Building Rapport

Many of the potential benefits of building rapport are described in *What You Need to Know about Motivation and Teaching Games: An in-depth analysis* (Ward, 2008). For that reason, I will only briefly list most of the potential benefits and elaborate in the places where Ward fell short in 2008.

1. Students who like their teachers are more likely to <u>cooperate</u> well with them.
2. Students who like their teachers are more likely to <u>initiate</u> to them. Among other things, social initiations provide a meaningful context (Skinner, 1957) for <u>language</u> acquisition.
3. Students who like their teachers are less likely to engage in <u>problem behaviors</u>.
4. Rapport-building activities tend to condition <u>adult attention as a reinforcer</u> (e.g., Ferster, 1961), which is probably the most <u>pivotal</u> (Koegel, et al, 1989) to a student's learning. Among other things, attention is a <u>natural consequence</u> of verbal and other social behaviors. Behaviors taught in natural circumstances have a greater likelihood of <u>maintenance and generalization</u> (Stokes and Baer, 1977).
5. Rapport-building activities can <u>expand a student's community of reinforcers.</u> This helps to sustain motivation during work and increases the likelihood that some of your student's interests will match some of his peers' interests. This can also increase the efficiency of instruction, such as reading (e.g., Tsai and Greer, 2006).
6. As noted throughout *Teaching Early Learner Repertoires*, a wide variety of specific learner repertoires, especially those related to spontaneity, responsiveness to prompts, and tolerance of various challenges, can be improved through broad-based social interactions geared simply toward having fun.
7. Learning is "contextual". I think this fact is under-appreciated, and will therefore elaborate extensively below. Basically, prompts and instructions, by virtue of their use during interesting interactions, can become more tolerable, and students may learn to appreciate each.

Conditioning, and other forms of learning, are <u>contextual</u>. For example, how do you feel about hearing the word "stop"? Why do you feel that way?

In some cases, "stop" will be neutral, or even helpful. Maybe you've asked a grocer where to find kitchenware, and as you walked past several aisles, he told you to "stop" at the correct aisle.

But there have been a lot of times that you were told to "stop" because you were doing something wrong or aggravating someone. So, you needed to stop an activity that you probably enjoyed (or else you wouldn't have been doing it) and you were also "wrong". Neither of those consequences helped you appreciate hearing "stop".   Or, a red light or train signal told you to stop while you were in a hurry to get somewhere. I'm certain you didn't appreciate that.

Because "stop" is heard most often in negative contexts, we tend to dislike the word.

What about other examples of contextual conditioning for our students? Let's look at physical prompting.* [Text box: At least for now, let's forget about "sensory defensiveness", as the majority of examples I've seen have been more about learning history than about sensory issues.] Physical "prompts" are frequently used:

> -when a student doesn't want to do something (these physical "prompts" are actually escape extinction, not prompting)
>
> -by a teacher moving a student somewhere without giving him the chance to respond to a verbal or visual instruction
>
> -when a student isn't trying hard, and teachers therefore over-prompt
>
> -when a student doesn't look at his teacher or at his work, and the teacher taps his chin upward or points his head downward
>
> -with new material (and new work may tend to be aversive)
>
> -during a correction procedure, which students tend to dislike
>
> -to assure a student walks with a group, rather than pursuing other interests on the way to the cafeteria

Most students who demonstrate any resistance to instruction have been prompted in some of the ways described above. These teaching strategies have probably <u>contributed</u> to any student's resistance to instruction, or prompt resistance.

How can we <u>change the contexts</u> in which our students experience physical prompts? Or, more broadly, how can we engage in physical contact with a student in <u>positive</u> ways?

First, we should consider "addition by withdrawal". If, for example, we can train teachers to give students a chance to respond to a verbal instruction before using a physical "prompt", we will be decreasing negative exposure to physical prompts.

What about ways to repair student responsiveness to physical prompts? For some students and settings, perhaps we can tickle or rough-house. When I've worked with students who were hesitant about these forms of contact, I've started with less-robust forms of contact, like a touch on the shoulder while delivering a reinforcer. We are frequently able to build up to more robust forms of contact.

Maybe we can put reinforcers out of reach, and instead of reinforcing mands by retrieving a reinforcer for this student, we can lift the student to the reinforcer. I've also successfully arranged for students to need my help getting small reinforcers from ziplock bags, and instead of opening the bag for them, I have physically helped them open the bag. I've also helped them reset and reuse a "jack-in-the-box". Very soon, students who resisted physical prompts were (sometimes non-vocally) manding physical assistance.

