



Your Therapy Source News

Digital magazine for pediatric occupational and physical therapists.

Issue 61 - April 2014









New and Sale Products



Title: IEP Goals Related to the Common Core for OT/PT Grades 3-5

Summary: Download of 6 files to align ELA and Math standards for grades 3-5 with educationally relevant OT/PT goals

List Price: \$19.95 Sale Price until 4/30/14: \$12.95

www.YourTherapySource.com/commoncore35

Title: Finish the Picture Spring Edition

Summary: Download includes 20 pictures to copy the patterns with a Spring theme.

List Price: \$3.99 Sale Price until 4/30/14: \$1.99

www.YourTherapySource.com/holidayspring



Title: Tai Chi for Children

Summary: Complete the path from the letter to the correct word using fine motor and visual motor skills.

List Price for Electronic Book: \$15.00

www.YourTherapySource.com/taichi

Sensory Based Phenotypes for Autism?

Autism Research recently published research examining whether sensory differences can be used to classify subgroups of children with autism spectrum disorder (ASD). The Short Sensory Profile was completed on 228 children with ASD ages 2-10 years old.

The results indicated the following:

- 1. four distinct sensory subtypes were identified -
- (a) sensory adaptive
- (b) taste smell sensitive
- (c) postural inattentive

Sensory Based Phenotypes for Autism?

(d) generalized sensory difference.

2. the sensory subtypes differed from each other on two dimensions: (a) the severity of reported sensory differences; and (b) the focus of differences across auditory, taste, smell, vestibular and proprioceptive domains.

3. Upon examination of the clinical features of each subtype two possible mechanisms of sensory disturbance in autism were revealed: (a) sensory hyperreactivity; and (b) difficulties with multisensory processing.

4. Lastly, the sensory subtypes were not well explained by other variables such as age, gender, IQ, and autism symptom severity.

The researchers concluded that classification of children using sensory differences offers a possible method to identify phenotypes in ASD. In addition, further research was recommended to determine neural and physiological correlates for the sensory-based phenotypes.

Check out all of our sensory processing products at <u>http://yourtherapysource.com/sensoryprocessing.html</u>

Reference: Lane, A. E., Molloy, C. A. and Bishop, S. L. (2014), Classification of Children With Autism Spectrum Disorder by Sensory Subtype: A Case for Sensory-Based Phenotypes. Autism Res. doi: 10.1002/aur.1368

Self Regulated Strategy Development

Self regulated strategy development (SRSD) is an instructional model to teach writing strategies to students. SRSD has been researched and shown to result in significant and meaningful improvements in writing knowledge, writing quality, writing approach, self-regulation skills, and motivation. School based occupational therapists may focus on the actual skill of handwriting and also the skill of self regulation. Hopefully, the end result is the ability to function in the educational environment which included completing written assignments (getting thoughts onto paper). SRSD may work well with some of the students that you work with. In fact, as pediatric therapists we usually work with a similar model from start to finish based on our motor control backgrounds. Therefore, you are probably doing many of these already but perhaps not in this exact order.



There are six stages to SRSD:

Stage 1: Develop background knowledge. Identify what skills the student needs to complete the assignment. If any skills are lacking pre-teach these skills or utilize modifications to achieve the skills. (Translation in therapy terms – evaluate)

Stage 2: Discuss it. Make sure the student is motivated to make changes. Review the student's current performance and progress monitoring. Introduce the steps of the strategy. (Translation in therapy terms: explain evaluation findings)

Stage 3: Model it. Show the student the new strategy. Discuss the pros/ cons of the strategy. Have the student create positive statements to remain motivated throughout the writing process. Introduce goal setting. Repeat any steps as needed. (Translation in therapy terms: Teach the new skill)

Stage 4: Memorize it. Practice the new strategy until the student can perform it independently. Provide visual or written cues if needed to remember all the steps. (Translation in therapy terms: Practice in isolated setting)

Stage 5: Support it. Student gradually takes ownership and responsibility of the new strategy. This can be practiced with peer instruction, constructive feedback and positive reinforcement on the teachers part. (Translation in therapy terms: Practice in all environments, provide feedback and modify environment if needed).

