

Teacher Strategies for Dyslexics



DYSLEXIA BASICS

What is dyslexia?

Dyslexia is a language-based learning disability. Dyslexia refers to a cluster of symptoms, which result in people having difficulties with specific language skills, particularly reading. Students with dyslexia may experience difficulties in other language skills such as spelling, writing, and speaking. Dyslexia is a life-long status, 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.

What causes dyslexia?

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 dyslexic person develops and functions. Moreover, people with dyslexia have been found to have problems with discriminating sounds within a word, a key factor in their reading difficulties. Dyslexia is not due to either lack of intelligence or a desire to learn; with appropriate teaching methods dyslexics can learn successfully.

How widespread is dyslexia?

Current studies suggest that 15-20% of the population has a reading disability. Of those, 85% has dyslexia. Dyslexia occurs in people of all backgrounds and intellectual levels. In addition, dyslexia runs in families; dyslexic parents are very likely to have children who are dyslexic. Some people are identified as dyslexic early in their lives, but for others their dyslexia goes unidentified until they get older. People who are very bright can be dyslexic. They are often gifted in areas that do not require strong language skills, such as art, computer science, design, drama, electronics, math, mechanics, music, physics, sales, and sports.

What are the effects of dyslexia?

The impact that dyslexia has is different for each person and depends on the severity of the condition and the approaches of the remediation. The most common effects are problems with reading, spelling, and writing. Some dyslexics do not have much difficulty with early reading and spelling tasks but do experience great problems when more complex language skills are required, such as grammar, understanding textbook material, and writing essays.

People with dyslexia can also have problems with spoken language. They may find it difficult to express themselves clearly, or to fully comprehend what others mean when they speak. Such language problems are often difficult to recognize, but they can lead to major problems in school, in the workplace, and in relating to other people. The effects of dyslexia reach well beyond the classroom.

Dyslexia can also affect a person's self-image. Students with dyslexia often end up feeling "dumb" and less capable than they actually are. After experiencing a great deal of stress due to academic problems, a student may become discouraged about continuing in school.

How is dyslexia diagnosed?

A formal evaluation is needed to discover if a person is dyslexic. The evaluation assesses intellectual ability, information processing, psycho-linguistic processing, and academic skills. It is used to determine whether or not a student is reading at the expected level, and takes into account the individual's family background and overall school performance. The testing can be conducted by trained school or outside specialists.

What are the signs of dyslexia?

The problems displayed by individuals with dyslexia involve difficulties in acquiring and using language -- reading and writing letters in the wrong order is just one manifestation of dyslexia and does not occur in all cases. Other problems experienced by dyslexics include:

- Learning to speak
- Organizing written and spoken language
- Learning letters and their sounds
- Memorizing number facts
- Spelling
- Reading
- Learning a foreign language
- Correctly doing math operations

Not all students who have difficulties with these skills are dyslexic. Formal testing is the only way to confirm a diagnosis of suspected dyslexia.

How is dyslexia treated?

Dyslexia is a life-long condition. With proper help people with dyslexia can learn to read and/or write well. Early identification and treatment is the key to helping dyslexics achieve in school and in life. Most people with dyslexia need help from a teacher, tutor, or therapist specially trained in using a multisensory, structured language approach. It is important for these individuals to be taught by a method that involves several senses (hearing, seeing, touching) at the same time. Many individuals with dyslexia need one-on-one help so that they can move forward at their own pace. For students with dyslexia, it is helpful if their outside academic therapists work closely with classroom teachers.

Schools can implement academic modifications to help dyslexic students succeed. For example, a student with dyslexia can be given extra time to complete tasks, or help with taking notes, and/or appropriate work assignments. Teachers can give taped tests or allow dyslexic students to use alternative means of assessment. Students can benefit from listening to books-on-tape and from writing on computers.

Students may also need help with emotional issues that sometimes arise as a consequence of difficulties in school. Mental health specialists can help students cope with their struggles.

What are the rights of a dyslexic person?

The Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act (ADA) define the rights of students with dyslexia and other specific learning disabilities. These individuals are legally entitled to special services to help them overcome and accommodate their learning problems. Such services include education programs designed to meet the needs of these students. The Acts also protect people with dyslexia against unfair and illegal discrimination.

©Copyright 2000, The International Dyslexia Association (IDA). IDA encourages the reproduction and distribution of this fact sheet. If portions of the text are cited, appropriate reference must be made. Fact sheets may not be reprinted for the purpose of resale.



Common Signs of Dyslexia

By: International Dyslexia Association (2000)

Facts about dyslexia

Startling facts about dyslexia and related language-based learning disabilities:

- Fifteen to twenty percent of the population has a reading disability.
- Of students with specific learning disabilities who receive special education services, seventy to eighty percent have deficits in reading. Dyslexia is the most common cause of reading, writing and spelling difficulties.
- If children who are dyslexic get effective phonological training in kindergarten and first grade, they will have significantly fewer problems in learning to read at grade level than do children who are not identified or helped until third grade.
- Seventy four percent of the children who were poor readers in the third grade remained poor readers in the ninth grade. This means that they couldn't read well when they became adults.
- Individuals inherit the genetic links for dyslexia.
- Dyslexia affects males and females nearly equally, and people from different ethnic and socio-economic backgrounds as well.

