

Digital magazine for pediatric occupational and physical therapists.

Issue 49 - April 2013



New and Popular Products

Sidewalk Chalk Fun and Games

Sidewalk Chalk Fun and Games

This is an electronic pdf document of 30 games and activities to encourage fine and gross motor skill development with sidewalk chalk.

Retail Price: \$4.99



Your Therapy Source Inc

Sale Price until 4/30/13: \$1.99

www.YourTherapySource.com/sidewalk



Active Arms

This is an electronic book of 30 activities that encourage fine motor skills, upper extremity range of motion and coordination activities. If you are looking for some new ideas for individuals with moderate to significant motor delays this ebook is filled with creative, fun activity ideas using common items.

Retail Price: \$5.99

Sale Price until 4/30/13: \$2.99

www.YourTherapySource.com/activearms

10 Ideas to Get Parents More Involved

Getting parents involved with occupational and physical therapy at school can be very beneficial for carry over of therapeutic activities outside of school time. Here are 10 ideas to get parents more involved:

- 1. Offer parent workshops on different topics in the evening.
- 2. Have an orientation for new parents in the beginning of the school year.
- 3. Host an evening on technology tips offering information on assistive technology to apps.
- 4. Host a health and fitness night with the benefits of different physical activities and sports.

5. Have an exploration night - invite families to come and explore new and old equipment and toys that help to carry over therapy goals.

- 6. Throw a party. The students could prepare food and serve it to the parents and families.
- 7. Host a family game night. Play all inclusive games so that everyone can participate.

8. Pick different students of the month. Each month a student can be the star. Parents can send in pictures and stories about what the child does at home.

9 Put on a show. Maybe perform an ethnic dance or create musical instruments to play and invite the families to come and watch.

10. Ask parents to volunteer. Maybe you need help cutting out materials for a project or creating a piece of adaptive equipment. Or perhaps, parents would be willing to have a fund raiser to raise money for specialized equipment.

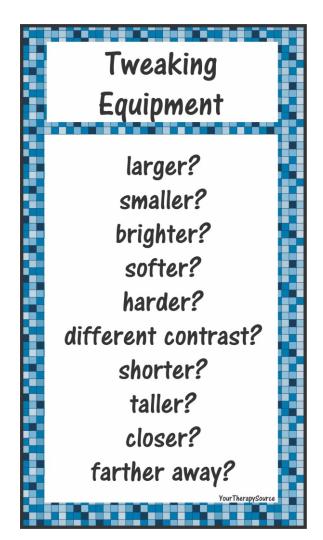
Tweaking Equipment

Pediatric therapists frequently modify or adapt equipment for children. Whether it be a writing utensil or sports equipment, sometimes children don't need a specialized tool to participate in the activity but just small adjustment to the typical equipment. Here is a simple example - perhaps a child would write more legibly with a shorter pencil versus a pencil with a grip on it. Maybe a student could hit the ball further in gym class using a lighter bat. When you are considering changes to equipment start with the most simple ideas and make little changes if possible.

In general, you can ask yourself would the child be able to participate more independently or successfully if the equipment was:

larger? smaller? brighter? softer? harder? different color or contrast? shorter? taller? closer? farther away?

Sometimes, we are quick to jump to an off the shelf product or a larger modification when all the equipment may need is a little tweak. What would you add to the list of simple changes?



Handwriting and Visual Motor Skills

Writing Forces Associated with Pencil Grasp Patterns

The *American Journal of Occupational Therapy* published research on the writing forces associated with four pencil grasp patterns in 74 children in grade 4. The students completed a handwriting assessment before and after a copy task and grip and axial forces were measured. The results indicated the following:

- no kinetic differences among grasps, whether considered individually or grouped by the number of fingers on the barrel.
- when grasps were grouped according to the thumb position, the adducted grasps exhibited higher mean grip and axial forces.
- Grip forces were generally similar across the different grasps.
- Kinetic differences resulting from thumb position seemed to have no effect on speed and legibility.

The researchers concluded that interventions for handwriting difficulties should focus more on speed and letter formation than on grasp patterns.

Reference: Schwellnus H, Carnahan H, Kushki A, Polatajko H, Missiuna C, Chau T. Writing forces associated with four pencil grasp patterns in grade 4 children. Am J Occup Ther. 2013 Mar;67(2):218-27. doi: 10.5014/ajot.2013.005538.

Predictability of a Visual Motor Task

Developmental Medicine and Child Neurology published research on visual motor deficits in very preterm children. There were 58 very preterm children (average age 7 yr 6 months and average gestational age 29.2 weeks) and 64 age matched full term children in the study. The participants IQ was measured and a diagnosis of developmental coordination disorder (DCD) was given if the child scored below the 15th percentile on the Movement Assessment Battery for Children. The children traced a trail on a touch screen using their index finger to evaluate visual motor performance. In one condition the children traced a predictable path and in the other condition it was an unpredictable or unstructured path.

