

### Bits of Wisdom for All

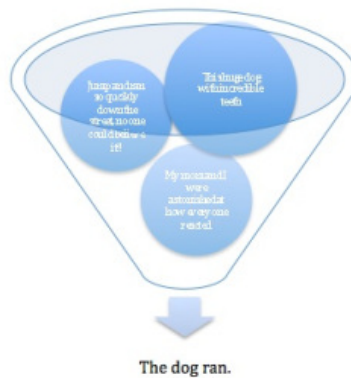
*Insights from an educational psychologist and mom*

## Finding the Right Intervention to Increase Processing Speed

Posted on [October 29, 2011](#)



Finding the right intervention to help your child increase his processing speed and writing skills is worth the effort. There are multiple issues to consider, including visual processing, fine motor skills, and language organization skills. When I think of the students that have high verbal skills and slow processing speed I often use the image of a funnel. The funnel is wide at the top and narrow at the bottom. Like sand flowing through a funnel, your child’s thoughts flow freely at the top of funnel, but need to consolidate and get in a linear form to get out the bottom of the funnel. Strong verbal skills provide a tremendous vocabulary that enriches the ability to communicate ideas. However, the struggle for the hand to form the letters on paper causes many students to write down only the basics of their idea, or to try to write the whole idea and never finish due to fatigue.



When children with high verbal skills and slow processing speed are required to take their ideas and push them through this funnel it becomes a laborious process. The funnel represents the process of taking the mental images and ideas and translating them into words on the page. It is the translation from the language center to the motor center that creates the difficulty. If you could look at the different parts of their brain, you would find that these children would most likely have highly developed language centers along with poorly developed motors sectors. Many teachers do not understand how difficult this is for a child.

An IEP (Individualized Educational Plan) with a 504 is a good idea to consider. When the WISC-IV Verbal Comprehension Index score is more than 15 points higher than the Processing Speed Index score there should be no problem getting a 504, which allows extra time on tests. The difference between the Index scores indicates that the child is able to communicate ideas verbally, but that his visual-motor processing skills are slow. Therefore, this child needs extra time on visual-motor tasks to allow him to get his ideas down on paper. I would also ask for modifications on homework and in-class writing assignments, so that the student only has to do enough to show he has grasped the concepts. Allowing the student to dictate extra practice materials is another option.

Finding the best professional help to build processing speed and writing skills is trickier. The types of professional services you can use are:

[Occupational therapy](#) to work on building the fine motor skills for writing.

- The amount of effort it takes students to write makes the whole writing process laborious. The frustrating part for the students is that they have the ideas but it's too much work to communicate them.
- I recommend the [Retrain the Brain](#) program along with [Handwriting Without Tears](#).
- An occupational therapist has additional tools that can be used to build the hand muscles needed for fluent writing.

[Vision Therapy](#), if visual tracking is an issue.

[Educational specialists, tutors](#) or a [speech and language therapist](#) can help with organizing language and writing skills. The writing skills that a student with this profile needs to learn, includes pre-writing skills to help him organize his ideas before he writes.

- Mind maps or advanced organizers such as [graphical organizers](#) are great tools.
- In other words, we want to take the grand ideas that the student has and get them onto paper.
  - This process alone will alleviate a lot of stress on the student.
- Once the ideas are on paper, they can be numbered in the order the student wants to present them in his final paper.
- You can use the format from my [5 paragraph essay worksheets](#) and modify them for writing one paragraph. Once one paragraph has been mastered, you can start on two paragraphs. The goal is to get the ideas out so that the student can look at and work with his thoughts without becoming overwhelmed.

It is important to remember that when you are building new pathways in the brain, daily practice is necessary. This means to really build the fine motor skills and/or eye muscles you need to do the exercises daily. It will only take 5 to 10 minutes of daily exercises for most students to develop increased productivity within six months.

I also think educating teachers is important so they can understand what your child is experiencing. Share any articles you like that explain the issue your child is having, along with the testing results, so the teacher realizes

this is not an issue of lack of effort, but a real learning challenge. Your communication with the teacher will also allow her to become part of your team. Letting teachers know that you understand that your child is struggling and that you are actively working to get help for him, will allow the teacher to know she has your support and that you don't expect her to do all the work alone. Building a successful educational team that works and communicates together is the best intervention.

