

Dysgraphia Accommodations and Modifications

Accommodations

When considering accommodating or modifying expectations to deal with dysgraphia, consider changes in

1. The rate of producing written work
2. The volume of the work to be produced
3. The complexity of the writing task
4. The tools used to produce the written product
5. The format of the product

Change the demands of writing rate

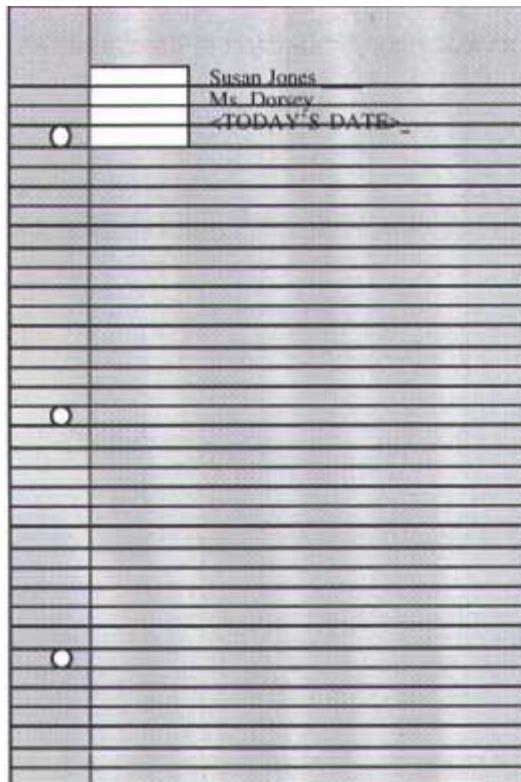
- Allow more time for written tasks including note-taking, copying, and tests
- Allow students to begin projects or assignments early
- Include time in the student's schedule for being a 'library assistant' or 'office assistant' that could also be used for catching up or getting ahead on written work, or doing alternative activities related to the material being learned.
- Encourage learning keyboarding skills to increase the speed and legibility of written work.
- Have the student prepare assignment papers in advance with required headings (Name, Date, etc.), possibly using the template described below under "changes in complexity."

Adjust the volume

- Instead of having the student write a complete set of notes, provide a partially completed outline so the student can fill in the details under major headings (or provide the details and have the student provide the headings).
- Allow the student to dictate some assignments or tests (or parts of tests) a 'scribe'. Train the 'scribe' to write what the student says verbatim ("I'm going to be your secretary") and then allow the student to make changes, without assistance from the scribe.
- Remove 'neatness' or 'spelling' (or both) as grading criteria for some assignments, or design assignments to be evaluated on specific parts of the writing process.
- Allow abbreviations in some writing (such as b/c for because). Have the student develop a repertoire of abbreviations in a notebook. These will come in handy in future note-taking situations.
- Reduce copying aspects of work; for example, in Math, provide a worksheet with the problems already on it instead of having the student copy the problems.

Change the complexity

- Have a 'writing binder' option. This 3-ring binder could include:
 - A model of cursive or print letters on the inside cover (this is easier to refer to than one on the wall or blackboard).
 - A laminated template of the required format for written work. Make a cut-out where the name, date, and assignment would go and model it next to the cutout. Three-hole punch it and put it into the binder on top of the student's writing paper. Then the student can set up his paper and copy the heading information in the holes, then flip the template out of the way to finish the assignment. He can do this with worksheets, too.



- Sample Template

- Break writing into stages and teach students to do the same. Teach the stages of the writing process (brainstorming, drafting, editing, and proofreading, etc.). Consider grading these stages even on some 'one-sitting' written exercises, so that points are awarded on a short essay for brainstorming and a rough draft, as well as the final product. If writing is laborious, allow the student to make some editing marks rather than recopying the whole thing. On a computer, a student can make a rough draft, copy it, and then revise the copy, so that both the rough draft and final product can be evaluated without extra typing.
- Do not count spelling on rough drafts or one-sitting assignments.
- Encourage the student to use a spellchecker and to have someone else proofread his work, too. Speaking spellcheckers are recommended, especially if the student may not be able to recognize the correct word (headphones are usually included).

