ACCOMMODATIONS

Accommodations, provided for both testing and instruction, change the way students access information and demonstrate their knowledge, skills, and abilities; they do not change academic standards or expectations. Accommodations should be matched to the individual student's educational needs and be incorporated into classroom practice routinely before using in assessment situations (IDA, 2017).

For more information about accommodations, see Accommodations for students with Disabilities available at https://dyslexiaida.org/accommodations-for-students-with-dyslexia/.

Types of Accommodations

The following accommodations are suggested by the International Dyslexia Association.

Presentation, Response, Setting, and Timing/Scheduling are the four basic types of accommodations used during instruction and assessment:

Presentation accommodations allow students to access instructional materials in ways that do not require them to read standard print presented in a standard visual format.

- Verbal instructions
- Repetition of instructions
- Text/Instructions in audio-format
- Larger print
- Fewer items per page
- Visual prompts or cues
- Highlighted text
- Information in songs or poems
- Text-to-Speech software
- Electronic dictionary
- Audio Books
- Note-taking assistance

Digital Books

- Learning Ally: https://www.learningally.org
- Bookshare: https://www.bookshare.org
- National Library Service Project Gutenberg US Library of Congress: https://www.loc.gov/nls/
- Texas State Library and Archives Commission Talking Books:
- https://www.tsl.texas.gov/tbp/index.html

Response accommodations allow students alternatives for completion of activities, assignments, and tests. Students demonstrate their knowledge and skills in alternate ways.

- Mark answers in test book instead of on separate answer sheet
- Alternative answer sheet
- Dictate to scribe or record oral responses on audio device
- Speech-to-Text Software
- Point to response choices
- Type (keyboard) response
- Verbal or oral responses
- Electronic spell check
- Word banks
- Formula banks

Setting accommodations change the location in which a test or assignment is given or the conditions of the classroom setting.

- Individual or small group
- Reduce visual and/or auditory distractions (e.g., wear headphones while working independently)
- Distraction-free setting (separate room)
- Priority seating arrangements

Timing/Scheduling accommodations change the length of time allowed for completion of a test, project, or assignment and may change the way the time is organized (e.g., breaks).

- Flexible scheduling (e.g., several sessions vs. one)
- Extended time
- Allowing for more frequent breaks (as appropriate)
- Changing order of tasks or subtests.
- Chunking or breakdown long assignments

Organization and Study Strategies

Organization

In addition to the types of accommodations and examples listed, devices and strategies that help students organize their time and work can be helpful.

- Timers to keep track of time
- Highlighters to mark text
- Planners for tracking assignments
- Graph paper to organize math problems on paper
- Color Coding (e.g., subject areas, categorization within notes)

Study Strategies

- Visualization
- Retelling as soon as possible after a lecture
- Putting new learning into own words as soon as possible after class—talking about learning
- Making flashcards of important words and concepts
- Organizing a study group for discussion (practice)

Additional organizational tools can be found at the following link:

https://www.understood.org/en/school-learning/learning-at-home/teaching-organizational-skills/download-backpack-checklist

Additional Tools and Technology

http://dyslexia.yale.edu/resources/tools-technology/

PARENT TIPS AND RESOURCES

Parents may find the following suggestions, tips, and resources helpful in working with their child.

READING ALOUD

Struggling readers need daily practice in reading aloud. Use strategies below to guide your child's reading.

Problem Solving Strategies for Parents

A good reader is one who can figure out (problem-solve) unknown words. A good reader has a repertoire of strategies and can flexibly make use of these as needed. You can help by being aware of strategies and prompting your child to make use of these rather than providing answers.

1. Your child should monitor his/her reading. Young readers will try to make words and picture agree or match. Looking puzzled, stopping, and/or starting over are signals that something is confusing.

PARENTS: It is important that the child do the monitoring. Do not "help" too quickly. Give your child thinking time. If your child cannot continue after allowing sufficient time, you can ask, "Was that okay?" "Why did you stop?" "What did you notice?" "Was there something tricky in that sentence? Show me."

2. Your child should self-correct his errors.

PARENTS: Allow time for correcting errors. The reader must take the first step and use strategies to figure out difficult words.

3. Your child should crosscheck strategy use. Readers constantly check to see if words make sense.

PARENTS: If your child becomes frustrated and does not know what to do, try one of the following prompts:

"What word could you try?"
"Do you know another word that starts like that?"
"Do you know a word that looks like this word?"
"What do you think it could be?"
"Run your finger under the tricky word."
"Do the letters give you any clues?"
"Get your mouth ready to say that first sound."