Common signs: Preschool

The following difficulties may be associated with dyslexia if they are unexpected for the individual's age, educational level, or cognitive abilities. To verify that an individual is dyslexic, he/she should be tested by a qualified testing examiner.

- May talk later than most children
- May have difficulty pronouncing words, i.e., *busgetti* for *spaghetti*, *mawn lower* for *lawn mower*
- May be slow to add new vocabulary words
- May be unable to recall the right word
- May have difficulty with rhyming
- May have trouble learning the alphabet, numbers, days of the week, colors, shapes, how to spell and write his or her name
- May have trouble interacting with peers

- May be unable to follow multi-step directions or routines
- Fine motor skills may develop more slowly than in other children
- May have difficulty telling and/or retelling a story in the correct sequence
- Often has difficulty separating sounds in words and blending sounds to make words

Common signs: Kindergarten through fourth grade

The following difficulties may be associated with dyslexia if they are unexpected for the individual's age, educational level, or cognitive abilities. To verify that an individual is dyslexic, he/she should be tested by a qualified testing examiner.

- Has difficulty decoding single words (reading single words in isolation)
- May be slow to learn the connection between letters and sounds
- May confuse small words – *at/to, said/and, does/goes*
- Makes consistent reading and spelling errors including:
 - Letter reversals – *d* for *b* as in, *dog* for *bog*
 - Word reversals – *tip* for *pit*
 - Inversions – *m* and *w*, *u* and *n*
 - Transpositions – *felt* and *left*
 - Substitutions – *house* and *home*
- May transpose number sequences and confuse arithmetic signs (+ - x / =)
- May have trouble remembering facts
- May be slow to learn new skills; relies heavily on memorizing without understanding
- May be impulsive and prone to accidents
- May have difficulty planning
- Often uses an awkward pencil grip (fist, thumb hooked over fingers, etc.)
- May have trouble learning to tell time
- May have poor fine motor coordination

Excerpted from: ABC's of Dyslexia. (2000). International Dyslexia Association.

Ways to Spot the Dyslexic in the Classroom

1. Does he have trouble with sequence?
2. Does he have trouble with “critical symbols?” (d-b-p-q / m-w / u-n / 6-9 / h-y)
3. Does he form letters with a clockwise (rather than counterclockwise) motion?
Does he mark from the bottom up (as in making 7, t, f, p, g, b, d)?
Does he mix capital and lower case letters?
Does he mix manuscript and cursive styles?
Is he prone to use capital B and D instead of lower case?
4. Does he fall apart under time limits and pressure? Does he work very slowly?
5. Does he skip punctuation cues?
6. Does he have difficulty copying from the blackboard?
7. Is it impossible for him to remember multiplication tables?
8. Does he have trouble with many aspects of time (telling time, remembering his birthday, days of the week, months of the year)?
9. Does he have difficulty following directions? Does he ask you over and over what you say?
Does he need constant reminders of what to do?
10. Does he have problems with oral language? Poor recall of nouns?
11. On tests, does he refuse to take allotted time, guess, and mark at random?
12. Does he exhibit preservation and/or telescoping?
13. In spelling, does he transpose silent letters within words; can he not recall correct order of letters; does he misplace silent e?
14. In math, does he sometimes work left to right, when opposite direction is called for? Does he reverse processes while computing? Is he unable to organize facts in story problems?
15. Does he sub-vocalize and use his finger as a pointer? (He needs these cues!)
16. Dyslexics may work 5 to 6 times more slowly than other students. Rule of thumb: try assigning 1/5 amount of rest of class, then slowly increasing amount. Seek quality rather than quantity.
17. Auditory dyslexic is never quite sure he heard correctly. May comprehend only 30-40 percent of what he hears according to Dale Jordan.
18. Watch him write the alphabet on ruled paper. Does he hesitate? Does he switch from manuscript to cursive? Does he have proper letter shapes? Proper sequence? (The teacher should attempt to re-create his style by tracing over and observing flaws in directionality.)
19. Does he show an ability to tell whether words are the same or different? Does he have difficulty in reproducing or identifying rhymes?
20. Do his papers, especially spelling papers, look like “bird scratchings?” Do they have many erasures, mark-overs, erratic spacings?

HOW DOES THE DYSLEXIC STUDENT LEARN?

- ✚ The dyslexic student must be shown
 - the big picture and then how the details fit into it.
 - From parts to whole
 - From the easy to the more difficult
 - From the simple to the complex
 - From the concrete to the abstract
 - From the visual to the auditory
 - Always showing him how new information fits in with what he has learned
 - With much review and practice at every step of the way

- ✚ The dyslexic student is **NOT**...
 - an incidental learner. He must be *directly* taught (shown) everything.
 - Lazy! He is doing his best. It takes many times more energy for the dyslexic student to get through the day and to do even average work, than it does the average student.