Change the tools

- Allow the student to use cursive or manuscript, whichever is most legible
- Consider teaching cursive earlier than would be expected, as some students find cursive easier to manage, and this will allow the student more time to learn it.
- Encourage primary students to use paper with the raised lines to keep writing on the line.
- Allow older students to use the line width of their choice. Keep in mind that some students use small writing to disguise its messiness or spelling, though.
- Allow students to use paper or writing instruments of different colors.
- Allow student to use graph paper for math, or to turn lined paper sideways, to help with lining up columns of numbers.
- Allow the student to use the writing instrument that is most comfortable. Many students have difficulty writing with ballpoint pens, preferring pencils or pens which have more friction in contact with the paper. Mechanical pencils are very popular. Let the student find a 'favorite pen' or pencil (and then get more than one like that).
- Have some fun grips available for everybody, no matter what the grade. Sometimes high school kids will enjoy the novelty of pencil grips or even big "primary pencils."

- Word Processing should be an option for many reasons. Bear in mind that for many of these students, learning to use a word processor will be difficult for the same reasons that handwriting is difficult. There are some keyboarding instructional programs which address the needs of learning disabled students. Features may include teaching the keys alphabetically (instead of the "home row" sequence), or sensors to change the 'feel' of the D and K keys so that the student can find the right position kinesthetically.
- Consider whether use of speech recognition software will be helpful. As with word processing, the same issues which make writing difficult can make learning to use speech recognition software difficult, especially if the student has reading or speech challenges. However, if the student and teacher are willing to invest time and effort in 'training' the software to the student's voice and learning to use it, the student can be freed from the motor processes of writing or keyboarding.

Modifications

For some students and situations, accommodations will be inadequate to remove the barriers that their writing problems pose. Here are some ways assignments can be modified without sacrificing learning.

Adjust the volume

- Reduce the copying elements of assignments and tests. For example, if students are expected to 'answer in complete sentences that reflect the question,' have the student do this for three questions that you select, then answer the rest in phrases or words (or drawings). If students are expected to copy definitions, allow the student to shorten them or give him the definitions and have him highlight the important phrases and words or write an example or drawing of the word instead of copying the definition.
- Reduce the length requirements on written assignments -- stress quality over quantity.

Change the complexity

- Grade different assignments on individual parts of the writing process, so that for some assignments "spelling doesn't count," for others, grammar.
- Develop cooperative writing projects where different students can take on roles such as the 'brainstormer,' 'organizer of information,' 'writer,' 'proofreader,' and 'illustrator.'
- Provide extra structure and intermittent deadlines for long-term assignments. Help the student arrange for someone to coach him through the stages so that he doesn't get behind. Discuss with the student and parents the possibility of enforcing the due dates by working after school with the teacher in the event a deadline arrives and the work is not up-to-date.

Change the format

- Offer the student an alternative project such as an oral report or visual project. Establish a rubric to define what you want the student to include. For instance, if the original assignment was a 3-page description of one aspect of the Roaring Twenties (record-breaking feats, the Harlem Renaissance, Prohibition, etc) you may want the written assignment to include:
 - A general description of that 'aspect' (with at least two details)
 - Four important people and their accomplishments
 - Four important events - when, where, who and what
 - Three good things and three bad things about the Roaring Twenties

You can evaluate the student's visual or oral presentation of that same information, in the alternative format.