Bookmarks

Fix Up Strategies

Strategies for Confusing Words:

- Check word parts you know
- Do I notice prefixes, suffixes, or other word parts that carry meaning?
- Try sounding the word out.
- Are there any clues in the sentence or surrounding sentences that can help me determine the meaning of the word?

Strategies for Confusing Ideas:

- Identify the confusing part.
- Slow down and reread the confusing part.
- Reread the whole page and parts before and after the confusing part.
- Summarize what has happened so far.
- Think about the parts you do understand.
- Think about what you know.
- Read on. Does it make sense now?

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TIPS TO ENCOURAGE READING AND WRITING

1. Keep books and magazines in your child's room.

2. Carry books along when you go to the dentist, doctor, or places you may have to wait.

3. Reading a story or poem soothes a fretful child or relieves boredom.

4. Have your child help with a family message center. Children love the sense of accomplishment – and helping! Have your child help with the grocery or shopping list. At the same time, you are getting your child to read – while seemingly doing something else. Keep grocery lists, chore lists, messages, shopping lists, "love notes," etc.

5. Read recipes. Not all reading happens in books. When you are cooking, ask your child to read the ingredients to you.

6. Read road signs. While you are driving, ask your child to read the road signs: Stop, Yield, One Way, street signs, or maps.

7. Get audio recordings of books. You may lack time to read to your child as much as you would like; however, listening to audio books provides access to a world of knowledge and builds listening comprehension.

8. Encourage your child to keep a daily journal.

9. Vary the writing your child does at home for different audiences and different purposes.

10. Encourage creativity and the enjoyment of writing.

11. Model reading and writing for your children.

Graphic Organizers: Samples of graphic organizers for writing tasks can be found at the following link:

https://www.understood.org/en/school-learning/learning-at-home/encouraging-reading-writing/download-graphic-organizers-to-help-grade-schoolers-with-writing

SELECTING BOOKS FOR YOUR CHILD

Use the steps below in selecting books from the library or bookstore that are an appropriate reading level for your child.

1. Choose a random page from the middle of the book and ask your child to read it aloud.
2. Keep an unseen count of errors.
3. If there are more than five errors on a page, the book is likely too difficult.

If your child shows interest in a book and it is too difficult, find an audio recording so that your child can follow along. Experiencing fluent reading provides a wonderful opportunity for students to hear the flow and pace of language as the author intended.

HOMEWORK HELP

- Establish the habit of using a planner to record assignments, directions, and due dates. Make sure your child understands the expectations of the assignment. Coach your child to seek clarification from the teacher.

- Set a regular time for doing homework. Take into account the need for having a break from schoolwork and the importance of getting work done early in the evening. For many families, right after dinner is a good time.

- Designate a regular place for doing homework that takes into account your child's learning preferences. Have needed supplies on hand.

- Model good work habits yourself.

- If your child has difficulty with lengthier assignments, establish checkpoints along the way. Coach your child at the beginning and end of an assignment.

- If your child has difficulty working independently on assignments, establish a schedule that includes time of working alone before asking for help. Discuss the kinds of help you will give and the things you expect to be done independently.

- Schedule breaks and limit the number of spontaneous interruptions.

- Break a long assignment into smaller, more manageable tasks. Coach your child until this becomes an independent task.

BOOK SELECTIONS FOR STUDENTS

Adam Zigzag by Barbara Berrie (1995)

Close to Famous by Joan Bauer (2012)

Eleven by Patricia Reilly Giff (2009)

How Dyslexic Benny Became a Star: A Story of Hope for Dyslexic Children and Their Parents by Joe Griffith (1997)

I Have Dyslexia. What Does That Mean? By Shelley Ball-Dannenberg (2009)

It's Called Dyslexia by Jennifer Moore-Mallinos (2007)

Knees: The Mixed Up Word of a Boy with Dyslexia by Vanita Oelschlager (20120

My Name is Brain Brian by Jeanne Betancourt (1995)

Thank-you, Mr. Falker by Patricia Polacco (2012)

