

## WHAT IS A TYPICAL CLASS LIKE?

- 5 minutes of large motor work - tracing giant sized letters while emphasizing the First Stroke of the letter
- 15 minutes of medium motor work in FUN multi-sensory mediums such as Exploding paint, shaving cream, punch writing, with good touchpoints on the writing lines
- 10 minutes of workbook practice
- Zany craft activity for the letter of the day, with more practice of letters/words/sentences on handwriting paper or unlined paper
- Motor Gym work on visual memory of the letters of the day. For example, writing the letters in the air with eyes closed, then jumping in our letter pit or riding down a scooter board ramp.
- Multi-sensory work on reversal techniques
- Last 5 minutes of class is always show and tell and parent training!

## The Handwriting Clinic

**Does My Child Have DYSGRAPHIA?**

**Information Brochure**

**1506 Capital St, Ste. 150  
Plano, Texas 75074  
972 633-1974**

## Dysgraphia is a General term

According to the Learning Disabilities Association of America website, the signs of dysgraphia are as follows:

- \* May have illegible printing and cursive writing (despite appropriate time and attention given the task)
- \* Shows inconsistencies: mixtures of print and cursive, upper and lower case, or irregular sizes, shapes or slant of letters
- \* Has unfinished words or letters, omitted words
- \* Inconsistent spacing between words and letters
- \* Exhibits strange wrist, body or paper position
- \* Has difficulty pre-visualizing letter formation
- \* Copying or writing is slow or labored
- \* Shows poor spatial planning on paper
- \* Has cramped or unusual grip/may complain of sore hand
- \* Has great difficulty thinking and writing at the same time (taking notes, creative writing.)

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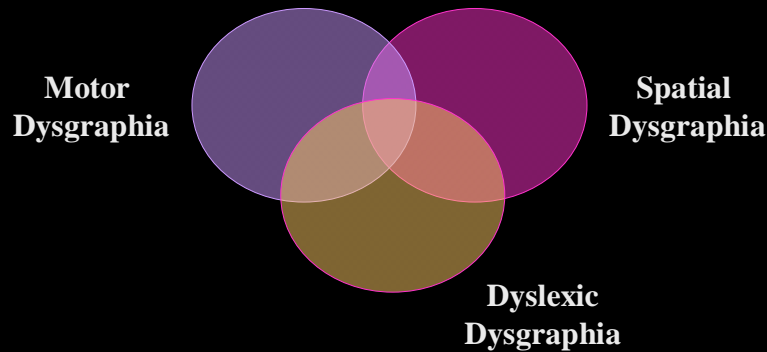
## What the clinic looks at:

“Dysgraphia” is an overly used term. Almost all the children that come into our clinic with a diagnosis of dysgraphia, probably do not really have dysgraphia. Yes, there are problems with their handwriting, but these problems can be overcome. Almost all the children who come into the clinic have several of the signs listed in the left column, but MOST do NOT have dysgraphia. The important question, is to NARROW down what is wrong with their handwriting. If you look at the definitions of dysgraphia on the left, all the terms are too general. The following are possible problems, and children may have one problem only, or a combination of problems, and they may have a lot to do with poor handwriting, but the child may or may not have dysgraphia:

- Poor vision - it is always a good idea to get a good vision exam, not just a screening by the pediatrician or school nurse.
- Receptive or expressive language delay that contributes to poor written expression
- Poor fine motor skills or eye hand coordination
- Delayed visual motor skills
- Poor spelling, which contributes to poor written expression
- Were taught upper case at a young age, and then were taught upper and lower case at the same time, in preschool and Kindergarten. Most of our first graders come with a mixture of upper and lower case letters - and then after programming, stop doing this!
- Lack of time for direct 1:1 teaching of handwriting at school - child learned handwriting by copying letters, but formed letters in the incorrect sequence and this was never corrected early so it became habit.
- Maturity - schools expect children to learn handwriting in pre-K (private programs) and quickly in Kindergarten. Many children just would prefer to be out riding their bikes, playing with blocks, than working on coloring, drawing, writing letters. Handwriting used to be taught to six year olds many years ago, but now is pushed into lower and lower grades.
- Learning disabilities, dyslexia, poor spelling, poor visual memory
- Other diagnosis such as ADD, PDD, ADHD, Aspergers syndrome
- In 1990, Bergmann did a study of 447 adults - and 80 percent had a mature, tripod grip on a pencil. The majority of children do not have a tripod grip on a pencil now days. They have been exposed to pencils and crayons at an early age, before their hand had a chance to mature. Three year olds seek stability on a pencil, and will use funky grips to achieve stability. By age 4 or 5, a child needs fluidity with a pencil to make a pencil draw letters, more detailed drawing, etc - but the funky grips are locked in, and without intervention - a child may never develop a more manipulative grip on a pencil. Bad habits form early. Also, the research seems to indicate that most grasp patterns do not affect handwriting legibility. There are many biomechanical problems in the hand that can occur in the hand - poor intrinsic strength in the small muscles, joint laxity, stress to a joint - and funky grips may need evaluation - but a label of “dysgraphia” for these problems is misleading.