Remediation

Consider these options:

- Build handwriting instruction into the student's schedule. The details and degree of independence will depend on the student's age and attitude, but many students would like to have better handwriting if they could.
- If the writing problem is severe enough, the student may benefit from occupational therapy or other special education services to provide intensive remediation.
- Keep in mind that handwriting habits are entrenched early. Before engaging in a battle over a student's grip or whether they should be writing in cursive or print, consider whether enforcing a change in habits will eventually make the writing task a lot easier for the student, or whether this is a chance for the student to make his or her own choices.
- Teach alternative handwriting methods such as "Handwriting Without Tears."
- Even if the student employs accommodations for writing, and uses a word processor for most work, it is still important to develop and maintain legible writing. Consider balancing accommodations and modifications in content area work with continued work on handwriting or other written language skills. For example, a student for whom you are not going to grade spelling or neatness on certain assignments may be required to add a page of spelling or handwriting practice to his portfolio.

More information on dysgraphia

- [The Writing Dilemma: Understanding Dysgraphia](#). Richards, Regina G. RET Center Press, 1998. This booklet defines and outlines the stages of writing, the effects of different pencil grips on writing, and dysgraphic symptoms. Guidelines are provided to identify dysgraphic students and specific helps and compensations are provided.
- [Educational Care: A System for Understanding and Helping Children with Learning Problems at Home and in School](#). Levine, Melvin. Cambridge, MA: Educators Publishing Service, 1994. Concise, well organized descriptions of specific learning tasks, variations in the ways students process information, and concrete techniques that teachers and parents can use to bypass areas of difficulty.
- [Handwriting Without Tears](#). Olsen, Jan Z.
- Shannon, Molly, OTR/L *Dysgraphia Defined: The Who, What, When, Where and Why of Dysgraphia* - conference presentation, 10/10/98.

DYSGRAPHIA

"Dysgraphia" is a learning disability resulting from the difficulty in expressing thoughts in writing and graphing. It generally refers to extremely poor handwriting.

Each State has its own criteria which determine if a student has a learning disability as it is defined by special education guidelines. When a student's writing or graphing difficulties are severe enough to meet these criteria, special education services are indicated. Problems arise because "dysgraphia" has no clearly defined criteria. A student with any degree of handwriting difficulty may be labeled "dysgraphic" by some educational specialists, but may or may not need special education services.

Most learning disabled students experience difficulty with handwriting and probably could be considered "dysgraphic". However, the term is seldom used within public schools because of the lack of any generally recognized or measurable criteria.

Underlying Causes

Students with dysgraphia often have sequencing problems. Studies indicate that what usually appears to be a perceptual problem (reversing letters/numbers, writing words backwards, writing letters out of order, and very sloppy handwriting) usually seems to be directly related to sequential/rational information processing. These students often have difficulty with the sequence of letters and words as they write. As a result, the student either needs to slow down in order to write accurately, or experiences extreme difficulty with the "mechanics" of writing (spelling, punctuation, etc.). They also tend to intermix letters and numbers in formulas. Usually they have difficulty even when they do their work more slowly. And by slowing down or getting "stuck" with the details of writing they often lose the thoughts that they are trying to write about.

Students with an attention deficit disorder (especially with hyperactivity) often experience rather significant difficulty with writing and formulas in general and handwriting in particular. This is because ADHD students also have difficulty organizing and sequencing detailed information. In addition, ADHD students are often processing information at a very rapid rate and simply don't have the fine-motor coordination needed to "keep up" with their thoughts.

Some students can also experience writing difficulty because of a general auditory or language processing weakness. Because of their difficulty learning and understanding language in general, they obviously have difficulty with language expression. Recall that written language is the most difficult form of language expression.

Although most students with dysgraphia do not have visual or perceptual processing problems, some students with a visual processing weakness will experience difficulty with writing speed and clarity simply because they aren't able to fully process the visual information as they are placing it on the page.

SYMPTOMS

1. Students may exhibit strong verbal but particularly poor writing skills .
2. Random (or non-existent) punctuation. Spelling errors (sometimes same word spelled differently); reversals; phonic approximations; syllable omissions; errors in common suffixes.

Clumsiness and disordering of syntax; an impression of illiteracy. Misinterpretation of questions and questionnaire items. Disordered numbering and written number reversals.