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#### About Melissa Mullin, Ph.D.

I am the director of the K & M Center in Santa Monica, CA. Our goal is to help children reach their academic potential. We specialize in creating individualize learning programs so each of our students can do better in school and life.

[View all posts by Melissa Mullin, Ph.D. →](#)

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## 10 Responses to *Finding the Right Intervention to Increase Processing Speed*



**[jmeyer22](#)** says:

May 10, 2012 at 11:25 am

I have a daughter that was born at 23 weeks and had an IVH and diagnosed with cerebral palsy. She just had her new IEP meeting (she is 12 and in 5th grade going into 6th grade). She was classified from CD (cognitive disability ) to OHI. So since she had perceptual reasoning scores higher than the rest they put her into the category. She has the delay still . Her processing speed puts her about 3 grade levels behind the other kids in math, reading comprehension and science/social studies. Everything is really modified for her. It took her 6 hours to complete her OAA's in reading. I need a plan at home to get her processing speed up to where it should be (if possible) and to have a teaching plan to modify for her.

[Reply](#)



**[Melissa Mullin, Ph.D.](#)** says:

May 16, 2012 at 3:24 am

I do suggest OT to help build her processing speed. You have read my post on processing speed so you know the main interventions I suggest. However, in her case there is the cerebral palsy that may be complicating her progress. I do have few students with this diagnose and they too have significant processing speed issues. Learning to be a touch typist, using speech to text software like Dragon Speech, having access to class notes, having extra time on tests and reduced work can all help. There are more technology tools coming out all the time that will help her. Continue to develop her fine motor skills, but also build her skills with the tools that can assist her. The school should be able to work with you to create modifications that address her processing speed deficit and allow her to demonstrate her cognitive protential.

[Reply](#)



**Rachel** says:

May 17, 2012 at 5:17 am

Hi, I think some of the article appears missing ? It talks of Occupational Therapy for fine motor skills, Vision therapy for visual issues and then there are no further headings althoughorganisers are touched on – should there not be headings and discussions for Language and Organisational issues. Thank you.

Once the Educational Psy has assessed low processing speed, who do you get help from to ascertain the cause of the low processing speed ?

Thanks for your fantastic site and help.

[Reply](#)



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**Melissa Mullin, Ph.D.** says:

May 18, 2012 at 7:39 pm

Your question is a good one:

There are so many individual aspects to consider. One test alone cannot be used to make diagnoses. I suggest that you discuss this your evaluator. The person who did the testing should be able to look at the test results and break apart some of these issues to give more information.

For a head start, here are some things to look for in the report:

- Is there a difference between the Coding and Symbol Search scores? If Coding is low and Symbol Search is high, then most likely fine-motor skills are the problem. If both are low then you need to keep looking. If Symbol Search is low and Coding is high then the issue is with visual discrimination.
- How is the child’s handwriting? If it is hard to form letters, stay anchored on the line, or the writing is very messy and takes a long time, then fine motor skills can be the problem.
- If reading fluency is low, then discuss with the evaluator if any tracking tests were done. The WJ Visual Matching is an easy one to do, or see an eye doctor for an evaluation that includes eye tracking.
- The Beery Visual-Motor Integration (VMI) breaks the visual skills from the motor skills to see if they are different.
- If visual processing and fine motor skills are OK, then you can consider if slow cognitive processing is the issue. Does this child need more time to think on all tasks? Was it noted in the testing that the child took a long time to complete tasks, even when the task was not visual or motor?

I have revised the post. There was no link for educational therapy, tutoring and speech and language, which is where the language organization skills can be worked on, so it wasn’t highlighted to look like a heading.

I hope this helps!

[Reply](#)



**Selena** says:

September 21, 2012 at 3:34 am

Hi,  
My son had the WPPSI-III and had:  
Verbal IQ (Superior) PR = 93  
Performance IQ (Average) PR = 73

Full Scale IQ (High Average) PR = 84

Processing Speed (Average) PR= 37

I was told he would need to take longer at school work and to complete tasks.