- ✚ The dyslexic student needs ...
 - a quiet, calm, structured, orderly, consistent and fair environment
 - one or two verbal instruction at a time
 - short, simple instructions with few words. Then ask, “*What do you think you heard me say?*”
 - a *simultaneous* multi-sensory structured approach to his language learning that uses all three pathways of learning: Visual, Auditory and Kinesthetic-Tactile
 - to be given every opportunity to use his creativity in his learning.
 - time to process what he has heard
 - time to respond
 - time to complete assignments

- ✚ The dyslexic student *appears*...
 - to not be paying attention. In fact he is experiencing an auditory overload and may even get a “glazed” look on his face. He can’t help this. We can help him by using the strategies above and by giving him **the gift of time**.

ACCOMMODATING STUDENTS WITH DYSLEXIA IN ALL CLASSROOM SETTINGS

Teaching students with dyslexia across settings is challenging. Both general education and special education teachers seek accommodations that foster the learning and management of a class of heterogeneous learners. It is important to identify accommodations that are reasonable to ask of teachers in all classroom settings. The following accommodations appear reasonable and provide a framework for helping students with learning problems achieve in general education and special education classrooms. They are organized according to accommodations involving materials, interactive instruction, and student performance.

Accommodations Involving Materials

Students spend a large portion of the school day interacting with materials. Most instructional materials give teachers few activities or directions for teaching a large class of students who learn at different rates and in various ways. This section provides material accommodations that enhance the learning of diverse students. Frequently, paraprofessionals, volunteers, and students can help develop and implement various accommodations. Material accommodations include the following:

- 1. Use a tape recorder.** Many problems with materials are related to reading disabilities. The tape recorder often is an excellent aid in overcoming this problem. Directions, stories, and specific lessons can be recorded on tape. The student can replay the tape to clarify understanding of directions or concepts. Also, to improve reading skills, the student can read the printed words silently as they are presented on tape.
- 2. Clarify or simplify written directions.** Some directions are written in paragraph form and contain many units of information. These can be overwhelming to some students. The teacher can help by underlining or highlighting the significant parts of the directions. Rewriting the directions is often helpful. *For example:*
Original directions: This exercise will show how well you can locate conjunctions. Read each sentence. Look for the conjunctions. When you locate a conjunction, find it in the list of conjunctions under each sentence. Then circle the number of your answer in the answer column.
Directions rewritten and simplified: Read each sentence and circle all conjunctions.
- 3. Present a small amount of work.** The teacher can tear pages from workbooks and materials to present small assignments to students who are anxious about the amount of work to be done. This technique prevents students from examining an entire workbook, text, or material and becoming discouraged by the amount of work. Also, the teacher can reduce the amount of work when it appears redundant.
For example, the teacher can request the student to complete only odd-numbered problems or items with stars by them, or can provide responses to several items and ask the student to complete the rest. Finally, the teacher can divide a worksheet into sections and instruct the student to do a specific section. A worksheet is divided easily by drawing lines across it and writing go and stop within each section.
- 4. Block out extraneous stimuli.** If a student is easily distracted by visual stimuli on a full worksheet or page, a blank sheet of paper can be used to cover sections of the page not being worked on at the time.

Also, line markers can be used to aid reading, and windows can be used to display individual math problems.

5. **Highlight essential information.** If an adolescent can read a regular textbook but has difficulty finding the essential information, the teacher can mark this information with a highlight pen.
6. **Locate place in consumable material.** In consumable materials in which students progress sequentially (such as workbooks), the student can make a diagonal cut across the lower right-hand corner of the pages as they are completed. With all the completed pages cut, the student and teacher can readily locate the next page that needs to be corrected or completed.
7. **Provide additional practice activities.** Some materials do not provide enough practice activities for students with learning problems to acquire mastery on selected skills. Teachers then must supplement the material with practice activities. Recommended practice exercises include instructional games, peer teaching activities, self-correcting materials, computer software programs, and additional worksheets.
8. **Provide a glossary in content areas.** At the secondary level, the specific language of the content areas requires careful reading. Students often benefit from a glossary of content-related terms.
9. **Develop reading guides.** A reading guide provides the student with a road map of what is written and features periodic questions to help him or her focus on relevant content. It helps the reader understand the main ideas and sort out the numerous details related to the main ideas. A reading guide can be developed paragraph-by-paragraph, page-by-page, or section-by-section.