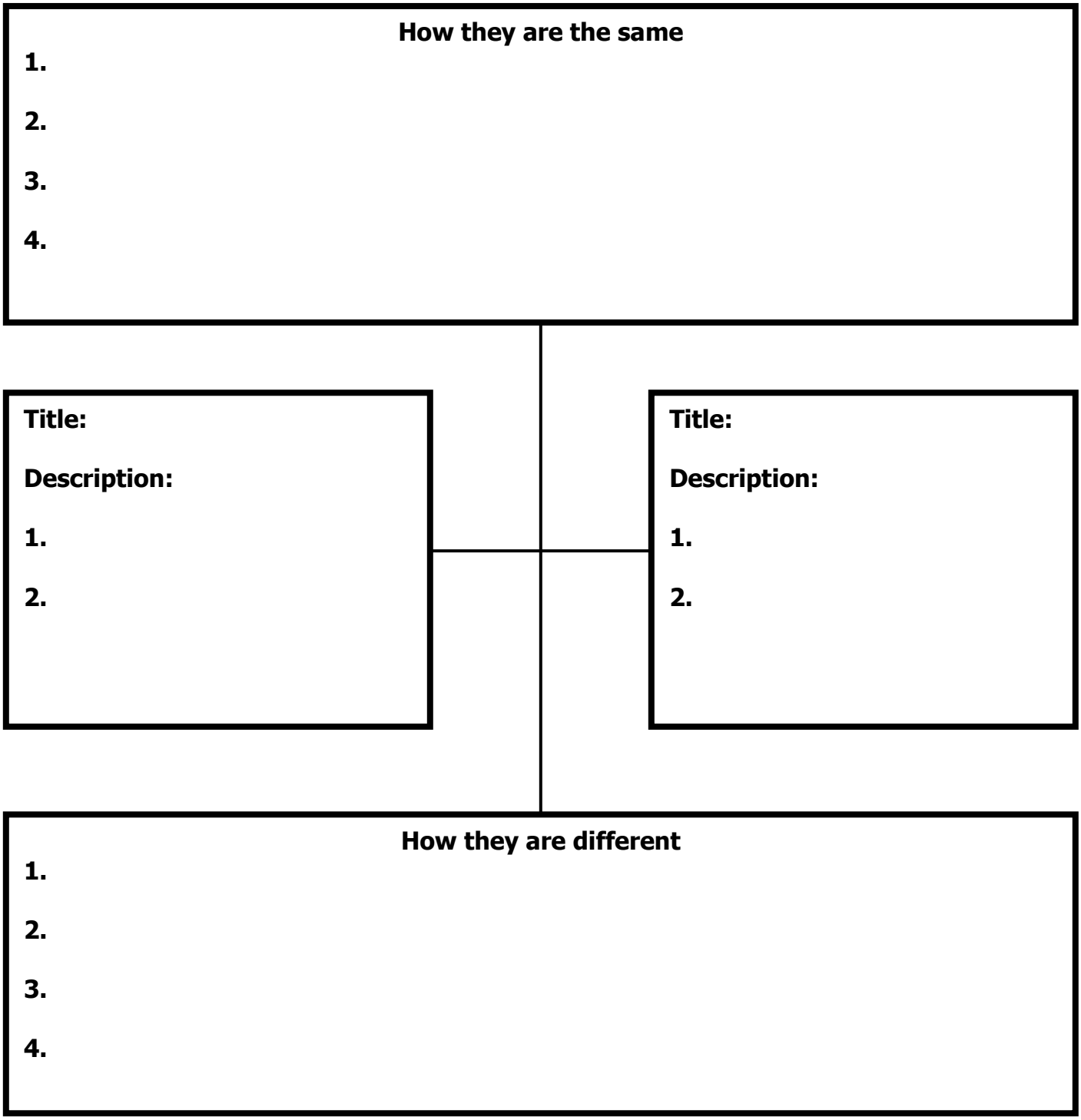
The Alphabet War: A Story about Dyslexia by Diane Robb and Gail Piazza (2004)

The Hank Zipzer Series by Henry Winkler (2009)