Stage 6: Independent performance. The student is able to use the new strategy in different settings or various tasks. (Translation in therapy terms: Goal achieved!)

Do you see the connection between what we do in therapy and this strategy? This could be applied to any modifications or accommodation used in the educational setting. For example, it would be useful for implementing sensory diets in the school settings, teaching motor skills to participate in physical education or recess, handwriting techniques, etc. Want to read more about SRSD, read the entire article at http://www.updc.org/assets/files/resources_by_topic/literacy/SummerWriting13/Graham_SRSD.pdf.

References: Santangelo, T. et al. Using Self-Regulated Strategy Development to Support Students Who Have "Trubol Giting Thangs Into Werds". Remedial and Special Education Volume 29 Number 2. March/April 2008 78-89. doi 10.1177/0741932507311636

Modifications and Interventions for School – Reporting Forms

Product Details: Download of Electronic book with 72 pages including 66 reproducible forms and hundreds of suggested interventions. Find out more information at http://yourtherapysource.com/modifications.html

10 Easy Physical Activities to Get the Brain Ready for Testing



Research has shown that there are positive benefits for the brain from physical activity including academic achievement on test scores. With common core and state tests coming up, here are 10 physical activity suggestions to get the brain ready for testing:

1. Brisk Walking: Need something easy and quick? Line the class up and take a quick, brisk walk, outdoors if able. Change up speeds, go slow, go fast, go left and go right, throw in some stairs if possible and head back to class to take the test.

2. Recess: Would it be possible to have a quick outdoor recess before the tests? Children are usually more physically active when loose parts are available during recess, therefore be sure to include jump ropes and balls during recess versus just playground equipment.

3. Chair Aerobics: If you are tight on space and can not leave the room, turn on some music and do some quick chair aerobics. March in your seat, do large arm circles and rotate your trunk right and left.

4. Dance in Your Seat: Again, if tight on space, turn on some music but perform the dance moves from a seated position. Do the macarena sitting in a chair, stomp your feet in sitting to the ChaCha Slide, etc.

5. Shake it Out: Stand at your seat, Call out different body parts and the children have to shake that body part. Play it like Simon Says or move quickly calling out different body parts to change it up quickly.

6. Classroom Cardiac Training: Stand at your seat. Walk in place for 30 seconds, jog in place for 30 seconds, run in place for 30 seconds, jump in place for 30 seconds and finish with 30 seconds of jumping jacks.

7. Yoga Poses: Need to sneak in some movement but keep it calm and quiet? Try a quick yoga routine of standing poses ie mountain pose, standing crescent pose, warrior pose, chair pose, etc. Check out Classroom Activity Posters at http://www.yourtherapysource.com/cap.html for easy standing exercises.

8. Animal Actions: Move like various animals around the room. Need ideas? Check out the Monster Movement Transition Cards for a full list of animals A-Z at

http://www.yourtherapysource.com/monstermovements.html.

9. Let the Kids Lead: Out of ideas? How about have the students take turns leading the class in some quick wake up exercises? If the kids can not think of ideas, what if they come up and demonstrate sports they participate in (ie karate, swimming, basketball, etc) and the rest of the class mimics their actions?

10. Stretch It Out: Have the class perform some gentle stretching before they are hunched over their tests for hours. Keep it simple such as 5 Postural Exercises Using a Classroom Chair at http://www.yourtherapysource.com/tipsheetsfreebie.html

<u>IEP Goals Related to the Common Core for OT/PT K-2:</u> This electronic document is a large goal bank for school based occupational and physical therapy that is aligned with the English Language Arts (ELA) and Mathematics common core standards for grades K-2. Get more information at http://www.yourtherapysource.com/commoncorek2.html

Gross Motor Skills in Children with Autism



Gross Motor Skills in Children with Autism The Journal of Child & Adolescent Behavior published research comparing the gross motor skill performance on 21 children with autism spectrum disorder (ASD) and 21 age matched peers (5-10 years) using the Test of Gross Motor Development-2 (TGMD- 2).