ACCOMMODATIONS INVOLVING INTERACTIVE INSTRUCTION

The task of gaining students' attention and engaging them for a period of time requires many teaching and managing skills. Teaching and interactions should provide successful learning experiences for each student. Some accommodations to enhance successful interactive instructional activities are:

- 1. Use explicit teaching procedures.** Many commercial materials do not cue teachers to use explicit teaching procedures; thus, the teacher often must adapt a material to include these procedures. Teachers can include explicit teaching steps within their lessons (i.e., present an advanced organizer, demonstrate the skill, provide guided practice, offer corrective feedback, set up independent practice, monitor practice, and review).
- 2. Repeat directions.** Students who have difficulty following directions are often helped by asking them to repeat the directions in their own words. The student can repeat the directions to a peer when the teacher is unavailable. The following suggestions can help students understand directions: (a) if directions contain several steps, break down the directions into subsets; (b) simplify directions by presenting only one portion at a time and by writing each portion on the chalkboard as well as stating it orally; and (c) when using written directions, be sure that students are able to read and understand the words as well as comprehend the meaning of sentences.
- 3. Maintain daily routines.** Many students with learning problems need the structure of daily routines to know and do what is expected.
- 4. Provide a copy of lecture notes.** The teacher can give a copy of lecture notes to students who have difficulty taking notes during presentations.
- 5. Provide students with a graphic organizer.** An outline, chart, or blank web can be given to students to fill in during presentations. This helps students listen for key information and see the relationships among concepts and related information.
- 6. Use step-by-step instruction.** New or difficult information can be presented in small sequential steps. This helps learners with limited prior knowledge who need explicit or part-to-whole instruction.
- 7. Simultaneously combine verbal and visual information.** Verbal information can be provided with visual displays (e.g., on an overhead or handout).
- 8. Write key points or words on the chalkboard.** Prior to a presentation, the teacher can write new vocabulary words and key points on the chalkboard or overhead.
- 9. Use balanced presentations and activities.** An effort should be made to balance oral presentations with visual information and participatory activities. Also, there should be a balance between large group, small group, and individual activities.
- 10. Use mnemonic instruction.** Mnemonic devices can be used to help students remember key information or steps in a learning strategy. (An example of mnemonic instruction is using the word HOMES to remember the names of the Great Lakes. H is for Lake Huron, O is for Lake Ontario, M is for Lake Michigan, E is for Lake Erie, and S is for Lake Superior.)

- 11. Emphasize daily Review.** Daily review of previous learning or lessons can help students connect new information with prior knowledge.

Accommodations Involving Student Performance

Students vary significantly in their ability to respond in different modes. For example, students vary in their ability to give oral presentations; participate in discussions; write letters and numbers; write paragraphs; draw objects; spell; work in noisy or cluttered settings; and read, write, or speak at a fast pace. Moreover, students vary in their ability to process information presented in visual or auditory formats. The following accommodation involving mode of reception and expression can be used to enhance students' performance:

- 1. Change response mode.** For students who have difficulty with fine motor responses (such as handwriting), the response mode can be changed to underlining, selecting from multiple choices, sorting, or marking. Students with fine motor problems can be given extra space for writing answers on worksheets or can be allowed to respond on individual chalkboards.
- 2. Provide an outline of the lecture.** An outline enables some students to follow the lesson successfully and make appropriate notes. Moreover, an outline helps students to see the organization of the material and ask timely questions.
- 3. Encourage use of graphic organizers.** A graphic organizer involves organizing material into a visual format. To develop a graphic organizer, the student can use the following steps: (a) list the topic on the first line, (b) collect and divide information into major headings, (c) list all information relating to major headings on index cards, (d) organize information into major areas, (e) place information under appropriate subheadings, and (f) place information into the organizer format.
- 4. Place students close to the teacher.** Students with attention problems can be seated close to the teacher, chalkboard, or work area and away from distracting sounds, materials, or objects.
- 5. Encourage use of assignment books or calendars.** Students can use calendars to record assignment due dates, list school related activities, record test dates, and schedule timelines for schoolwork. Students should set aside a special section in an assignment book or calendar for recording homework assignments.
- 6. Reduce copying by including information or activities on handouts or worksheets.**
- 7. Have students turn lined paper vertically for math.** Lined paper can be turned vertically to help students keep numbers in appropriate columns while computing math problems.
- 8. Use cues to denote important items.** Asterisks or bullets can denote questions or activities that count heavily in evaluation. This helps students spend time appropriately during tests or assignments.
- 9. Design hierarchical worksheets.** The teacher can design worksheets with problems arranged from easiest to hardest. Early success helps students begin to work.

- 10. Allow use of instructional aids.** Students can be provided with letter and number strips to help them write correctly. Number lines, counters, and calculators help students compute once they understand the mathematical operations.
- 11. Display work samples.** Samples of completed assignments can be displayed to help students realize expectations and plan accordingly.
- 12. Use peer-mediated learning.** The teacher can pair peers of different ability levels to review their notes, study for a test, read aloud to each other, write stories, or conduct laboratory experiments. Also, a partner can read math problems for students with reading problems to solve.
- 13. Encourage note sharing.** A student can use carbon paper or a notebook computer to take notes and then share them with absentees and students with learning problems. This helps students who have difficulty taking notes to concentrate on the presentation.
- 14. Use flexible work times.** Students who work slowly can be given additional time to complete written assignments.
- 15. Provide additional practice.** Students require different amounts of practice to master skills or content. Many students with learning problems need additional practice to learn at a fluency level.
- 16. Use assignment substitutions or adjustments.** Students can be allowed to complete projects instead of oral reports or vice versa. Also, tests can be given in oral or written format. For example, if a student has a writing problem, the teacher can allow her or him to outline information and give an oral presentation instead of writing a paper.