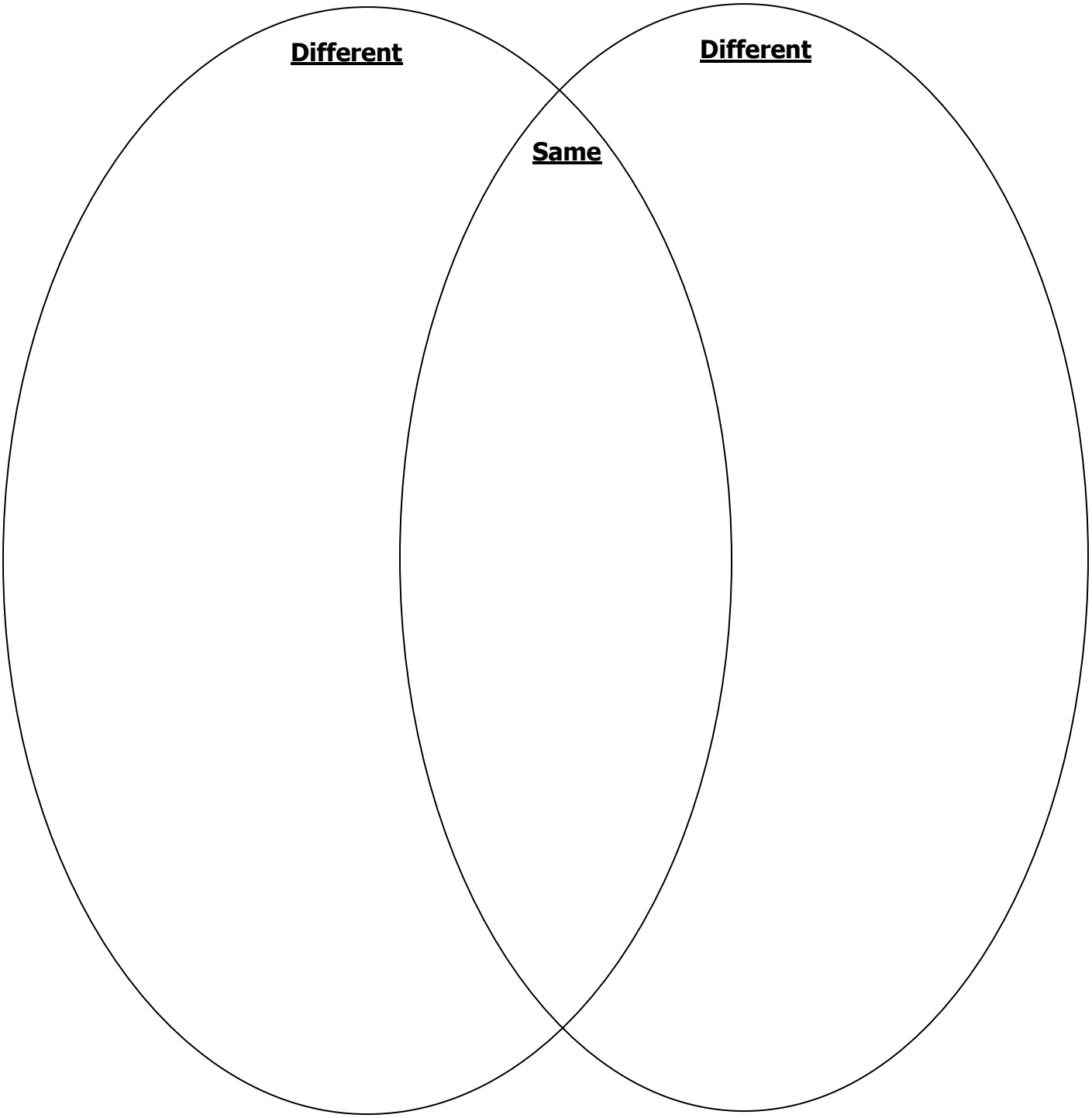
The Lightning Thief by Rick Riordan (2006)

STUDY SKILLS

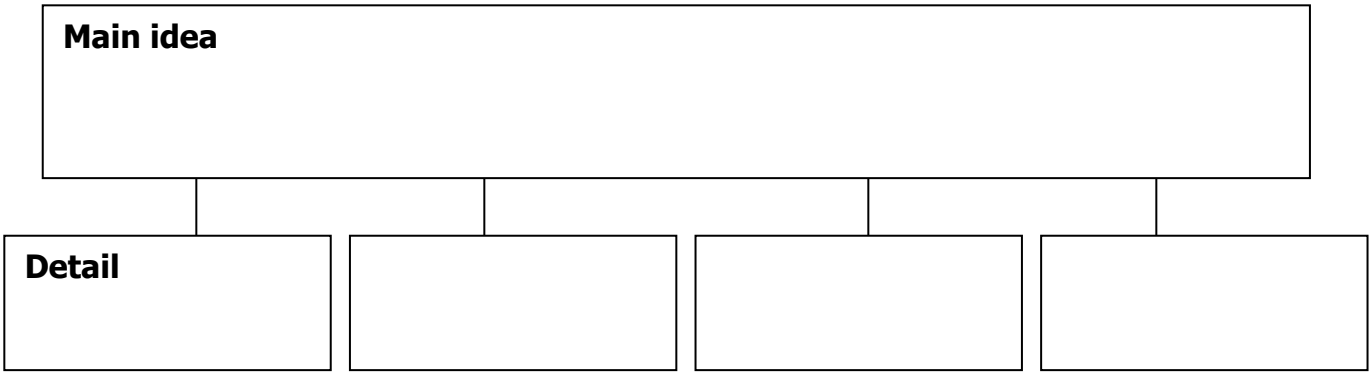
Graphic organizer for comparing two books:

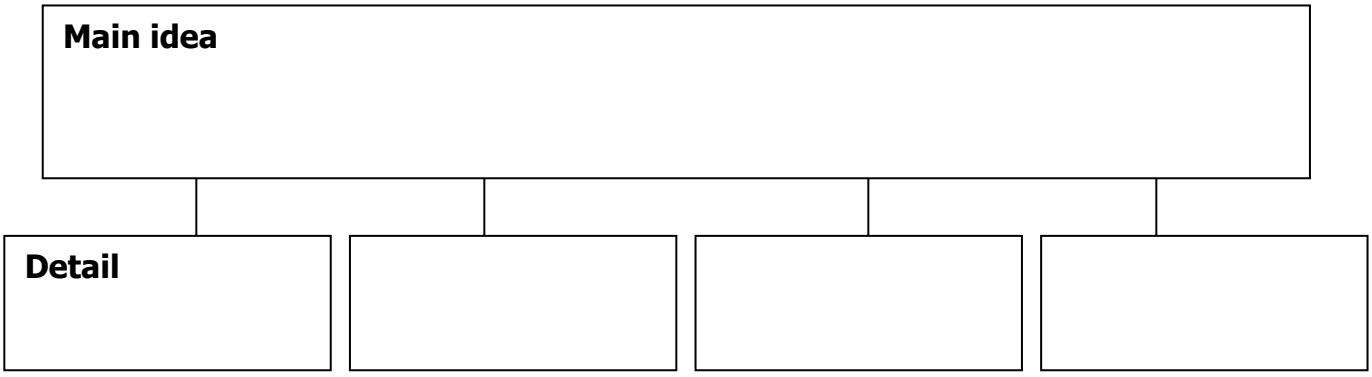


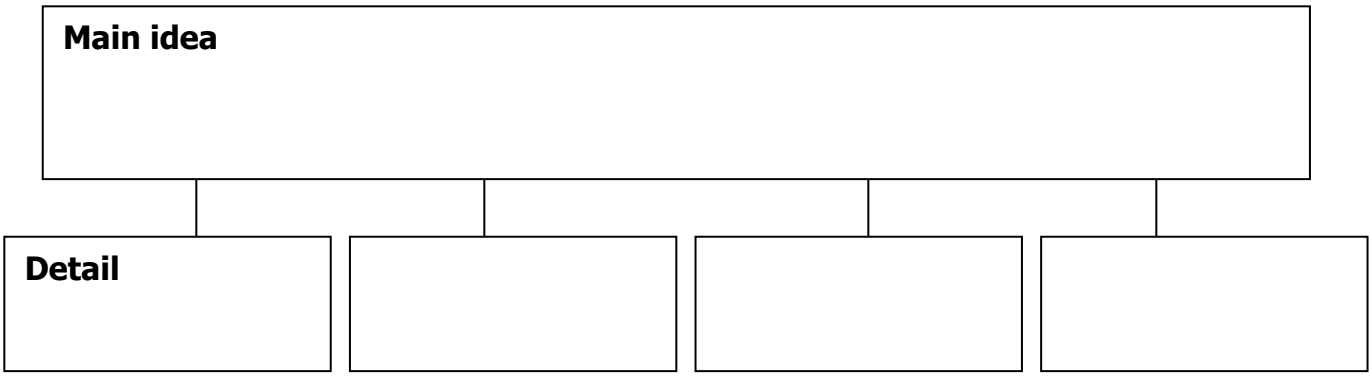
Graphic organizer for comparing:



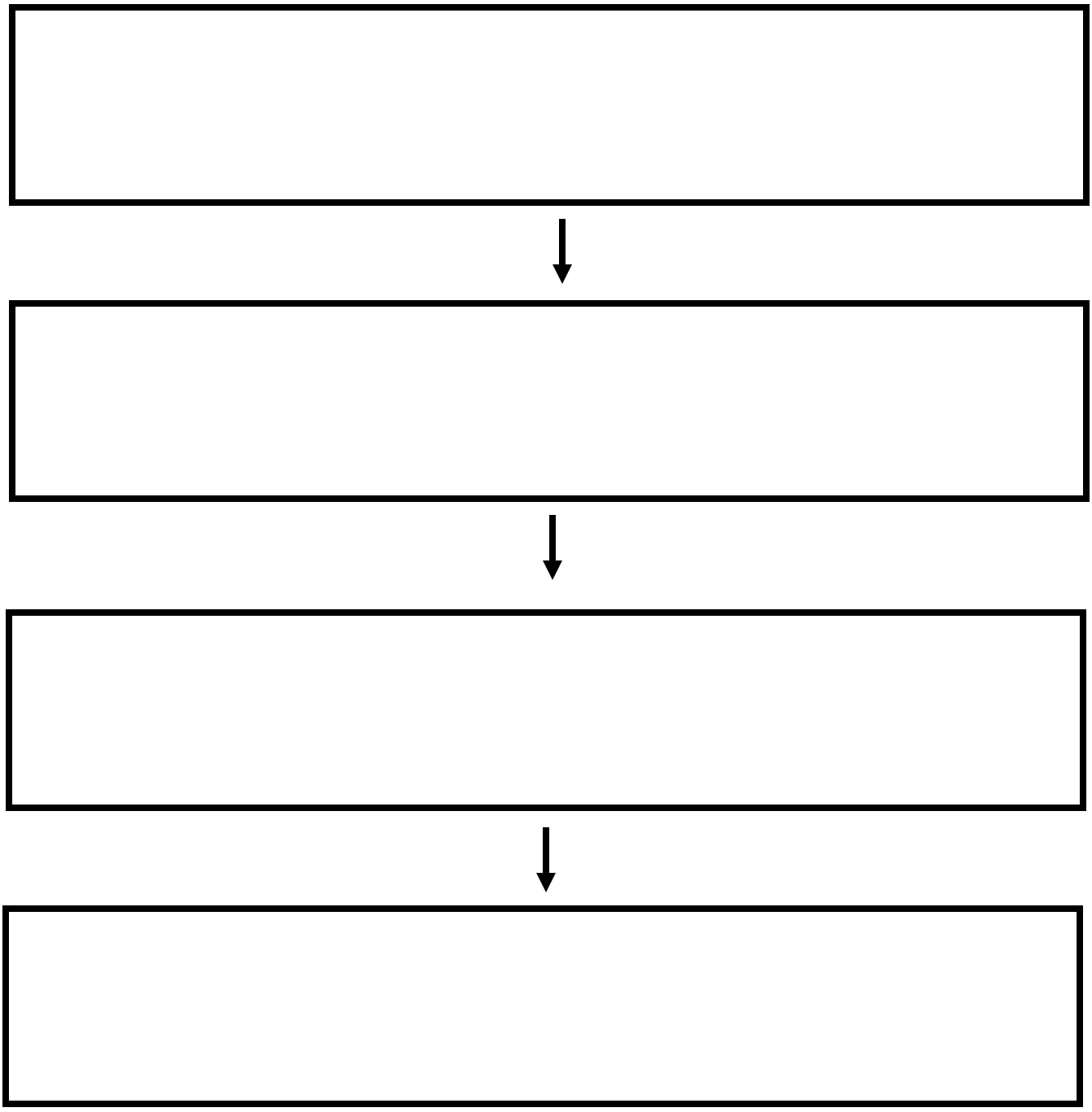
Graphic organizer for main idea:







Graphic organizer for sequencing:



Graphic organizer for argumentative writing:

Opinion or Position Statement:

Arguments that support opinion:

1.

2.

3.

Arguments against opinion:

1.