In the initial stages of "Guided walks" (pg. _____), a student holds hands with his teacher for a very short walk, and together they find a reinforcer.

All of these contexts can improve student responsiveness to physical prompts because they naturally result in reinforcers and don't require much student effort. Especially in the examples of the ziplock bags and "jack-in-the-box", students should come to not only accept physical prompts, but to appreciate them.

These, and other, specific strategies for improving tolerance of prompting are scripted in *Teaching Early Learner Repertoires*. If your student is currently resisting any type of prompt, and if that doesn't improve dramatically through extensive broad-based rapport-building activities, you should try some of the strategies described in this book. A student who resists prompts is difficult to teach.

Item-specific protocols vs. Broad-based interventions

Theoretically, we could practice scripted exercises for each repertoire listed in *The Inventory of Good Learner Repertoires*, but that is not as efficient as incorporating those repertoires into more natural contexts. Skills learned within exercises sometimes need to be systematically applied into more natural contexts. Skills learned in natural contexts don't require this follow-up work. After some time engaging in a variety of fun, interactive play, you can assess which repertoires are still in need of treatment, and then consider more targeted exercises.

Targeted exercises have the advantage of being easy for teachers to implement. They are easy to script, and teachers know when to watch for targeted behaviors. The disadvantage of item-specific exercises is that outcomes may not be generalized across all relevant circumstances.

How can you build rapport with your student?

1. Identify reinforcers (e.g., Pace, et al, 1985). You can find out about potential reinforcers by interviewing parents and others familiar with a student. You can also provide "forced choice" reinforcer assessments (DeLeon & Iwata, 1996; Fisher, et al, 1992). But see, also, (Roscoe, Iwata, and Kahng, 1999) for procedures for assessing a single reinforcer. You may offer one potential reinforcer and observe how readily your student "takes" it. The faster, and more frequently, a student eats a cookie, the more he wants it. The faster, and more frequently, he approaches a cloud of bubbles, the more he likes them.

   Most importantly, take the time to <u>observe</u> your student very closely. <u>Allow space</u> for him to behave spontaneously. Look for ways to <u>earn interactions</u> based upon your student's interests. Perhaps he is running a car along the edge of a toy shelf. You may narrate car noises, run another car towards his, set up a ramp for his car to jump, set your finger in the path of his car and act "hurt" if he runs into you. This approach requires patience and creativity. This process is described concisely in *Giggle Time: Establishing the Social Connection* (Sonders, 2003).

   The most valuable thing you can accomplish during this time is to establish a number of activities that are "better with you than without you"*. [Text box: Cathy Santapadre is eternally thanked for identifying this priority.] This type of play follows the "Intrinsic Motivation Guidelines" (see below).

2. When you have established an activity that is "better with you than without you", feel free to play with your student for a <u>long</u> while. One student was throwing a squishy toy tomato at a sliding glass door. He enjoyed watching the tomato bounce off, but I was able to throw it much harder than he could, making the tomato stick to the door, slowly peel off and fall to the floor. He liked this better. We continued variations of this activity for close to an hour. I varied the way I approached the door, the sounds I made before throwing, the way I swung my arm, the faces I made after the tomato hit the door, etc. *It is important to note that I introduced variations in <u>my behavior</u>…I wasn't telling this student to make different noises. At this point, this student tended to be

defensive, resistant, and controlling. Had I directed variations from him too soon, the activity would have been ruined.

3. <u>Use anticipation</u>. After a few throws, I sometimes paused for a few seconds before throwing the tomato. I made guttural noises in anticipation of throwing. Shortly thereafter, I began to freeze after making a guttural noise. The student "expected" the tomato to fly, and when it didn't, he naturally looked at me to see when I was going to throw. I threw after he looked at me. This social referencing also provided me the opportunity to make goofy faces and helped to establish my animation as a form of reinforcement for this student.

4. Establish a <u>balance of control</u> during play. When seeking to discover a student's interest, you will frequently be "following his lead". This does not mean that he will remain the eternal boss of all play interactions. I could easily tell the student in the tomato example to give me the tomato. He sometimes gave it to me <u>spontaneously,</u> which was great evidence of his motivation. But I <u>also</u> wanted him to sometimes <u>follow directions</u> to give me the tomato, because this produced an easy example of cooperation. If you can successfully embed enough directions into fun interactions, your student will likely become increasingly cooperative.