The International Dyslexia Association (IDA) thanks Cecil Mercer, Ed.D., a distinguished professor at the University of Florida, for the preparation of this fact sheet.

©Copyright 2002, The International Dyslexia Association (IDA). IDA encourages the reproduction and distribution of this fact sheet. If portions of the text are cited, appropriate reference must be made. Fact sheets may not be reprinted for the purpose of resale.

Fact Sheet #51 –10/02

Types of Test Item Formats

1. Make directions simple and include examples.
2. Type or print directions. **Never** use cursive.
3. Directions should be at the start of each test section.
4. Be certain students understand all directions.
5. Use a New York Times or Comic Sans FONT.

True and False Tests

1. Avoid T/F tests whenever possible.
2. **Never** use double negatives.
3. Don't use 'trick' words like: *always, sometimes, none of the above, all of the above, sometimes, never, mostly, few, etc.*
4. Have students circle the words 'True' or 'False' rather than writing 'T' or 'F'.
5. Avoid wordy questions.

Essay Tests

1. Give students a choice. More than one essay question per test.
2. Ask or give explicit directions, questions, etc.
3. Question and answer should be on the same page.
4. Provide lined paper for answers.
5. Provide a word bank.

Multiple Choice Tests

1. Ask questions in complete sentences.
2. Align questions and options vertically.
3. Limit the number of options to no more than three.
4. Circle the correct answer rather than filling in the blank.

Fill-In-The Blank Tests

1. Don't count off for spelling. Allow students to underline the word/s that they suspect are incorrect, or provide a word bank.
2. The length of the line should mirror the length of the answer.

There are ____ days in a year.

The first president of the United States was _____.

George W. Bush is the _____ of the United States.

3. The blank should be near the end of the question.

4. (Students need a “trigger” word to get them started)

Matching Tests

1. Avoid having students draw lines to connect the matches.
2. Place the longer part of the match on the left, the short answers on the right.
3. Do not list more than one match for each question.
4. Color-code the matches.
5. Keep all matches on the same page.
6. Match by categories. Provide a line or spacing to divide the categories.

SPELLING

How common are spelling difficulties?

Spelling is difficult for many people, but there is much less research on spelling than there is on reading to tell us just how many people spell poorly or believe they spell poorly. Less is known about spelling competence in the general population than is known about reading achievement because there is no national test for spelling and many states do not test students' spelling skills.

Almost all people with dyslexia, however, struggle with spelling and face serious obstacles in learning to cope with this aspect of their learning disability. The definition of dyslexia (see Fact Sheet on Definition) notes that individuals with dyslexia have “conspicuous problems” with spelling and writing, in spite of being capable in other areas and having a normal amount of classroom instruction. Many individuals with dyslexia learn to read fairly well, but difficulties with spelling (and handwriting) tend to persist throughout life, requiring instruction, accommodations, task modifications, and understanding from those who teach or work with the individual.

What causes people to be poor spellers?

One common but mistaken belief is that spelling problems stem from a poor visual memory for the sequences of letters in words. Recent research, however, shows that a general kind of visual memory plays a relatively minor role in learning to spell. Spelling problems, like reading problems, originate with *language* learning weaknesses. Therefore, spelling reversals of easily confused letters such as *b* and *d*, or sequences of letters, such as *wnet* for *went* are manifestations of underlying language learning weaknesses rather than of a visually based problem. Most of us know individuals who have excellent visual memories for pictures, color schemes, design elements, mechanical drawings, maps, and landscape features, for example, but who spell poorly. The kind of visual memory necessary for spelling is closely “wired in” to the language processing networks in the brain.

Poor spellers have trouble remembering the letters in words because they have trouble noticing, remembering, and recalling the features of language that those letters represent. Most commonly, poor spellers have weaknesses in underlying language skills including the ability to analyze and remember the individual sounds (phonemes) in the words, such as the sounds associated with *j*, *ch*, or *v*, the syllables, such as *la*, *mem*, *pos* and the meaningful parts (morphemes) of longer words, such as *sub-*, *-pect*, or *-able*. These weaknesses may be detected in the use of both spoken language and written language; thus, these weaknesses may be detected when someone speaks and writes.

Like other aspects of dyslexia and reading achievement, spelling ability is influenced by inherited traits. It is true that some of us were born to be better spellers than others, but it is also true that poor spellers can be helped with good instruction and accommodations.