At the clinic, we are often asked if we diagnose dysgraphia. We do not because psychologists usually diagnose dysgraphia in their testing. But we do careful assessment to figure out the real picture of what is going on and then give interventions based on what we see. Luckily, most of the students who come in with a diagnosis of dysgraphia, walk out with good handwriting. But we do like to look at the student as a whole, and recommend a plan to help all areas.

## Dysgraphia – 3 main types according to Duel (1994)



According to Duel, there are three main types of dysgraphia. At the clinic, we look at all areas, to come up with a plan of intervention. Each type of dysgraphia has its own treatment - one would not want to treat a student with the same interventions for each type!

Below are the different types of dysgraphia and possible treatments we may recommend:

### ◆ Dyslexic dysgraphia:

Composition	Poor legibility, Poor spelling
Copying of Written Text	Relatively Preserved
Fine motor	Normal

The term “dyslexic” dysgraphia is probably not a true description. Students that seem to have problems in this area seem to be more in line with a diagnosis of a disorder of written expression. Many non-dyslexic children COULD have a disorder of written expression. Likewise, many children with dyslexia demonstrate these problems too.

#### TREATMENT:

1. Handwriting intervention with a therapeutic, multi-sensory handwriting program for K – 1<sup>st</sup> grade – just to make sure that the child has handwriting down so that handwriting does not contribute to problems with written expression.
2. Multisensory cursive program in 2<sup>nd</sup> grade or 3<sup>rd</sup> grade – just to make sure any part of handwriting contributions is eliminated.
3. Assistive tech for spelling/written expression/ text to speech – we do evaluations and training and have fun classes on this. If a student qualifies for 504 or special education services, then often the school can recommend an assistive technology evaluation
4. We have writing literacy classes that will go back and work on grammar, composition, punctuation rules, compensation techniques for poor spelling, etc (see our writing literacy brochure)
3. Hand held spell checker (sometimes with text to speech).
4. Keyboarding instruction – ALL kids need this but in particular students with a disorder of written expression. We have multi-sensory keyboarding classes.
5. Dyslexia program in the public schools if the student qualifies as dyslexic.
6. Good vision exam
7. Speech therapy if there is a receptive or expressive language delay.
8. Testing by the school district to qualify for services may be indicated. We also can make referrals to testing and diagnostic centers.

◆ Motor dysgraphia

Composition	Poor legibility, Preserved spelling
Copying of Written Text	Poor
Fine motor	Abnormal



- ◆ TREATMENT:
- ◆ 1. Work on fine motor skills, evaluate grasp
  - ◆ 2. Take through a multi-sensory therapeutic handwriting program
  - ◆ 3. Grasp class is 1st—5th grade, (if needed)
  - ◆ 4. Retrain the Brain/Callirobics type exercises
  - ◆ 5. Get on smallest paper - CR paper if possible

- ◆ Sometimes attentional issues, vision issues may contribute to motor dysgraphia - evaluate,
- ◆ Modify copying from board, teacher notes, dictation, keyboarding is sometimes helpful.

**Spatial Dysgraphia** - due to a defect in understanding of space

Composition	Poor legibility, Preserved spelling
Copying of Written Text	Poor
Fine motor	Normal



TREATMENT:

- ◆ Multi-sensory handwriting Program
- ◆ Cursive program in 2nd.3rd grade if visual motor skill at 6 yr level
- ◆ One Hour to Legibility Program – quick techniques for sizing, spacing, etc and legibility techniques.

## What to do if a child truly has dysgraphia?

Sometimes, but not often, we do see children, that despite intervention for specific targeted areas such as fine motor or visual motor skills, continue to have challenges with handwriting - although we typically see some improvement, even in students with severe problems. We have some children whose fine motor skills are truly affected in many areas, not just handwriting, and despite intervention, handwriting is affected. We see some children who have a significant visual motor delay, and while this usually responds to intervention with multi-sensory handwriting techniques, the child will still be significantly affected. Most of the time, we see these children also have a co-diagnosis. Many children with ADHD have such impulsive and fast handwriting, and they may not be attending well enough to slow down. Many children with PDD or Aspergers have a co-diagnosis of delayed fine motor skills, and poor sustained visual attention to the letter formation. Some children have significant enough learning disabilities, that they cannot keep up with the written work when it involves composition, taking notes, etc. We also sometimes see children with physical problems in the hand, muscular problems, neurological problems, etc which can affect handwriting. Some children may have an idiopathic tremor, significant joint laxity, or even problems with tendons and biomechanics of the hand. We have even referred some children to hand surgeons/.

For these children, there are accommodations that the school can provide. The child would need to qualify for 504 or special education. Some common modifications might be to have teacher notes for lectures, since the child may have trouble taking notes legibly when a teacher is talking and diagramming on the board. Some students may need more time to take a test. For written expression, many students might use keyboarding, so that editing and spell check can be done through software. There are many software products that are commonly on the market which has integrated spell checkers and text to speech, so that a child can hear the paragraph read aloud. Some students may need a portable keyboard such as an alphasmart, Dana, Neo, or Fusion. Some children can just use a handheld spell checker. Many students may be helped through tape recording lectures. All of these modifications are usually available, but are put together by a team approach, through testing and observation in the students educational setting. Parents have a right to request an “assistive technology” evaluation at IEP meetings.