5. Whether or not you are able to make some activities "better with you than without you", you should also feel free to <u>deliver extrinsic reinforcers</u> (e.g., candy, videos, etc.) (See "Extrinsic Motivation Guidelines" below). Initially, you can deliver these reinforcers for "free", but should soon start to require at least tiny behaviors from your student. (See examples below as we deal with "Misconceptions about pairing").

6. <u>Expand interests</u>. If your student is very interested in Cheetos, after establishing good approaches and mands, try using Cheetos to play Hide-the-prize, Red Light/Green Light, Hotter/Colder or other simple games. Perhaps you can throw the Cheetoh in the air and catch it in your mouth, or throw it into your student's mouth.

   Pair neutral stimuli with reinforcers. Sing to your student while you push him on the swing. Give him Cheetos while he looks at a book. Play preferred music and drink Yoohoo while coloring.

   Better yet, when engaged in play that is better with you than without you, add small variations. After the tomato hit the door, I sometimes made sounds suggesting that it

was gross, and I sometimes cheered/applauded. The student began to appreciate each of these, and turned to watch me do each. He began to spontaneously imitate the applause. Returning to the car example from recommendation #1 above, if the student likes to make the car jump a ramp, perhaps we can then introduce things for the car to jump over. Perhaps it can jump over a doll. If this works well, perhaps we can lie on the floor and have the car jump us, or jump our student. Perhaps the car can crash into a wall and the driver can require medical attention. (Please see 2 play templates below, "Materials and Processes" and "Chains" to help plan expansion of student interests.) *Note, as mentioned above, especially with "rigid", defensive students, it is better to demonstrate new variations yourself than it is to direct your student to demonstrate new variations.

7. Don't be afraid to teach mands if your learner is ready. But do not push mands if your student isn't beginning to approach you, or at least orienting toward you, spontaneously. See "Healthy Mand Training", pg _____.

8. If possible, introduce some structured games, such as the ones described in *What You Need to Know about Motivation and Teaching Games: An in-depth analysis* (Ward, 2008). See "Games and repertoires" for a partial list of games that can help teach early learner, language, and other repertoires.

9. Rapport-building is not strictly about play. Rapport is also improved as a student learns to readily follow simple instructions, and learns not only that it is easy to follow these instructions, but also that it is in his best interest to do so. These instructions can come in the context of play (e.g., "Give me the tomato"), in the context of routines (e.g., dressing), or in the context of preferred transitions (e.g., going to the swimming pool).

    *It is important to note that cooperation with these instructions leads to natural reinforcement. Handing me the tomato is followed by me throwing the tomato against the door. Pulling up pants is followed by a return to play. Retrieving swimming trunks and towel is followed by the opportunity to go to the pool.

    We should take advantage of this natural motivation by allowing our student plenty of time to respond as independently as possible. If you know that you will need to prompt, that is alright, but many of these expectations will be clear and easy for your student.

I take advantage of natural motivation by waiting a long time, if necessary, for a student to respond. For example, one student wanted to go outside to swim. After telling him to get his trunks, he paced in the area, repeated his mand to "go outside", and scripted to himself for more than 2 minutes. I was silent, except to remind him to get his trunks once each time he repeated his request to go outside. I did <u>not</u> point at his trunks, physically guide him to his trunks, cheerlead for him to get his trunks, nag, suggest how much fun it would be to go to the pool, or block him from pursuing other interests. It was <u>not my agenda</u> for him to get to the pool…it was <u>his agenda</u>. After more than 2 minutes, this student independently got his swimming trunks and put them on.

Contrast this example with my direction for him to come inside after swimming. That <u>was</u> my agenda. As such, I didn't have the same type of opportunity to wait for my student to come with maximal independence. Rather, I approached him, told him it was time to change and pointed at the towel. He responded nicely to this direction and these supports, and I was able to praise. But had he not responded readily, I would have repeated my instruction, potentially with an additional prompt. Had I waited for independence, my student would have enjoyed extra pool time while ignoring my instruction.

10. Initially, minimize exposure to learner "turn-offs" (but see "Some potential exceptions" below). Look for ways around telling your student "no". Most of your answers will be "yes", and when this will not be possible, perhaps those potential reinforcers can be out of sight. Beware that <u>excessive prompting tends to be a student turn-off</u>.