Diagnosis of spelling problems

If dyslexia is suspected, and the student is at the kindergarten or first-grade level, simple tests of phoneme awareness and letter naming can predict later spelling problems, just as they predict later reading problems. If a student is struggling to remember spelling words, a standardized test of spelling achievement with current national norms should be given to quantify just how serious the problem is. In addition, a spelling diagnostic test should be given to identify which sounds, syllable patterns, or meaningful parts the student does not understand or remember. A spelling diagnostic test, such as a developmental spelling inventory, will tell a

teacher exactly which consonant, vowel, syllable, and word spellings the student must be taught. Third, the student should be tested on his or her knowledge of the most commonly used words in English that are necessary for writing, as these, too, should be emphasized in instruction.

How do children learn to spell?

Children gradually develop insights into how words are represented with letters in preschool, kindergarten, and first grade. This process moves ahead much more quickly (and successfully) if instruction in sounds and letters is systematic, explicit, and structured. Spelling of whole words is facilitated when the child understands that words are made up of separate speech sounds and that letters represent those sounds. As knowledge of that principle increases, children also notice patterns in the way letters are used, and they notice recurring sequences of letters that form syllables, word endings, word roots, prefixes, and suffixes. Memories for whole words are formed much faster and recalled much more easily when children have a sense of language structure and receive ample practice writing the words.

Inventive spelling or spelling words the way they sound is common in preschool and kindergarten children and is a desirable step in understanding how we use letters to spell. However, inventive spelling is not sufficient for students to learn all of the conventions and patterns of Standard English writing. Encouraging students, beyond the beginning of first grade, to invent their spellings or to ignore correct spelling is not constructive.

Is our English spelling system predictable or unpredictable?

The English spelling system is not crazy or unpredictable. It can be taught as a system that makes sense. Nearly 50% of English words are predictable based on sound-letter correspondences alone (e.g., slap, pitch, boy). An additional 37% of the more common words are almost predictable except for one sound (e.g., knit and boat). Other information, such as the language from which a word came (e.g., Old English, Latin, Greek, or French) and word meaning, also helps explain the spellings of words. Only 4% of English words are truly irregular and may have to be learned through whole word methods, such as tracing and saying the letters while the word is being memorized. Thus, it is possible to approach spelling instruction with confidence that the system by and large makes sense—an encouraging observation for students who have great difficulty forming memories for words.

What are the implications for teaching?

Spelling instruction that explores word structure, word origin, and word meaning is the most effective, even though students with dyslexia may still struggle with word recall. Emphasizing memorization by asking students to close their eyes and imagine the words, or asking them to write words multiple times until they “stick” are only useful after students are helped to understand why a word is spelled the way it is. Students who have learned the connections between speech sounds and written symbols, who perceive the recurring letter patterns in English syllables, and who know about meaningful word parts are better at remembering whole words.

Classroom spelling programs should be organized to teach a progression of regular spelling patterns. After first grade, spelling instruction should follow and complement decoding instruction for reading. Children should be able to read the words in their spelling lesson; most learners can read many more words than they can spell.

Understanding correspondences between sounds and letters comes first. For example, before spelling a word, students can orally take the sounds of the word apart. Then, they can recall the letters that spell those sounds. Next, patterns such as the six basic syllable types of English should be taught because they represent vowel

sounds in predictable ways. D, students should be taught a few basic rules for adding ending to words, such as when letters should be doubled, when *y* is changed to *i*, and when the silent *e* is dropped.

A few irregular words should be practiced daily (e.g., come, they, their, who). Tracing and saying the letters, building the words with letter tiles, copying and writing in sentences, all help build memories for irregular words. Students may be able to handle only a few new words at a time, and they may need many opportunities to write words accurately and with supervision before they can remember them. As words are learned, exercises to build fluency, such as word and sentence dictations, are helpful. Having students keep a list of their own particular “spelling demons” for reference supports the development of proofreading ability and aids mastery of the spelling of those challenging words.

It is important that students learn to spell words for writing and not just for spelling tests. Transfer to spelling in everyday writing is essential. It helps if the student is taught to use a proofreading procedure that involves checking for one element at a time, such as punctuation, capitalization, spelling, sentence structure, and organization.

Computer spellcheckers are not helpful unless the student has already achieved basic spelling skill, at about a fifth-grade level, and unless the student receives other proofreading help. Spellcheckers do not identify all errors.

Important accommodations and task modification for dyslexic students include the following:

- Grading written work primarily on content,
- Writing correct spellings over incorrect ones and limiting rewrites to a reasonable amount,
- Providing proofreading assistance,
- Encouraging students to dictate their thoughts before writing and giving them the spellings of key content words to use in writing,
- Allowing students in intermediate grades and higher to type exams and papers or to use a voice-translation device on a computer,
- Encouraging students to hand in early drafts of research papers and essays to allow for revision before grading.

The International Dyslexia Association (IDA) thanks Louisa Cook Moats, Ed.D. for her assistance in the preparation of this fact sheet.

