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Dear Leslie:

Dr. Kent Johnson has asked me to write to you and describe how we monitor and practice the "Big 6 + 6" with young children.

The "Big 6 + 6" are basic fine motor movements that all individuals must have at regular performance rates if they are to be proficient at manipulating any objects for stimulation, at self-help skills, at mobility, non-verbal communication, etc.

The "Big 6" is a convenient label for the movements of reach, point, touch, grasp, place and release. The "+ 6" stands for pull, push, shake, squeeze, tap and twist.

If you are working with children who have developmental delays it is often extremely helpful to practice and measure these skills in isolation as well as practicing and measuring them as compounds.

Another essential element you must have to work on these skills are channels. We use channels to describe the input we give to the child and the output or the response the child makes. We pay close attention to getting children to performance standards on each channel and watch carefully their performance levels when we shift to the next more sophisticated channel. A frequent channel sequence for "Big 6" topics might flow like this:

Input	Output	Abbreviation
Guide	Reach	G/Reach
Touch	Reach	To/Reach
Hear-Touch	Reach	H-To/Reach
Hear	Reach	H/Reach
See	Reach	Se/Reach
Think	Reach	T/Reach

We do not necessarily work on only one channel at a time. An individual's curriculum may include a G/reach as well as a To/Reach and a H-To/Reach. We try to move them through the channels as quickly as possible without losing the performance.

I would advocate working on each "Big 6" topic in isolation as well as in compound. We have had a good deal of success teaching the skills this way.

I will break down the "Big 6 + 6" and try to give you an idea of how we would practice and measure the performance.

"Big 6" in Isolation

- Reach - hold up an object for the child to reach towards.
- give whatever assistance your channel stipulates.
 - as soon as the child moves towards the object, move the object in another direction so the child is tracking the object with their hand.
 - do not let the child make contact with the object after each reach. You want the movement to be repeated over and over again. Since grasping and manipulating the object is a natural reinforcer, you may want to build up the ratio of reaches to reinforcement when you first begin.
 - practice the reaching for a few minutes then time the child for 15 or 30 seconds counting the number of reaches.
 - chart the information.
 - it is very important to always give assistance at normal levels of performance. For example, if you are guiding, you should be guiding at a rate of 200-300 reaches/minute.
- Point - have objects in front of the child, on the wall, etc.
- have them point, preferably with an outstretched finger, to each object one after another.
 - keep repeating the sequence.
 - practice for a few minutes then time for 15 or 30 seconds counting the number of points.
 - chart information.
- Touch - this can be done in the same way as point. The only difference being that the child actually touches the object.
- Grasp and Release - this can be done with any object. Squeak toys are fun, as are using marbles in a can. We have used wooden spoons and pencils or markers. Here the teacher holds the pencil and the child just grasps and releases repeatedly.

- Grasp and Release - remember that the only movement being done here is grasping and releasing, so the child does not reach out for the object or place the object anywhere. If you are using something like marbles in a can, use the large marbles and hold the child's hand over the can. You put the marble in their hand. All they do is grasp and release it.
- practice for a few minutes then time for 15 or 30 seconds.
 - count up the number of marbles in the can and chart the information.

- Place - here we often put something small in the child's hand and have them hold onto it.
- place some sort of container in front of the child.
 - the child is to reach out, place their hand over the container and then bring their arm back to the starting position. This is one place.
 - they repeat this movement over and over again, but they do not release the object.
 - practice then time for 15 or 30 seconds, counting the number of places.
 - chart information.

"Big 6" as a Compound

- here the child reaches for an object, touches it, grasps it, places it over a container and releases it. We often use marbles into a can or basin, coins, small blocks, clothes pins, etc.
- have the child practice and then time the child for 30 or 60 seconds
- count the number of objects in the container and chart the information.

Remember that you should always be working on channels that produce the highest performance rates. All these skills in isolation should be at 200-300/minute to be useful to the person. The "Big 6" as a compound should be at 100-120/minute.

"+ 6"

- Pull - Push - we have used Fisher-Price "corn-poppers", small brooms, desk or file drawers, toy cars with sirens, etc.
- the child just pushes the object forward and then pulls it back. This is one movement. Then they repeat it over and over again.
 - practice for a few minutes and then time for 15 or 30 seconds, counting the number of movements.
 - chart the information.

Shake - we usually use rattles or anything that makes a noise when you shake it.

- the child just shakes the object repeatedly.
- practice and then time for 15 or 30 seconds, counting the number of shakes.
- chart the information.

Squeeze - we have had the most success with plant atomizers, windex bottles, water pistols, etc.

- the child squeezes the handle of the atomizer and shoots the stream of water into a container, onto a plant, onto the teacher, etc.
- practice and then time for 15 or 30 seconds, counting the number of squeezes.
- chart the information.

Tap - we have used xylophones, drums, table tops, etc. for this.

- we have the child extend a finger and tap repeatedly on the surface.
- practice and then time for 15 or 30 seconds counting the number of taps.
- chart the information.

Twist - we have had the most success using door knobs.

- place the child's hand on the door knob and have them twist it repeatedly.
- practice, time for 15 or 30 seconds and chart the information.

All these skills should be at 200-300/minute. We usually work with both hands on all "Big 6 + 6" topics and chart each hand separately.

The amount of practice time you provide during the day will be critical. Always have objects for the child to reach for and manipulate. The assistance you provide during direct teaching will start showing up in the time the child spends out of the program. The child will begin reaching out for people, toys, eating utensils, etc. One interesting outcome we had was the children were able to brush away flies and mosquitoes in the summer time!

I feel that I have overloaded you with information and there is still so much more I would like to share with you, especially in regards to practice techniques and decision making. This is probably enough for now! Please let me know how you get along. I will be happy to help in any way I can.

It really will make the difference when you get these skills to regular levels of performance with your children. I have seen children who have spent years in bed start to manipulate toys, feed themselves,

balance themselves, gain mobility (crawling) once we have the "Big 6 + 6" at regular performance levels. Even when we have been working on Guide and Hear-Touch as inputs we see the children begin to operate on Think channels.

Good luck! I will be looking forward to hearing from you.

Sincerely,

Anne Desjardins

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AD:sb

cc: Dr. Kent Johnson