11. Use a "contrast effect". Non-social reinforcers come at a slightly higher price than social reinforcers. I sometimes talk about this process as "treating some reinforcers with more respect than others". If a student, for example, is obsessed with his IPad and only wants to engage with it by himself, and also sort of likes it when you blow bubbles, you may make the IPad "more expensive" than the bubbles. Perhaps your student needs to use a carrier phrase with good articulation and good volume when asking for the IPad. Then, he has to trace the word IPad and tell you which game he intends to play. Then he follows an instruction to give you a timer, so that you can set it for 4 minutes of IPad play, and he needs to sit at the table and wait for you to bring the IPad to him.

When he wants bubbles, you only require the initial mand, and then you blow bubbles and help him pop them for a few minutes. With early learners, my only initial

requirement for continuing fun social interactions is some proof that the interaction truly is fun, as evidenced by "steam" (Ward, 2008).

Intrinsic Motivation Guidelines

I use these guidelines when I want to ensure that most/all of a student's participation is maintained by intrinsic motivation. Whenever possible, we want to establish intrinsic motivation for social interactions.

1. The student is always free to leave or terminate the interaction. We only want him to participate if <u>he</u> wants to participate. We do not use escape extinction.
2. Follow a student's lead, and offer possible expansions. The student is free to accept or decline any of our offers. We have to <u>earn</u> his participation by having fun ideas and by making it easy for him to participate.
3. Do not use extrinsic reinforcers, like tokens or candy. You want to be sure that he is participating <u>strictly</u> because he wants to.
4. If a student does leave a play activity, wait a while for him to return. Do not follow him immediately. He knows where you are, and if he wanted to be next to you, he would have stayed.
5. It is ok to provide some directions, as long as the student enthusiastically cooperates (as if to say "Yeah, that's a great idea!) If you see that your directions are pushing your student away, decrease your directions and/or look for "higher probability" (i.e., simpler, more preferred) instructions.

Extrinsic Motivation Guidelines

These guidelines are written specifically for addressing play and rapport through the use of extrinsic reinforcers. We also sometimes use extrinsic reinforcers during work sessions, but I am not talking about that here.

Sometimes, especially with defensive students, we need to begin establishing rapport by delivering extrinsic reinforcers for very easy behaviors, such as "student approaches". But there is also nothing wrong with building rapport through extrinsic reinforcers part of the day and through intrinsic reinforcers during other parts of the day.

1. Make sure you have found effective reinforcers. If you're offering stickers, and your student's behavior isn't improving, stickers are not reinforcers. Maybe this student would do better if you used M&M's.
2. Your student is free to leave whenever he chooses. Do not follow him and do not remind him that he could have a reinforcer if he stayed with you.
3. You can spend some time reinforcing approaches and reinforcing mands.
4. You can spend some time delivering reinforcers for appropriate leisure behaviors.
5. You can use extrinsic reinforcers to work on play "tool skills" (such as catching a ball, stacking a block, or blowing up asteroids on an IPad game).
6. It is ok to provide frequent directions, as long as your student is responding readily. If he is not responding readily, decrease the frequency of your instructions or look for higher-probability instructions.
7. Be careful with your prompting! If you are teaching a new skill, it may be necessary to prompt, but be sure that you're not really forcing cooperation through your "prompting".
8. You can spend some time teaching "attend to name" by occasionally calling your student's name and delivering a reinforcer if he looks within a few seconds.

Data

The most important data points when establishing rapport include:

-frequency of student initiations

-frequency of signs of student withdrawal

-duration of fun engagement

-variety of activities that are "better with you than without you"

-frequency of contextual instructions that your student follows readily

Other data points of interest may include:

-spontaneous mands, motor imitation, echoics, or tacts

-new play activities

I usually like to start with a data sheet like this one, recording activities that are better with you than without you. My top two reasons for using this sheet are to: 1) draw teacher attention to fun play as a priority; and, 2) to continually challenge expansion of interests. I assume that a duration score of 2 minutes reflects a student who happily participated for 2 minutes, NOT a student who was blocked into the play area for 2 minutes.

Activity	Duration	Ideas for expansion
Chase	90 seconds	Chase with foam sword? Hide-and-seek leads to game of chase?
Tickle on red ball	4 minutes, on and off	Make up stories that end with tickles?
Bubbles	3 minutes	"Huff and puff, and BLOW the bubbles?"
"Huff and puff and BLOW the bubbles"	5 minutes	Tell more of "The 3 Little Pigs" before each opportunity to blow bubbles; require student to read a few words from the book?