I am concerned about the low Processing speed, but they gave me no insights on how to help.

Could you give me some insight into this? He is 7.

Thanks

[Reply](#)



**[Melissa Mullin, Ph.D.](#)** says:

September 23, 2012 at 12:10 am

Here are a few suggestions from my Frustration Profile article. You can read the whole thing at

<http://bitsofwisdomforall.com/2011/03/28/the-frustrated-learner/>

### **Processing Speed**

***Allow longer response time to:***

*respond orally to questions in class*

*complete seatwork assignments in class*

*make decisions when offered a choice of activities*

***Allow extra time for tests, usually time and a half.***

***Shorten assignments so they can be accomplished within the time allotted.***

***Provide copies of notes***

### **Writing Skills**

**Teach brainstorming, clustering and mind mapping skills.**

**Teach editing skills.**

**Allow the use of a computer.**

### **Fine-Motor skills**

***Use Retrain the Brain to build fine motor skills.***

***Use Handwriting without Tears to enhance letter formation.***

[Reply](#)



**danielle** says:

October 5, 2012 at 1:18 pm

my son is 15yrs old. he was retested this year and he scored a 78 in processing speed I found the information here helpful but my son also has aspergers syndrome and i am having difficulties in finding information on how to help him. Autism creates its own set of difficulties and some of the things you would use to help an average child without Autism does not work for him. I am seriously struggling with the school. If there is any information you could give me, it would be greatly appreciated. thank you

[Reply](#)



**[Melissa Mullin, Ph.D.](#)** says:

October 12, 2012 at 10:52 pm

I don't have any details about your son, so please take what fits here and let the rest go. All students are individual learners and while we can group "types" of learners, I have learned that generalizations can be both helpful and wrong. I am assuming that the processing speed score you refer to was from the WISC, which means it was a visual-motor timed task that did not require any deep concept processing. The Processing Speed Index on the WISC can correlate to how quickly students write and how well they can look at something and write it down (copying from the board, standardized tests). Your son is 15 years old, so I would focus on building typing skills and getting him extra time on tests, if his Processing Speed is significantly below his other scores. Tools that help him organize his thoughts ([graphic organizers](#) or [Inspiration](#)) will help him be concise when he writes which decrease the amount of writing he needs to do. I hope this helps.

[Reply](#)



**Anne Quilter Goldstein** says:

November 15, 2012 at 6:35 pm

Hello. Thank you very much for this site. I live in California, and have two sons (16 and 11) with Verbal Comp Index scores much more than 15 pts. (28 and 35 difference respectively). Since they are not failing, the school will not offer them 504 accommodations. If needed they'll give extra time on tests, and the younger sons teachers will reduce i.e. math problems. Both of their verbal scores are in the high 90's. The schools say their scores need to fall 2 SD's below the mean before they are eligible for any services.

I am wondering if you know of anything written in the Ed Code regarding discrepancies between various indexes, vs a child needing to be in the lowest 2% to qualify.

Thank you,

Anne

[Reply](#)



**Melissa Mullin, Ph.D.** says:

November 29, 2012 at 11:44 pm

I am not familiar with the educational codes. I find it very unfortunate that more schools and The College Board are not allowing students with slow processing speed extra time. It used to be that having a 15 point difference between the verbal comprehension and the processing speed indexes was enough for schools and the College Board to grant time accommodations to students. However, lately I have seen students who have been denied extra time even though they had a large discrepancy on their scores. The new position seems to be that students must have a functional disability to be granted extra time on tests. What this means is that they have high potential, as your boys do, and also that they are scores on academic assessments such as the WJ demonstrate difficulty on time within a subject area. This would mean their reading fluency, writing fluency, math fluency scores would be weak. It also seems like students need a stronger background history of difficulty to be allowed additional time on tests. In other words, their processing speed issues would have caused them to struggle in elementary school as well as middle school and high school.

[Reply](#)

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