The results indicated the following:

- 46% of the very preterm children received a diagnosis of DCD compared to 16% of the full term children
- in the predictable path condition there was no difference in visual motor performance between the very preterm and full term children
- in the non structured path condition the very preterm children had poorer visual motor performance whether DCD was present or not

The researchers concluded that the predictability of a visual motor task plays a crucial role in very preterm children with DCD and without DCD.

Reference: Jorrit F De Kievie et al. The crucial role of the predictability of motor response in visuomotor deficits in very preterm children at school age. Developmental Medicine & Child Neurology. Article first published online: 17 MAR 2013 DOI: 10.1111/dmcn.12125

Twitter and #hashtags

Here are 5 tips to getting started on Twitter:

<u>1. Create an account.</u> Go to http://www.Twitter.com and create an account.

<u>2. Organize tweets.</u> If you plan on following many people I recommend that you use a tool like TweetDeck or Hootsuite. These tools allow you to follow many tweets and manage them. It can be become very difficult to read all the interesting information that comes in if it is not organized. You can create columns of different topics i.e. OT, PT, assistive technology, autism, ADHD, etc. This makes all the "tweets" more manageable to read and follow. If you want more than one Twitter account, for example personal and professional, you may want HootSuite to manage those accounts.

<u>3. Send a message.</u> Type your 140 character or less message in the box at the top of the page and hit update or enter. If you are referencing a website you have to include http:// before the www part of an Internet address. Most people shorten the web address to leave more room for the message. To do this you can create a tiny url right in TweetDeck. Paste in the full web address and hit the shorten button.

4. Find people to follow. This can be a slow process. You can search keywords in Twitter via TweetDeck or Twitter Search. For example, type in the keyword occupational therapy and see what comes up. If you find any interesting tweets, choose to follow that person. To perform a more specific search use a hash tag. A hash tag in twitter is the # sign. You put that before words when you want to tag a tweet. For example, we frequently use the hash tags #pediOT, #pediPT, #slpeeps (speech therapy) #handwriting, #cerebralpalsy, #autism, #sensoryprocessingdisorder, #specialeducation and #specialneeds.

Remember when you use or search for hashtags keep it all one word. Even if you do not have a Twitter account, you can type in these hashtags into a search engine and you can view what is trending on Twitter. For those with Twitter accounts it can be hard to keep up with all the tweets. This is a simple way to see what you may have missed. Just type in the hashtag and you will see the previous tweets about the topic. Here is the current search for #pediOT - https://twitter.com/search?q=%23pediot.

Here are 2 great Twitter accounts that I recommend to follow for pediatric therapy topics: @YTherapySource - pediatric occupational and physical therapy news, research, ideas and activities. @pediastaff - more pediatric OT, PT and speech news stories, research and tips.

5. Retweet, Reply or Direct Message. Here is some Twitter lingo to review. When you retweet a message, you can resend a message to all of your followers that you think is important. For example, you read a post that we wrote and you want to share it with others. You can just click on the retweet button in TweetDeck or type in RT@YTherapySource and paste the message.

You can reply to any message by simply typing in the twitter account name with the @ sign before it i.e.@YTherapySource - thanks for all the great information.

If you want to send someone a message but do not want all of your followers to view it, you can direct message someone or DM. You can click on the direct message button in TweetDeck or type in D@YTherapySource followed by your message. This tweet will only be seen by the person you are sending it to.

Twitter can be a great source of information. Give it a try!

Ostracism and Physical Activity



Pediatrics published research on a small study of 19 children (average age 11.7 years old) to assess the effects of simulated ostracism on children's physical activity behavior, time allocated to sedentary behavior, and liking of physical activity. In the first experimental session, children played a virtual game where they were exposed to ostracism followed by a 30 minute open gym period where they could choose physical or sedentary activities. In the second experimental session, the children played a virtual game where they were included followed again by the 30 minute free play gym time. The results indicated the following:

- the children accumulated 22% fewer accelerometer counts and 41% more minutes of sedentary activity in the ostracized condition.
- liking of the activity sessions was not significantly different between the ostracized or included conditions.

The researchers concluded that ostracism may add to a child's lack of physical activity.

Not sure we needed a research study to see what many of us observe but it is a very interesting way to try to determine that ostracism is causing a decrease in physical activity levels of children. If children have deficits in motor skills they have trouble participating in physical games. Since many childhood games include physical activity they may be ostracized or choose not to participate due to their limitations. As a result of this ostracism, they may then participate less.

Perhaps occasionally applying a more universal design approach to teaching motor skills in the younger years would help to decrease ostracism of children. Here are three suggestions:

- try playing cooperative games or games with no winners and losers.
- sometimes modify the rules so that all children can succeed.
- change the size of the playing field
- provide alternative equipment to increase the success of all the children.