The motor performance scores on the TGMD-2 were compared. The following results were recorded:

1. For the locomotor subtest, 67% children with ASD received poor standard scores and 40% of scores were very poor.

2. For object control skills, about 60% children with ASD had poor standard scores and 33% of scores were very poor.

3. For overall gross motor quotient scores, 81% children with ASD were below 79 and classified as poor and about 76% children scored below 70 and received very poor rating.

4. statistical analysis revealed significant performance difference between children with ASD and typically developing children.

The researchers concluded that regardless of how the children with ASD were classified there were delays in gross motor skill performance. This information is important in order to implement appropriate intervention programs that can effectively address the delayed object and locomotor skill performance in children with ASD.

Reference: Liu T, Hamilton M, Davis L, ElGarhy S (2014) Gross Motor Performance by Children with Autism Spectrum Disorder and Typically Developing Children on TGMD-2. J Child Adolesc Behav 2: 123. doi:10.4172/jcalb.1000123

Photo used with Creative Common License from http://algerblog.blogspot.com/2011_04_01_archive.html

Need ideas? Check out **Educational Sensory Motor Activities -** Download of an electronic book of 40 reproducible sensory motor activities that incorporate motor skills with learning language arts, reading, math, teamwork and cooperation.

Find out more at http://yourtherapysource.com/educationalsensorymotorpdf.html

5 Tips to Help Students Be Independent with Modifications

5 Tips to Help Students Be Independent with Modifications

Modifications to the school environment can greatly benefit students with disabilities. School staff needs to teach students to be independent in making sure that modifications are in place in the learning environment. It is not our job to simple recommend modifications it is also our job as educators/therapists to ensure that the modifications are carried out on a daily basis. Without the student's approval there will not be follow through on modifications in the classroom.

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Here are 5 tips to help students be independent with modifications in the classroom:

1. Explain to the student the benefits of modifications. Provide before and after data or examples directly from the students academic work.

2. Educate the student on modifications – Explain to the student different supports that are available to him/her.

3. Review on what has worked in the past – If a student has tried a certain modification with no overall changes keep that in mind. Things change over time and sometimes a certain modification can be worth revisiting.

4. Teach the student self-advocacy skills. Practice having the student explain to school staff why they need certain modifications. This will be a life long skill to master.

5. Reassure the student that it is okay to ask for help. We all need help with certain aspect of our lives. No one is perfect. Every student needs extra help at some point.

<u>Modifications and Interventions for School – Reporting Forms</u> This printed or electronic book provides pediatric therapists with over sixty, reproducible reporting forms with hundreds of suggested modifications and interventions for students. FIND OUT MORE INFORMATION http://yourtherapysource.com/modifications.html

5 Ways to Snap Out of a Funk



Ever have the blues at your job? Feeling like you are stuck in a rut? Here are 5 ways to snap out of a funk as a pediatric occupational or physical therapist:

1. Remember why you chose this profession – to help others.

2. Connect with other therapists to ask for help establish a professional learning network or monthly team meetings with colleagues to ask for suggestions or to vent. Need activity suggestions to mix things up a bit? Check out all the free ideas at YourTherapySource.

3. Have other interests – don't obsess over your job. Try to leave it at work and go home for your own leisure activities.

4. You are not alone – all therapists go through phases where you feel like you are spinning your wheels.

5. Realize you may not always be right – sometimes the parent or teacher would like a different end result than you would for a child. If you always insist on your way or the highway your job will be very tough. Compromise and try to move on – you will feel happier!

Gait Analysis and Visual Input in Children with Hemiplegia



The *Journal of Physical Therapy Science* published research on the effects of the modulation of optic flow speed on gait parameters in children with hemiplegic cerebral palsy. Optic flow is the pattern of motion perceived at the retina, which specifies the direction of locomotion and provides vital feedback concerning an individual's regulation of walking velocity.

Gait analysis was completed on 10 children with hemiplegic cerebral palsy under 3 different conditions of optic flow speed: slow, normal, and fast optic flow speed. The children walked across the walkway of a GAITRite system, while watching a virtual reality screen, and walking velocity, cadence, stride length, step length, single support time, and double support time were recorded.