3. Generally illegible writing (despite appropriate time and attention given the task).
4. Inconsistencies : mixtures of print and cursive, upper and lower case, or irregular sizes, shapes, or slant of letters.
5. Unfinished words or letters, omitted words.
6. Inconsistent position on page with respect to lines and margins and inconsistent spaces between words and letters.
7. Cramped or unusual grip, especially holding the writing instrument very close to the paper, or holding thumb over two fingers and writing from the wrist.
8. Talking to self while writing, or carefully watching the hand that is writing.
9. Slow or labored copying or writing - even if it is neat and legible.

STRATEGIES

1. Encourage students to outline their thoughts. It is important to get the main ideas down on paper without having to struggle with the details of spelling, punctuation, etc
2. Have students draw a picture of a thought for each paragraph.
3. Have students dictate their ideas into a tape recorder and then listen and write them down later.
4. Have them practice keyboarding skills. It may be difficult at first, but after they have learned the pattern of the keys, typing will be faster and clearer than handwriting.
5. Have a computer available for them to organize information and check spelling. Even if their keyboarding skills aren't great, a computer can help with the details.
6. Have them continue practicing handwriting. There will be times throughout a student's life that they will need to be able to write things down and maybe even share their handwriting with others. It will continue to improve as long as the student keeps working at it.
7. Encourage student to talk aloud as they write. This may provide valuable auditory feedback.
8. Allow more time for written tasks including note-taking, copying, and tests.
9. Outline the particular demands of the course assignments/continuous assessment; exams, computer literacy etc. so that likely problems can be foreseen.
10. Give and allow students to begin projects or assignments early.

11. Include time in the student's schedule for being a 'library assistant' or 'office assistant' that could also be used for catching up or getting ahead on written work, or doing alternative activities related to the material being learned.
12. Instead of having the student write a complete set of notes, provide a partially completed outline so the student can fill in the details under major headings (or provide the details and have the student provide the headings).
13. Allow the student to dictate some assignments or tests (or parts thereof) a 'scribe'. Train the 'scribe' to write what the student says verbatim and then allow the student to make changes, without assistance from the scribe.
14. Remove 'neatness' or 'spelling' (or both) as grading criteria for some assignments, or design assignments to be evaluated on specific parts of the writing process.
15. With the students, allow abbreviations in some writing (such as b/c for because). Have the student develop a repertoire of abbreviations in a notebook. These will come in handy in future note-taking situations.
16. Reduce copying aspects of work; for example, in Math, provide a worksheet with the problems already on it instead of having the student copy the problems.
17. Separate the writing into stages and then teach students to do the same. Teach the stages of the writing process (brainstorming, drafting, editing, and proofreading, etc.). Consider grading these stages even on some 'one-sitting' written exercises, so that points are awarded on a short essay for brainstorming and a rough draft, as well as the final product.
18. On a computer, the student can produce a rough draft, copy it, and then revise the copy, so that both the rough draft and final product can be evaluated without extra typing.
19. Encourage the student to use a spellchecker and, if possible, have someone else proofread his work, too. Speaking spellcheckers are recommended, especially if the student may not be able to recognize the correct word (headphones are usually included).
20. Allow the student to use cursive or manuscript, whichever is most legible
21. Encourage primary students to use paper with the raised lines to keep writing on the line.
22. Allow older students to use the line width of their choice. Keep in mind that some students use small writing to disguise its messiness or spelling.
23. Allow students to use paper or writing instruments of different colors.
24. Allow student to use graph paper for math, or to turn lined paper sideways, to help with lining up columns of numbers.
25. Allow the student to use the writing instrument that is most comfortable for them.
26. If copying is laborious, allow the student to make some editing marks rather than recopying the whole thing.