To truly get the appropriate services for your child, we recommend that the parent understand the components of dysgraphia, and to first see if improvement has been noted through therapeutic interventions. By the parent being empowered to know what services a child can receive, the parent will know what to ask for in the educational setting and appropriate modifications can be made for the student.

**Recommendations for treatment at different age levels: Please refer to individual brochures on our website for descriptions of each class, etc.**

Preschool :

- multisensory handwriting class or private therapy incorporating fine motor skills training and grasp development activities
- Possible home program to work on fine motor skills
- Home program to work multi-sensory on letter formation

Kindergarten:

- multisensory handwriting class or private therapy incorporating fine motor skills training and grasp development activities
- Possible home program to work on fine motor skills
- Home program to work multi-sensory on letter formation
- Reversal techniques for letters and numbers AS the child is learning letters and numbers
- Vision exam by an optometrist
- Referral to a vision specialist for vision therapy if there are significant problems with tracking, convergence, using the eyes together, etc

First Grade:

- multisensory handwriting class or private therapy incorporating fine motor skills training and grasp development activities
- Middle of first grade - stop trying to change major problems in sequencing letters (ie, kids who do bottom to top, funny sequencing) and work more on sizing of letters, touchpoints on the writing lines, etc.
- Grasp class if there is a need
- Home program to work multi-sensory on letter formation
- Remedial reversal techniques for letters and numbers
- Vision exam by an optometrist
- Referral to a vision specialist for vision therapy if there are significant problems with tracking, convergence, using the eyes together, etc

Second Grade:

- WHAM class for print
- Cursive class if in private school and they are teaching it, and have expectations for students to use cursive
- Remedial techniques for reversals of letters and numbers
- Begin using hand held spell checker if poor speller.
- Tutoring for reading, if this is a problem
- Possible evaluation by the school or an outside testing center
- Many children can improve handwriting, but then had a couple years with poor, illegible handwriting prior to intervention, so they have lost skills in editing grammar, punctuation, capitalization rules, and may also show poor spelling. We recommend a writing literacy class (Pirates or Heroes) where our teacher reteaches these skills. The student usually does well, since handwriting has been improved, and the student can read written work to edit. Please refer to our writing literacy brochure.

Third grade through 5th grade:

- multisensory cursive class incorporating fine motor skills training and grasp development activities
- WHAM class for print legibility or multisensory cursive class
- Keyboarding class for children with dyslexia, poor spelling, disorder of written expression, learning disabilities, etc. ALL children need keyboarding skills.
- Use of assistive technology if needed, special software for writing literacy, etc., Begin using a hand held spell checker if spelling is a problem.
- A portable keyboard (alphasmart, neo, dana, fusion, etc) IF needed, and if a student is typing 12 words per minute with home row keys. (Exception may be a child with a significant motor problem such as cerebral palsy, muscular dystrophy, etc - we recommend keyboarding, but it may have a slower words per minute, and often we begin this as early as K/1st grade in this age group.
- Vision exam by an optometrist
- Referral to a vision specialist for vision therapy if there are significant problems with tracking, convergence, using the eyes together, etc
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- Grasp class if needed.

BEFORE AND AFTER SAMPLES

June 19 – 28, 2006

1 hour/day Monday – Thursday for 2 weeks

B = before

A = after

One day a boy went to math class and his teacher assigned a hundred math problems!

B

Wham After  
One day a boy went to math class and his teacher assigned a

A

One day a boy went to math class and his teacher assigned a hundred math problems! His teacher also said that the class would not have recess that day. When the lunch bell rang, the teacher told the class to finish their papers first. Just then, the principal

B

One day a boy went to math class and his teacher assigned a hundred homework problems! His teacher also said th

A

abcdefghijklmnopqrstuvwxyz

## **Can Older Students and Teens Change Handwriting?**

Yes! In fact, older students and adults can usually change their handwriting after only an hour or two of instruction, but then they need to practice! There are legibility problems that develop when speed handwriting develops somewhere around age 10. The brain is faster than the hand! As students write, their hand is on the letter they are forming but their brain is several words or sentences away! The student begins to do poor closure of letters and several other handwriting errors, to “shortcut the letter” in order to have better speed! Many parents and teachers will tell a child to “use better handwriting”. However, a child really does not know the techniques to “use better handwriting!”. By teaching the child some common handwriting errors and working on sizing of letters, poor legibility can be changed rapidly! We have a WHAM class for older print legibility for 2nd -5th graders, and we usually devote 2 private sessions to students or adults 6th grade and above, to change legibility!

We also sell the One Hour to Legibility Program to school districts nationwide. This program teaches many of the legibility techniques that we use in the clinic.

Products available from:

[www.FirstStrokesHandwriting.com](http://www.FirstStrokesHandwriting.com)