The results indicated the following:

- fast optic flow speed (2 times the normal speed) significantly increased walking velocity, cadence, normalized step length, base of support, and single support cycle of both lower limbs.
- the slow optic flow speed (0.25 times the normal speed) yielded a significantly decreased walking velocity, cadence, normalized step length, base of support, and single support cycle for both lower limbs.

The researchers concluded that: gait training involving modulation of the optic flow speed is feasible and suitable for resolving abnormal gait patterns in children with hemiplegic cerebral palsy.

Reference: Hyungwon Lim, PhD, PT. Effect of the modulation of optic flow speed on gait parameters in children with hemiplegic cerebral palsy. J Phys Ther Sci. 2014 Jan;26(1):145-8. doi: 10.1589/jpts.26.145. Epub 2014 Feb 6.

Full text article at https://www.jstage.jst.go.jp/article/jpts/26/1/26_jpts-2013-312/_pdf.

Collaborative Fine Motor Program for OT and Teachers



Ingrid King, OT, has written research on a collaborative fine motor program for 5 year old children in New Zealand. A two phased mixed method design was utilized with 19 students in a 5 year old classroom (none of the students were receiving occupational therapy nor had a diagnosis). To measure changes in fine motor skills a group pre- and post-test was performed. A five year follow up study was completed to determine the teacher's perceptions. The intervention consisted of a fine motor program for the entire class led by the occupational therapist (which were then repeated by the teaching staff) one time per week for 8 weeks. Following the first 8 weeks, an additional fine motor program was completed for 12 weeks for only 6 of the students.

The results indicated the following:

- a significant difference was found in the groups fine motor performance following the the collaborative teaching training
- the teacher continued to use the knowledge and activities after the training was complete.

You can read the entire study here http://docs.com/ZH6H. Find out more about the fine motor program used for the study at www.myfantasticfingers.com

Reference: King, I. Then and Now: Addressing Young Students' Fine Motor Needs Through a Collaborative Modelling Teacher Training Intervention. Copyright 2014. Ingrid C. King www.myfantasticfingers.com

Need other ideas for a collaborative approach to school based occupational therapy? Check out the <u>Coleman Curriculum for School Based Occupational Therapy</u> at http://yourtherapysource.com/coleman.html

Hot Topics

Exercise Training for Wheelchair Propulsion

Clinical Rehabilitation published a research review on whether different types of exercise training programs are effective in improving wheelchair propulsion capacity. Studies were divided into four training types: interval, endurance, strength, and mixed training. The results indicated the following:

1. Twenty one studies were included representing 249 individuals with spinal-cord injury (50%), various diagnoses like spina bifida (4%), cerebral palsy (2%), traumatic injury, (3%) and able-bodied participants (38%).

2. All interval training studies found a significant improvement of 18-64% in wheelchair propulsion capacity.

3. Three out of five endurance training studies reported significant effectiveness.

4. Overall, methodological quality was generally poor and there were only two randomised controlled trials.

The researchers concluded that exercise training programs seem to be effective in improving wheelchair propulsion capacity. Although there was remarkably little research, particularly for individuals who do not have spinal-cord injury.

Reference: Zwinkels M et al. Exercise training programs to improve hand rim wheelchair propulsion capacity: a systematic review. Clin Rehabil. 2014 Mar 10. [Epub ahead of print]

Fitt's Law to Compare Pointing Device Use

Have you ever heard of Fitt's Law?

"Fitts's Law allows to predict a time it takes a user to point at an object using a specific pointing device (such as a mouse, trackball, trackpad, or even a finger)".

At a website about Fitt's Law - http://fww.few.vu.nl/hci/interactive/fitts/, you can collect data on how long it takes a user to point at an object comparing devices – skip to step 20 in the tutorial to go directly to comparing pointing devices. For example, you want to collect data on whether a student is faster using a traditional mouse or a track pad. This website takes you through a series of exercises where you click on various points using different pointing devices. Then a graph is generated comparing the time is takes to click using the two devices.

If you go through the entire Fitt's Law presentation at the website, it is very informative on determining the location, distance and size of buttons and other elements. It explains why certain locations are easier to click on and view.

Thought I would pass it along to those who are involved in assistive technology evaluations. Seems like it would be a great starting point to compare a student's abilities to use pointing devices.