I also like to track the development of new activity reinforcers, using a sheet like this one. These data can be graphed as a cumulative record.

I've simplified one student's data to make this example relatively easy. This student initially only liked electronics, swimming, and running. He enjoyed swimming and running by himself, and did not really care for social interaction.

Date	New activity reinforcer	Comments
8/01/12	Tugging his feet while he sits on the red ball	It helped that we built stories around why we were tugging his feet. He became more interested, and we may be able to increase the intensity.
8/06/12	Throw on couch	We followed some ball play with throws on the couch.
8/11/12	Hide-and-seek	He's interested enough in being thrown on the couch to sustain independent looking for up to 8-10 seconds.
8/16/12	Tug-of-war	We dramatize our losses by exaggerating falling onto a beanbag. Whether he wins or loses, we throw the student on the couch.

8/20/12	Long jump	After student successfully jumps across a target, we throw him on the couch.

Competence first vs. interest first instruction

Most teachers deliver instruction, including instruction on play, using the "competence first" approach. This approach is based upon the assumption that after a student learns a game or skill, he will use it as appropriate, and perhaps will like it. So, a potentially disinterested student may be prompted to roll a die, to move his character, and to pass the die to a peer.

My first preference is to seek "interest first" instruction. I like to establish interest in something first, and then teach the behaviors of which it is a consequence. So, sticking with the board game example, I may set a piece of candy on the game board, roll the die for my student, move his character to the candy, say "Wow, you landed on candy!" and give the student the candy. If my student begins to show interest, I may let him roll the die, and I will move his character for him.

Either of these approaches _may_ be valid for a particular student and a particular target. If a student does develop interest, the behaviors become easy to teach. But it is also true that, as students truly become competent at something, they sometimes do come to enjoy that activity, and certainly develop comfort. As noted in Intrinsic motivation and self-determination in human behavior (Deci & Ryan, 1985), signs of competence always function as an effective form of reinforcement.

As a teacher, just don't lie to yourself that you are working on interest first, when your student actually shows no interest. This leads to cheerleading, sloppy prompting, and a lot of student disengagement. In this case, it is better to acknowledge that your student isn't interested. You might look for ways to decrease the effort required of your student to participate, or to increase the motivation for participating. If you choose to work using the "competence first" approach, you should use timely effective prompts to prevent student disengagement and assure that your student is not ignoring your prompts.

Also, if you are working on competence first, you still have to minimize/avoid "signs of withdrawal". We're not saying that you can completely ignore motivation when addressing competence, just that there doesn't necessarily have to be intrinsic motivation in place yet.

<u>Misconceptions about establishing rapport</u>

I still remember the way Siri Ming explained pairing in a workshop for Behavior Analysts, Inc. People use the term "pairing" a bit too loosely. "Pure pairing" involves the delivery of entirely *non-contingent reinforcers (i.e., the teacher provides reinforcers regardless of what a student does). [Text box: Technically, "non-contingent reinforcement" is a misnomer, since reinforcement is always contingent on some behavior, but don't worry about that right now.] When establishing rapport, we would almost never deliver any type of reinforcer <u>during</u> any type of problem behavior, so there is already a contingency in place.

Even if we're starting with the mundane example of handing small edibles to a student, we begin to <u>introduce tiny contingencies</u> within the first few deliveries. In fact, since the <u>shaping</u> itself can be complicated, I will make the rest of this example as mundane and simple as possible.

1st M&M-student pacing and watching the wind blow in the trees, teacher hands M&M to student

2nd M&M-student pacing and watching the wind blow in the trees, teacher says "M&M?" while holding an M&M close enough for student to take

3rd M&M-same scenario, but the teacher holds the M&M a few inches further away

4th M&M-same scenario, but the student now needs to turn 15 degrees to his right and fully extend his arm in order to grab the M&M

5th M&M-same scenario, but the student has to take 2 steps to get the M&M

6th M&M-teacher tries to require the student to take 3 steps, but he doesn't. Instead, he goes back to looking at the trees. Teacher eats the M&M herself since, despite commercial claims, M&M's really do melt in your hands.

If a teacher views "pairing" simply as "the continual free delivery of reinforcers for the first week with a new student", benefits may be minimal and the eventual transition to teacher instructions may be hasty.