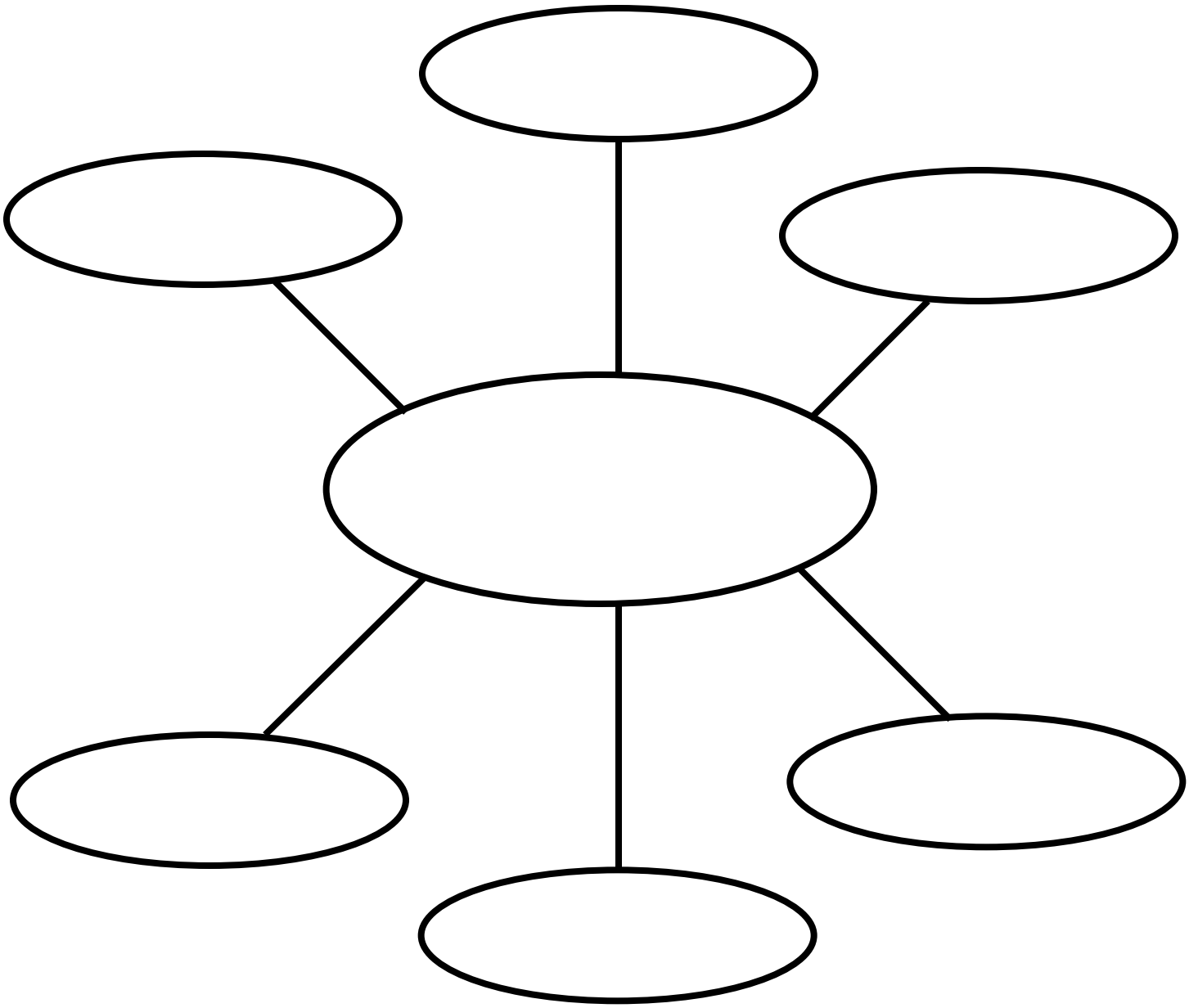
2.

3.

Conclusion:

Graphic organizer for content:

Concept Map



SUCCESS STORIES

Many people who have struggled with dyslexia or other related learning disorders in an academic environment have become true success stories as adults. You may find it helpful to share some of these names with your child, with the message that having dyslexia and achieving success can go hand-in-hand.