Reference: Fitt's Law Demonstration. Retrieved from the web on 3/5/14 at http://fww.few.vu.nl/hci/interactive/fitts/s

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Mini Sponge Blocks



Make these mini sponge blocks to encourage strengthening in the fingers, visual spatial skills, visual motor skills and grading of movements. The bonus is that they are super light to carry around from school to school if you are a therapist who travels from school to school or a parent who needs to bring along some busy bag sometimes.

Read all the details and suggestions at Your Therapy Source http://yourtherapysource.com/freeminisponge.html

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Vertical Puzzles



Here is a simple way to make vertical puzzles. By hanging up the puzzles on the wall or in an upright position you encourage an increase in upper extremity active range of motion, wrist extension and can sneak in some gross motor skills (ie squatting and reaching up high).

Go to http://yourtherapysource.com/blog1/2014/03/19/vertical-puzzles/ to get all the details.

Motor Skill Activities with Colored Dot Stickers



Gross Motor and Fine Motor Activity with Colored Dot Stickers

I am not sure why but I just LOVE colored dot stickers. They are cheap and versatile for all sorts of activities that combine movement with learning. Here is my latest idea using these awesome stickers:

1. Write some numbers on colored dot stickers. For this example, I wrote the numbers 1-4 twice. Draw matching circles with the same numbers on a piece of paper. For this example, the matching numbered circles were horizontally across on the paper.

2. Place the colored dot stickers randomly on the floor (carpet works best so you can pull them off easily and they will still stick to paper). For this example, I placed the colored dots around a balance disc.

3. Ask the child to squat down to get a colored, number dot. The child then matches the sticker number dot to the ones on the white paper. Continue until all the numbered dot stickers are matched up to the numbers on the paper.

4. Finally, the child draws a line connecting the matching colored number dots.

Read more at http://yourtherapysource.com/blog1/2014/03/13/gross-motor-and-finemotor-activity-using-colored-dot-stickers/

"Spinning" Exercises



Combine fine motor and gross motor skills with this free printable to try some "spinning" exercises. To get the details and download the printable go to http://yourtherapysource.com/freespinningtop.html

Flower Fine Motor Activities



Here are three different ideas using the same materials to encourage fine motor skills. To find out how to make the activities go to Your Therapy Source at http://www.YourTherapySource.com/freeflowers

5 Free Positive Reinforcement Ideas for Therapy

As the school year progresses, it can be hard to motivate children to participate in therapy sessions or to complete in class or home exercise suggestions. Here are 5 ways to use positive reinforcement during therapy sessions:

1. Therapy Tickets: Earn tickets for following rules, completing exercises, etc. Place your tickets in a cup and see if you win the prize! Download the free printable at http://yourtherapysource.com/freetherapyticke ts.html

2. Reward Box: When the box is full, the child earns a reward. Print out the freebie and make the box with tickets at http://yourtherapysource.com/rewardbox.html



5 Free Positive Reinforcement Ideas for Therapy



3. Reward Punch Cards for OT/PT and Speech: Give the child a punch card. Determine what skill the child will have to accomplish to get a punch hole. When the 10 holes are punched the child wins a reward. Get the free punch cards at http://yourtherapysource.com/freepunchcards.html

4. Therapy Bingo: Print out the bingo page and fill in activities of your choice. When child completes the activity or follows a rule, color in the box. When the child achieves 4 items in a row, he/she wins a reward. Another option is to complete the whole board to receive a reward. Download the bingo board at http://yourtherapysource.com/therapybingofree.html

5. Token Economy System for OT/PT/Speech: The child completes certain tasks to earn "therapy money". That therapy money is then exchanged for rewards. Don't forget that you can get "fined" as well therefore losing money. Great way to review money skills while rewarding appropriate behavior. Print out the free printables at http://yourtherapysource.com/freetoken.html

Need ideas for cheap, therapeutic rewards? Read some previous blog posts:

Positive Reinforcement Group Reward ideas at http://yourtherapysource.com/blog1/2010/09/03/positive-reinforcement/

Sneak in fine motor practice when distributing rewards at http://yourtherapysource.com/blog1/2011/10/23/fine-motor-rewards/



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