Some teachers also incorrectly believe that, while pairing:

-you never say "no"

-you can't set limits

-you can't place demands

-you have to <u>continually</u> engage your student. As described above, frequent interaction is ideal, but sometimes leads teachers to ignore student motivation.

I <u>am</u> very particular about using escape extinction* [text box: remember that "escape extinction" involves a teacher preventing a student from escaping an activity before participating to the level the teacher expects] to make a student "play". Productive play requires a teacher to be sensitive to student interest…to continue fun activities and to shift from boring activities. Student withdrawal is <u>information</u> for the teacher, not something to be extinguished.

<u>Some potential exceptions to basic pairing procedures</u>

(separated here to make the basic processes more digestible)

Sometimes, a behavior needs to be extinguished, through extinction or punishment, in order to allow appropriate behaviors to develop. A student may, for example, tantrum each time a toy doesn't operate the way he'd hoped. We could try to minimize exposure to that setback by assuring toys are in perfect working order, and directly teaching our student how to use the toys effectively. But if this student is also defensive of these toys, resisting assistance, we will have little chance to prevent play setbacks. In this case, I may allow my student to tantrum* when toys don't work the way he hopes. [Text box: this will function as extinction if tantrums have historically functioned to recruit adult assistance or comfort.] If he comes back to the toy, I will try to be available to assist, but will <u>not force him</u> to accept my assistance. If, when a toy fails him, my student throws the toy, I may put the toy out of reach for a while*. [text box: if he really wanted to play with the toy, this procedure will function as a type of punishment known as "response cost".]

When I first started in ABA, I worried that if I set limits, used extinction, or used punishment, I would significantly damage my relationship with a student. I have since learned that (as long as I am later available to reinforce) limits, extinction, and punishment result in students who respect limits and actually <u>increases</u> student appreciation when I am available to reinforce. Lest you be confused, I am not suggesting that you maximize opportunities to set limits, use

extinction, or punish, especially while attempting to build rapport. I am merely challenging the common misunderstanding that these strategies are strictly off-limits during pairing.

<u>Putting it all together (what does an hour of "building rapport" look like?)</u>

This is a description of my first hour of building rapport with a 6-year old student who loved electronics and really valued "control". My first goal with any new student is to establish activities that are "better with me than without me". Then, I want to increase the variety of interactions in which we engage. Next, I want to assure we have a healthy balance of control in these interactions. Finally, I want to increase specific behaviors, such as manding.

What happened?	What did I learn?	What did I plan to do about it?
Student took my (cheap) cell phone.	*He likes cell phones.*	*Narrate while he explored my cell phone.*
Parent told me that he is obsessed with electronics. So, I gently asked for my cell phone. The student aggressively pulled it away.	*I cannot have a healthy interaction with this student with a cell phone.*	*Take the cell phone back and most likely deal with the student's protest.*
I took the cell phone, and the student protested and attempted to steal my phone for the next 10 minutes. Since he was acting out to get the phone, I did not give him my phone or any attention (which could have suggested that he would get my phone). Eventually, this student found a set of playing cards and began to look through them.	*Ah, he likes cards. He might therefore also like "complete sets" and/or things that he can line up.*	*When he loses track of some of these cards, I will take them and give them back to him for "tiny approaches".*
He noticed missing cards, and I said "I have the 7." He looked and I handed it to him.	*He does like complete sets. And he can stay calm while waiting very briefly for a reinforcer.*	*I will repeat this interaction (i.e., giving him cards for calmly noticing that I have them) several more times.*
I delivered 3 more cards in the same way. On the last card, he named the card as I gave it to him, and he smiled	*His defensiveness has probably been learned through unclear reinforcer exchanges (i.e., he doesn't know when he will be*	*He may be ready for me to begin to complicate the delivery of some of the next cards.*