Related Reading:

- Moats, Louisa Cook, Ed.D., 1995. Spelling: Development Disability and Instruction. Baltimore, MD: York Press.
- Schupack, Helaine and Wilson, Barbara, 1997. The “R” Book, Reading, Writing & Spelling: The Multisensory Structured Language Approach. Baltimore, MD: The International Dyslexia Association’s *Orton Emeritus Series*.



Study Skills - A Handout for Parents

Many capable children at all grade levels experience frustration and failure in school, not because they lack ability, but because they do not have adequate study skills. Good study habits are important for success in school, to foster feelings of competence, to develop positive attitudes, and to help children realize they can control how well they do in school and in life. Good study habits lay the groundwork for successful work habits as an adult.

For children to learn good study skills, teachers and parents must work together. It is most important to help children build good habits, to develop a system that works for an individual child, and to use the system effectively and consistently. Preferred learning styles vary from child to child. Children need to discover how they learn and then work out a study system that fits best. Parents of elementary aged children usually help their children more than parents of adolescents. However, adolescents also need parental support and encouragement throughout high school.

Four basic principles to enhance study skills.

1. Make homework completion a positive experience: associate it with love and affection, freedom, fun and control.
2. Make homework completion a high priority.
3. Use homework completion to teach organization skills and improve learning skills. Remember that the primary purpose of homework is to improve learning and foster work habits.
4. Provide and enforce logical and meaningful consequences.

Make homework completion a positive experience

Associate it with love and affection, freedom, fun, and control. Possible ways to do this are:

- Provide support and praise for homework completion.
- Be available to provide non-critical assistance.
- Give children choice in when, where, and how they complete homework assignments.
- Encourage your children to complete homework well enough that they have a sense of control over their own learning and levels of competence.
- Maintain a positive and helpful attitude: avoid criticism and anger.
- Help children understand what types of homework they enjoy and encourage them to choose assignments accordingly. Some prefer written reports, other prefer hands-on projects.
- Use homework preferences in developing a homework schedule. Some children prefer to get disliked homework done first, while others prefer to do their easier homework first.

- When a child dislikes a subject, find ways to make it less frustrating. For example, set a goal of doing five math problems and then taking a stretch.
- Encourage your child to participate in study groups with friends. Research shows that children who form study groups achieve at a much higher level than children who always study alone.
- Encourage your child to have fun such as eating a snack, calling friends, starting an activity, or watching a favorite show when homework is finished.
- Never use homework as a punishment.
- Be a good listener, and encourage your child to ask questions about things that are hard to understand.
- Set aside time for your children to share with you the skills and information they are acquiring.
- Help children study for tests by quizzing them on the material in a friendly manner.
- Have your children imagine themselves as excellent students. Then brainstorm what needs to be done to make that a reality.

Make homework completion a high priority

- Make clear that you expect your children to complete homework well.
- Establish a study routine: children should be in the habit of studying at the same time and in the same place each day. Children and parents should decide, together, upon the study routine by taking into account scheduled activities, family commitments, and favorite TV shows. Also, consider the child's ability to concentrate at different times of the day. Many elementary school children are too tired after dinner, and show this by having trouble concentrating, being easily frustrated, and being slow to complete tasks. Ideally, the family agrees upon a study hour, the television and stereo are off, phone calls are not taken, and the entire family studies, reads, or completes paperwork.
- Establish a place to study with good lighting and a table or desk. Some children prefer to study in their own room. Others do better if they are studying at the kitchen table or other location near parental help. Some children are able to study with a little background noise such as music. Few can study effectively in front of the TV and most need uninterrupted quiet. Other children may prefer to work at the library, and will need transportation.
- Have supplies on hand including binders, notebooks, paper, pencils, pens, assignment books, erasers, dictionaries, a calculator, ruler, hole punch, tape, glue, reference books and/or programs.
- Demonstrate, and enforce, that homework completion is a higher priority than other activities. A child should not watch TV and talk with friends before completing homework, unless time later in the day has been set aside for homework completion.
- Reduce activities if a child has so many commitments that there is insufficient time for homework.

- Have help available for every subject. This might be a parent, neighbor, friend, teacher hot line, an on-line homework service, or a tutor. The helper needs to be someone who is knowledgeable about the subject and who can help the child without becoming frustrated or angry.
- Establish a family expectation that studying for exams is expected and takes priority over other activities.