27. Consider whether use of speech recognition software will be helpful. If the student and teacher are willing to invest time and effort in 'training' the software to the student's voice and learning to use it, the student can be freed from the motor processes of writing or keyboarding.
28. Develop cooperative writing projects where different students can take on roles such as the 'brainstormer,' 'organizer of information,' 'writer,' 'proofreader,' and 'illustrator.'
29. Provide extra structure and use intermittent deadlines for long-term assignments. Discuss with the student and parents the possibility of enforcing the due dates by working after school with the teacher in the event a deadline arrives and the work is not up-to-date.
30. Build handwriting instruction into the student's schedule. The details and degree of independence will depend on the student's age and attitude, but many students would like to have better handwriting.
31. Keep in mind that handwriting habits are entrenched early. Before engaging in a battle over a student's grip or whether they should be writing in cursive or print, consider whether enforcing a change in habits will eventually make the writing task a lot easier for the student, or whether this is a chance for the student to make his or her own choices. Beware of overload, the student has other tasks and courses.
32. Teach alternative handwriting methods such as "Handwriting Without Tears."
www.hwtears.com/inro.htm
33. Writing just one key word or phrase for each paragraph, and then going back later to fill in the details may be effective.
34. Multisensory techniques should be utilized for teaching both manuscript and cursive writing. The techniques need to be practiced substantially so that the letters are fairly automatic before the student is asked to use these skills to communicate ideas.
35. Have the students use visual graphic organizers. For example, you can create a mind map so that the main idea is placed in a circle in the center of the page and supporting facts are written on lines coming out of the main circle, similar to the arms of a spider or spokes on a wheel.
36. Do papers and assignments in a logical step-wise sequence. An easy way to remember these steps is to think of the word **POWER**.
- P** - plan your paper
- O** - organize your thoughts and ideas
- W** - write your draft
- E** - edit your work
- R** - revise your work, producing a final draft
37. If a student becomes fatigued have them try the following:

- * Shake hands fast, but not violently.
- * Rub hands together and focus on the feeling of warmth.
- * Rub hands on the carpet in circles (or, if wearing clothing with some mild texture, rub hands on thighs, close to knees)
- * Use the thumb of the dominant hand to click the top of a ballpoint pen while holding it in that hand. Repeat using the index finger.
- * Perform *sitting pushups* by placing each palm on the chair with fingers facing forward. Students push down on their hands, lifting their body slightly off the chair.

38. Allow student to tape record important assignments and/or take oral tests.

39. Prioritize certain task components during a complex activity. For example, students can focus on using descriptive words in one assignment, and in another, focus on using compound sentences.

40. Reinforce the positive aspects of student's efforts.

41. Be patient and encourage student to be patient with himself.

Strategies For Spelling Difficulties:

1. Encourage consistent use of spell checker to decrease the overall demands of the writing task and encourage students to wait until the end to worry about spelling.
2. Encourage use of an electronic resource such as the spell check component in a Franklin Language Master® to further decrease the demands. If student has concurrent reading problems, a Language Master® with a speaking component is most helpful because it will read/say the words.
3. Have the student look at each word, then close their eyes and visualize how it looks, letter by letter.
4. Have the student spell each word out loud while looking at it, then look away and spell it out loud again several times before writing it down.
5. Have the students break the spelling list down into manageable sections of only 3 to 5 words. Then take a break after mastering each section.
6. Have a scrabble board and computer accessible for affected students.

Dysgraphia does not have to limit creativity, as identified by the sample below composed on a computer by a 12-year-old dyslexic and dysgraphic student.

a) First draft of creative story as typed by 12-year-old student:

the way I describe a bumpy ride is like wothgan mowtsarts mowsek. eshe bumpy rowd is like a song. Eshe bumb is the a note eche uncon at the sam time ste is. that was the mewstere to mowts mowsuk it was vare metereus and unperdekdable. So the next time you drive down a bumpy theak of mowtsart.

b) Same story. Student read to teacher using his draft:

"The way I describe a bumpy ride is like Wolfgang Mozart's music. Each bumpy road is like a song. Each bump in the road is a note. Each bump is uncontrolled at the same time it still is controlled. That was the magic to Mozart's music. It was very mysterious and unpredictable. So the next time you drive down a bumpy road think of Mozart."