slightly.	*getting a reinforcer back.) And, as these defenses come down, he is potentially very engaging.*	
The student asked for another card, and I said "I have a game you can play to get the card." I had his mother cover his eyes while I hid the card in an easy place. Then his mother helped guide him by the hand as we played "hotter/colder". She modeled how to respond to "yes" and "no" as they got closer and further from the card. It only took 10-12 seconds to find the card, and the student was excited! He spontaneously handed me another card to hide!!!	*Wow, when this kid's defenses are down, he's really easy to play with, even when I quickly raise my expectations!*	*I want to reinforce the spontaneous mand, especially since it was a mand to play a new game.*
We played "hotter/colder" 3-4 more times. Since this was my first visit and I only had a few hours, and since this student was beginning to become pushy about playing "hotter/colder", I wanted to transition to a different activity. So, I said I had an idea for a different game. He protested this for a few minutes.	*Once this student sees a predictable structure, he wants to continue it and wants to take control of it.*	*In the long run, I'll make sure we shift games after every 2-3 repetitions and that we will not allow him to become too controlling with any game. In the meantime, I want to get him productively engaged again soon. Knowing that he likes "complete sets", I'm going to draw a block tower, and use those as "tokens" for behaviors he hopefully finds interesting. Since I don't know how well he'll respond, and since I don't intend to force cooperation, I will first ask his tutor to follow a funny instruction, and her cooperation will earn him his first "token".*
I direct his tutor to wiggle her arms like spaghetti. She does a good job of being	*I'm getting confirmation that he likes complete sets. I also think he'll become less*	*I'm creating a list of successful activities (i.e., hotter/colder, block tower) and successful*

funny with it, and I draw a star in the bottom cell of our tower. The student watched this, smiled at the tutor, and told me to draw another star. I told him to wiggle his arms like spaghetti, praised and drew the second star.	*controlling as he sees that we tend to have good ideas for fun activities with easy payoffs.*	*instructional methods (e.g., modeling), and we will begin building a program with other predictable games, using modeling to establish each new game.*

Materials and Processes

A "material" is something we use and a "process" is the manner in which we use it. So a paper airplane is a material, and throwing is a process in which we engage with that material.

For each interesting material, we may be able to <u>vary</u> interesting processes. For example, maybe we try to throw the paper airplane through a hula-hoop, or onto a sofa. Maybe we teach our student to help with one of the folds in the airplane, or maybe he helps to decorate the airplane with stickers or flames.

For each interesting process, we may be able to vary interesting materials. Sticking with the same example, if our student likes to throw the paper airplane through a hula-hoop, perhaps he'll also like to throw a ball threw the hula-hoop. If he likes to throw the ball through the hula-hoop, perhaps he'll also like to throw the ball into a basket. If so, perhaps he'll also like to kick a ball into a net. If so, perhaps he'll also like to use a golf club to putt a ball into a hole.

I sometimes have my teams categorize reinforcers into "materials" and "processes" in order to help brainstorm new variations. We use a sheet like this one.

Materials	Processes
Bubbles	*Dancing in the <u>bubbles</u>*
	Stomping on <u>bubbles</u>

	Catching <u>bubbles</u> without popping them
	<u>Blowing bubbles</u>
Candle	*<u>Blowing</u> out <u>candles</u>*
<u>Candle on a cupcake</u>	*Sing "Happy Birthday", blow out the candle, eat the <u>cupcake</u>*

Note that an interest in bubbles eventually led to interest in blowing bubbles, which led to blowing out a candle, which led to "Happy Birthday". Each new interest <u>can</u> function as a "pivot point", allowing the development of additional interests. In the examples above, I've underlined the common elements that allowed the pivot from existing interests into new interests.

In interest of sparing you some need for creativity, please enjoy the following list of materials and processes that many of my students have found interesting, accompanied by other things these students may learn to like. To avoid complication, I am not trying to display how each new interest might be developed, but please remember that, for example, a student who likes letters might like to trace letters, which can establish interest in markers, which can establish interest in drawing, which can establish interest in "Pictionary", which can establish interest in "Charades", etc. Enjoy.

If you enjoy this brainstorm, please thank Art Bram. He requested, and contributed to, the brainstorm. Also, especially if you are working with young learners, see the Baby Bumble Bee Actions Videos for dozens of additional ideas.

<u>Process or material</u>	<u>May like</u>
Seeking	Hide-and-seek, hotter/colder, Scavenger hunt, Where's Waldo, I spy…, Marco Polo, Easter Egg hunt, (paintball or squirt gun war games),
Racing	Relay races, fluency-building exercises for ALL types of skills!, "Perfection", Red Light/Green Light, tag, steal the bacon,
Letters/numbers	Lining up, counting items (and then, maybe counting actions?), synthesizing words, doing puzzles (especially alphabet or number puzzles), word searches, Boggle, Scrabble, Hangman, tracing/writing (especially on white boards?), reading, math,
Music	Playing instruments, dancing, Musical Chairs, "freeze dance", dancing lights, "name that tune", song fill-ins, props with songs (e.g., Monkey jumping on the bed), Karaoke,