Use homework completion to teach organization skills and improve learning

Keep in mind that the primary purpose of homework is to improve learning and foster work habits. Possible ways to do this are to:

- Encourage your child to use an assignment book, write all assignments into the book daily, and check them off when completed. Your child should also break down long-term assignments, such as projects, into smaller parts and write each part into the assignment book. Many children also find it helpful to put other commitments into the assignment book as well, including music lessons, sports, and jobs.
- Encourage your children to estimate how long it will take to complete each assignment and plan their schedule accordingly.
- Help your children set goals regarding how well they want to do on an assignment and how much effort it will take to do that well. This will help them learn to divide study time effectively.
- Help your children learn to plan for finishing assignments on time. They should start working on major assignments or reviewing for major tests well ahead.
- Help your children expand their concentration time. At first they may be able to concentrate for only 10 minutes. Parents can help their children build up this length of time gradually, so that homework takes less time. Even high school students should take a 10 to 15 minute break after studying for 45 or 50 minutes. Otherwise, they lose the ability to concentrate.
- Encourage your child to circle the verbs in directions.
- Encourage your child to review class notes and add details, make corrections, and highlight the most important information.
- Encourage your children to improve reading skills by having them pre-read non-fiction reading assignments (reviewing the headings, picture captions, reviewing tables, charts, and graphs). Children can pre-read fiction by reading the front cover, back cover, and introduction, and skimming the first quarter to determine setting, character, and plot.
- Encourage your child to determine the meaning of unknown words by using the context or by looking them up in a dictionary and writing them down.
- Help your child learn effective reading techniques such as SQ3R, where the reader:

- Surveys: Looks over the material before beginning to read to obtain a general orientation.
 - Questions: Writes down questions about the material before beginning to read.
 - Reads through the material in the normal way.
 - Recites and Writes: Writes down or gives the answers to another person.
 - Reviews: Goes over the material several times before being tested.
- Encourage your child to outline or "map" reading material for better understanding. To "map," a child places the main topic in the middle of a blank sheet of paper. Then a branch is drawn for each subheading, and supporting details are placed on smaller branches going out from the subheadings. This creates a visual aid that increases organization and comprehension.
 - Make sure your children are able to understand their textbooks. Children should be able to read 9 out of 10 words accurately and answer correctly a least 3 out of 4 questions.
 - Help your child predict outcomes, distinguish fact from opinion, discern emotional appeals, recognize bias, discern inference as they read.
 - Encourage your children to organize thoughts before beginning a written assignment, and write at least two drafts.
 - Have your child proofread and check for success or failure in answering the purpose of the assignment, legibility, neatness, spelling, complete sentences, and punctuation errors.
 - Help your child to see tests as an opportunity to "show off" what they have learned, rather than something to be feared.
 - Help your children predict test questions as they study for tests.
 - Encourage your child to space learning over several sessions instead of cramming the night before. Five hours of study spread over a week is better than studying five hours the night before the test: cramming for tests increases anxiety and causes lower grades.
 - Avoid acting as a tutor for your child. If a child needs a tutor in a particular subject, call the local high school and ask for a student tutor through the Honor Society.

Provide and enforce logical and meaningful consequences

- Each week, have your children assess their own homework completion by reviewing returned papers, tests and quizzes, and current grades. With your children, note their progress, improvements, areas of need, and jointly plan how to solve any problems.
- Display well-done work in a prominent place, such as on the refrigerator door.

- With their help, graph your children's grades. Include the grades for each class, the average grade for all classes, and an agreed upon target line. The target line should be the grades that you and your children agree are reasonable and obtainable (if your child is now receiving D's, a reasonable goal is grades of C: to first set the goal at A's will lead to frustration). Discuss the graph with your children, help your children identify any patterns of poor performance, and jointly develop solution plans.
- Teach your children to bring all necessary materials home. If your children get in the habit of "forgetting" homework materials, have them spend time on reading or working on other academic activities during the agreed upon study time. Your children could also walk back to school to pick up forgotten materials, or be charged "gas money" out of their allowance for being driven back to school. Or, with the help of a school psychologist or counselor, set up a system that rewards them for bringing everything home.
- Sometimes children "lose" completed homework in their books or backpack. Placing all completed homework in one folder in the backpack can solve this problem.
- If a child does not complete homework, reduce the freedom the child has until grades improve and the teacher indicates that the problem is solved. Methods of reducing freedom might be (a) giving your child less control about where and when homework is completed, (b) parents checking the quality of completed homework every evening, (c) parents and teachers maintaining ongoing communication in the assignment book, or (d) the child not being able to participate in a planned activity such as a field trip.
- Reward your child for good grades and for improving grades. Your child's preferences should be considered in deciding upon the reward, but the rewards need not be expensive. Going out together for an ice cream cone, or telephoning a grandparent to tell them of the child's success, are examples of inexpensive but effective rewards.
- Provide support and genuine praise for homework completion and good study habits.

Resources

Canter, L. (1993). *Homework without tears*. New York: HarperCollins.

How to help your child achieve in school (1988). Pueblo, CO: Consumer Information Center (Dept 109M).

Rosemond, J. (1990). *Ending the homework hassle: Understanding, preventing and solving school performance problems*. Andrews & McMeel.

Mack, A. (1997). *A+ Parents: Help your child learn and succeed in school*. McBooks.

<http://www.ldonline.com/article/5904?theme=print>

©2006 WETA. All Rights Reserved.