Hans Christian Andersen	Author of children's fairy tales
Harry Anderson	Actor, magician, comedian
Stephen Bacque	Entrepreneur of the Year, 1998
Ann Bancroft	Explorer, lecturer, educator, first woman to travel across the ice to the North and South Poles
Harry Belafonte	Singer, actor, entertainer
Alexander Graham Bell	Inventor
Dale S. Brown	Author, disability advocate
George Burns	Actor, comedian
Stephen J. Cannell	Screenwriter, producer, director
Gaston Caperton	Former governor of West Virginia
John T. Chamber	CEO of Cisco Systems
Nola D. Chee	Award-winning poet and author
Cher	Entertainer, actress
Agatha Christie	English mystery writer
Winston Churchill	Former Prime Minister of Britain
John Corcoran	Real estate millionaire
Tom Cruise	Actor
Fred Curry	Navy pilot, CEO of Greyhound Lines
Leonardo Da Vinci	Renaissance artist, sculptor, painter
Walt Disney	Cartoonist, visionary founder of Disneyland/Disneyworld
Dr. Red Duke	Physician, television commentator
Frank Dunkle	Director of U.S. Fish and Wildlife Service
Thomas Edison	Inventor, scientist
Tomima Edmark	Author, entrepreneur
Albert Einstein	Scientist, philosopher
Gustave Flaubert	Writer
Danny Glover	Actor
John Grisham	Author
Whoopi Goldberg	Actress
Edward Hallowell, MD	Author, psychiatrist, ADD specialist
Ellie Hawkins	Record-breaking rock climber
William Hewlett	co-founder of Hewlett-Packard
John Horner	Curator of paleontology, technical advisor to Steven Spielberg for **Jurassic Park** and **The Lost World**
John Irving	Author and screenwriter
William James	Psychologist, philosopher

Bob Jimenez	TV anchorman
Magic Johnson	Professional athlete
David Jones	Stunt man, pioneer in helicopter aerial photography
Thomas H. Kean	President of Drew University, former governor of New Jersey
Sylvia Law	Professor of law and medicine, author
Jay Leno	Comedian and TV show host
Craig McCaw	Pioneer of cellular industry
Edward James Olmos	Actor, community activist
Paul J. Orfalea	Entrepreneur, founder of Kinkos
George Patton	Military General
Patricia Polacco	Author, illustrator of children's books
Robert Rauschenberg	Artist
Nelson Rockefeller	Former governor of New York, former vice president of the United States
Nolan Ryan	Professional athlete
Charles Schwab	Founder of investment brokerage
William Simmons, MD	Professor of anesthesiology
Tom Smothers	Comedian
Nancy L. Sonnabend	Researcher, inventor, author
Jackie Stewart	Race car driver
Richard Strauss	Real estate developer, banker
Victor Villasenor	Award-winning author
Lindsay Wagner	Actress, author, "The Bionic Woman"
Russell White	Professional athlete
Roger W. Wilkins	Head of the Pulitzer Prize Board
Woodrow Wilson	Former president of the United States
Henry Winkler	Actor, director, humanitarian, "The Fonz"
Eric Wynalda	Professional athlete
William B. Yeats	Poet, dramatist, Nobel prize winner

GLOSSARY OF TERMS

Explicit direct instruction: presents a structured plan in a cumulative sequence.

Fluency: the ability to read with speed, accuracy, and proper expression
Fluency is one of several critical factors necessary for reading comprehension.

Graphonemic knowledge: the blending of sounds associated with letters into words
Graphonemic knowledge is necessary to separate words into component sounds for spelling and writing.

Language structure instruction: encompasses components of language such as morphology, semantics, syntax, and pragmatics.

Linguistic instruction: provides the concepts and understanding of patterns and relationships within a language.

Meaning-based instruction: directs purposeful reading and writing, with an emphasis on comprehension and composition.

Morphology: involves the study of word formations and their relationships to other words in the same language. Morphology is the analysis of word structure and parts of words, such as stems, root words, prefixes, and suffixes and their meaning.

Multisensory instruction: incorporates the simultaneous use of two or more sensory pathways (auditory, visual, kinesthetic, and tactile).

Orthographic memory: the memory for letter patterns and word spellings

Orthography: the conventional spelling system of a language

Phonemic awareness: detecting, blending, and manipulating sounds in spoken language

Phonics instruction: teaches the relationships between the letters of written language and the sounds of spoken language.

Phonological memory: passive short-term memory that briefly stores speech-based information in phonological form

Phonological awareness: involves an individual's awareness of
the phonological structure or sound structure of words. Phonological awareness is an important and reliable predictor of later reading ability.

Pragmatics: relationships between words, expressions, or symbols and their users

Process-oriented: strategies used for decoding and encoding, leading to word recognition, fluency, and comprehension

Semantics: the meaning of a word, phrase, sentence, or text

Syntax: the arrangement of words and phrases to create well-formed sentences in a language

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