Electronics	Video modeling?, video games, "remote control game", computerized instruction (which may be "a foot in the door" to teach those skills without electronics),
Materials flying	Paper airplanes, toy helicopters, bubbles, balloons, kites, balls (esp. if you kick/throw them high), toy rockets, birds, cars jumping ramps,
Materials falling down	Marble mazes, car ramps, bowling, Jenga, "King of the mountain",
Spinning	Spin him on a "whirly rocket", spin a top or a coin, games that have "spinners", helicopters, whirly-gigs/windmills
Dice	Any game that involves die
Slimy textures	Paper machete, finger paint, shaving cream (can lead to drawing, etc.),
Mystery	Mystery reinforcer (see "Tough Kid Handbook"), I spy, I'm thinking of…, Battleship, hangman, 20 questions,
Funny sounds	Paper towel rolls, toy microphones, popping hands to cheeks ("Mr. Knickerbocker"), pair sounds with toy vehicles and toy animals, "Apps" that echo/distort sounds,
Being tickled by therapist	Tickle therapist, tickle doll, doll tickles student, tickle various body parts
Eating preferred snack	Feeding therapist, feeding doll, doll feeding student, helping to prepare snack
Pushing car on floor	Pushing other objects (toy vacuum, stroller, train, etc.),
Jumping	On trampoline, across hula hoops, over small obstacles, "leap frog"
Ball	Rolling, kicking, throwing, batting, bouncing, making a basket, bowling block tower, basket full of balls down a flight of stairs

Chaining*

[Text box: a behavioral "chain" is a sequence of steps required to complete an activity, such as hand washing. Students learn each "link" in the chain, and put the links together. During play, a student may like one event, and I may systematically add links before that preferred event. A student who likes cupcakes could eventually learn to have a pretend birthday party, for example.]

I don't usually take data on this, other than to note that new interests have been developed, but in order to illustrate the thought process, a data sheet may look like this. Read from top to bottom, and from left to right. The creative play chaining process is not really this linear, but I wanted to make this example easy to follow.

4 steps before preferred event	3 steps before preferred event	2 steps before preferred event	Potential step before preferred event	Preferred event
				Steve exaggerates acting upset
			Alec "wakes" Steve	*Steve acts upset*
		Alec gives Steve a blanket and pillow	*Alec "wakes" Steve*	*Steve acts upset*
	Alec gives Steve a warm cup of milk	*Alec gives Steve a blanket and pillow*	*Alec wakes Steve*	*Steve acts upset*
Alec "sings a lullaby"	*Alec gives Steve a warm cup of milk.*	*Alec gives Steve a blanket and pillow*	*Alec wakes Steve*	*Steve acts upset*

Games and repertoires

Which games address which repertoires? Any game <u>can</u> help to address cooperation. Additionally, these repertoires can be addressed by the following games.

Repertoires	Games

Guessing	Pop-up Pirate, Memory, Charades, Pictionary, Hangman, Hotter/Colder, Battleship, "I spy..", "I'm thinking of…", 20 Questions, Marco Polo, Pin the Tail on the Donkey
Cooperation	Potentially, ANY game impacts cooperation. Red Light/Green Light is especially helpful for this.
Scanning	Memory, "hide-the-prize", Where's Waldo?, word searches, hide-and-seek, mazes, dot-to-dot, scavenger hunt, hotter/colder, "I Spy,…", "Guess Who?", "Guess Where?"
Focused traveling	Red Light/Green Light, Hide-and-seek, Hotter/Colder, Scavenger Hunt, any type of race
Social Referencing	Hide-the-Prize, Reverse Hotter/Colder, Tape Mouth Shut, "What am I looking at?", Relay Races
Attention as reinforcer	Peek-a-boo, Hide-and-Seek, Red Light/Green Light
Understanding and/or accepting "no"	Red Light/Green Light, Hotter/Colder, Hangman, 20 Questions, Go Fish
Appreciating "yes"	Hotter/Colder, Red Light/Green Light, Hangman, 20 Questions, Battleship, "Guess Who?", "Guess Where?"
Perseverance	Hide-and-Seek, Hotter/Colder, Scavenger Hunt, 20 Questions,
Asking Questions	Hangman, Hotter/Colder, Guess Who?, Guess Where?, 20 Questions
Reading/Spelling	Hangman, Boggle, Scavenger Hunt, Scrabble, Word Search, Word Jumble