Reference: Jacob E. Barkley, Sarah-Jeanne Salvy, and James N. Roemmich. The Effect of Simulated Ostracism on Physical Activity Behavior in Children. Pediatrics 2012; 129:3 e659-e666; published ahead of print February 6, 2012, doi:10.1542/peds.2011-0496

Hot Topics

Physical Disability After Inpatient Rehabilitation

Pediatrics published research on the outcome of 13798 children (seven to eighteen years old) with traumatic injuries following inpatient rehabilitation. The following results were reported after an average 3 week length of stay:

- functional limitations were reduced
- children still tended to have residual physical disabilities
- a median admission grade of 1 and a median discharge grade of 4 was recorded (a grading system of the Functional Independence Measure was used where grade 1 was total assistance and grade 7 was full independence)
- children with spinal cord injuries, either alone or in combination with other injuries, had lower functional grade at discharge, longer lengths of stay, and more comorbidities at discharge than those with traumatic brain injuries, burns, and multiple injuries.

Reference: Mark R. Zonfrillo, Dennis R. Durbin, Flaura K. Winston, Huaqing Zhao, and Margaret G. Stineman Physical Disability After Injury-Related Inpatient Rehabilitation in Children. Pediatrics 2013; 131:1 e206-e213; published ahead of print December 17, 2012, doi:10.1542/peds.2012-1418

Treadmill Training versus Overground Walking

Clinical Rehabilitation has published research comparing the effects of a 7 week treadmill training or overground walking program for children with cerebral palsy. There was 36 participants in the study with cerebral palsy levels I-III on the Gross Motor Functional Classification System who were randomly assigned to the treadmill or overground walking group. They completed a 7 week, 2 sessions per week, program in the physical therapy clinic. The results indicated the following:

both groups showed improvements on the 6 Minute walk test, timed up-and-go test, Pediatric

Evaluation Disability Inventory, Gross Motor Function Measure-88, and the Berg Balance Scale. the treadmill training group showed greater improvements both after treatment and during follow up sessions

The researchers concluded that treadmill training was more effective than training with overground walking with respect to functional mobility, functional performance, gross motor function and functional balance in children with cerebral palsy.

Reference: Grecco LA, Zanon N, Sampaio LM, Oliveira CS. A comparison of treadmill training and overground walking in ambulant children with cerebral palsy: randomized controlled clinical trial. Clin Rehabil. 2013 Mar 15. [Epub ahead of print]



Follow us on Pinterest www.Pinterest.com/ytherapysource	Follow our blog at www.YourTherapySource.blogspot.com
Follow us on Facebook www.Facebook.com/YourTherapySource	Follow us on Twitter www.Twitter.com/YTherapySource

Lucky Exercise Eggs

Here is a simple game. Gather some plastic Easter eggs. Hide a few plastic bunnies or any trinket inside a few eggs to make lucky eggs. Place the eggs in a basket.

Choose any exercise or activity or let the child choose to demonstrate an exercise or stretch. Once completed, the child reaches into the basket to pull out an egg. If a lucky egg is selected, the child gets a reward. It could be a sticker, small treat or a quick, free choice game.



The children I work with were very motivated to complete the exercises to see if they could find a lucky egg. For rewards they got to pick a free choice game on the iPad (ie Tap the Frog, Fruit Ninja, Perry?) These games are less than 30 seconds to participate in so it was easy to incorporate and move on to the next exercise.

This was a simple, cheap game using leftover plastic eggs that was highly motivating for older children.

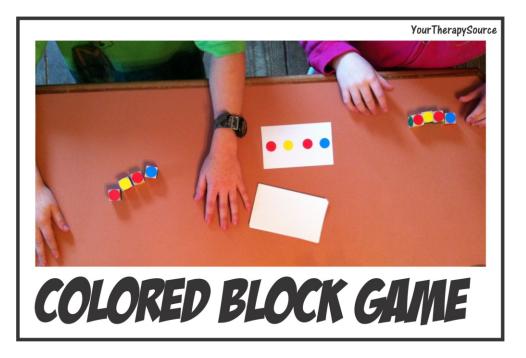


 Follow us on Pinterest
 Follow our blog at

 www.Pinterest.com/ytherapysource
 www.YourTherapySource.blogspot.com

Follow us on Facebook www.Facebook.com/YourTherapySource Follow us on Twitter www.Twitter.com/YTherapySource

Colored Block Game



Preparation/ How to Play:

Put colored dots on small blocks.

Put four colored dots on index cards.

Give each person four blocks.

Roll the blocks.

Quickly match up the colored blocks to the dots on the card.

Visit

http://yourtherapysource.com/videocoloredblocks.html to watch the video.



Follow us on Pinte www.Pinterest.com/yther		
Follow us on Faceb www.Facebook.com/YourTh		

Celebrate OT Month!!!!



tappy Occupational Therapy Month • Happy Occu ABCDEF GHJK OVE MNOP RS **NXYZ** Happy Occupational Therapy Month . Happy

© Your Therapy Source Inc www.YourTherapySource.com

ational Therapy Month

TUDDU

Occupational

neradu

Your Therapy Source Inc.



www.YourTherapySource.com

Visit www.YourTherapySource.com

for a full list of our products including:

- documentation forms
- sensory motor activity ideas
- sensory processing resources
- visual perceptual activities
- music downloads

We ship digital items worldwide for FREE!

Visit our website for FREE hand-outs, articles, free newsletter, recent pediatric research and more!