

Scoring *“The Inventory of Good Learner Repertoires”*

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The Inventory of Good Learner Repertoires (Ward, 2008) is an assessment tool designed to measure the ease with which a student may be taught. The IGLR can be used to identify a student's preferred learning styles, their dependence upon various supports, the relative efficacy of various supports, their resilience upon encountering challenges, and their potential to learn in less-supportive environments. Popular supports, such as visual activity schedules, are assessed for their actual benefit to a particular learner.

For learners working to become more cooperative, the IGLR can be used to identify ways to help them succeed, and build upon that success. For learners who are already very cooperative, the IGLR can be used to identify and fade any unnatural supports that remain or to identify new target learner repertoires.

The current book, "*Scoring the Inventory of Good Learner Repertoires*", provides directions to facilitate accurate use of the IGLR.

Scoring the Inventory of Good Learner Repertoires begins by offering several detailed rationales for using the IGLR. Examples are provided for programming for relatively inexperienced, or uncooperative learners, and also for more advanced learners. We describe case studies from student transition plans to less-restrictive educational settings.

Next, beginning on page 9, scorers unfamiliar with the IGLR can receive a basic orientation to the scoring format. Experienced scorers can skip this section. In fact, experienced scorers can skip a lot of *Scoring the Inventory of Good Learner Repertoires*, using it as a reference when they have a specific question about how to score a particular item. Most readers will not read this book cover to cover. I wrote it, and even I don't want to read it cover to cover.

Acknowledgements

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The purpose of The Inventory of Good Learner Repertoires

Scorers complete the *IGLR* in order to identify learner repertoires in need of improvement, as well as those that are strengths. Programming is then designed to take advantage of a learner's strengths while addressing at least some of the repertoires in need of improvement.

The *IGLR* is intended to help teachers identify how to teach any particular student. The *IGLR* accomplishes this by assessing learner preferences, effective/necessary supports, and the strength of various learner repertoires.

We talk a lot about earning student cooperation, but instructional programs should go much further. Instructional programs should make students want to cooperate, especially because of pride in their accomplishments, a desire to please their teachers, and interest in materials. In fact, learning should go beyond "cooperation", resulting in learners who actually participate in the processes of identifying targets and measuring progress.

Further, learners should be spontaneous, both socially and during independent leisure activities or daily living routines. The *IGLR* can help scorers understand how aspects of a student's cooperation are related to aspects of their spontaneity.

Differentiating plans for experienced and inexperienced students

For inexperienced students, or those experienced at avoiding instruction, the *IGLR* can help teachers identify starting points likely to facilitate early successes. Student cooperation and learning builds upon successes. For example, upon completing an *IGLR* for one student, their program called for:

- emphasis on gross motor responding, especially demonstration of intrinsically-motivating actions
- use of primary reinforcers, like edibles and pushes on a swing
- generous schedules of reinforcement (i.e., he accessed reinforcers very frequently)
- emphasis on in-context responding (e.g., asking him to get a plate before getting a snack)
- emphasis on "post-mand" instruction (i.e., most teacher directions were only delivered AFTER the student had requested a reinforcer)
- frequent opportunities to interact with their teacher in fun ways

-errorless teaching methods (i.e., prompting new responses before the student had the chance to err)

-only asking the student to “surrender reinforcers” while offering the student a new reinforcer to replace the old one

-several hundred mand opportunities (i.e., opportunities to request reinforcers) per day

For experienced students, the IGLR can help teachers identify additional learner repertoires that may further accelerate acquisition and/or facilitate that student’s transition to a less-restrictive learning environment. Put another way, using the IGLR can help prevent complacency with relatively advanced learners whose instructional programs continue to rely upon unnatural supports. For example, upon completing an IGLR, one advanced learner’s program called for:

-teaching him to make multiple attempts to recruit attention

-teaching tolerance of “no”

-teaching him to work independently for up to 15 minutes, including cooperating with instructions that required travel of up to 100 feet

-teaching him to help recognize whether he had met an instructional goal

-teaching him to work cooperatively with peers

-points used within a token economy, primarily for: reviewing work with his teacher to determine whether he’d met a goal; and, working cooperatively with peers.

-points can be exchanged for access to reinforcers twice per day, at scheduled times

Note that the first instructional program, for the less-experienced learner, involved multiple teacher supports, and minimal challenge. Note, also, that the program for the more-experienced learner involved multiple challenges and minimal teacher support.

Planning transitions to less-restrictive environments

Another use of the IGLR is to help plan a learner's transition to a less-restrictive educational placement by identifying discrepancies between their current levels and the demands of the future placement.

One student, we'll call him Martin, attended a non-inclusive school setting for 2 years. After making substantial progress in his last 6 months in this school setting, plans were undertaken to transition him to a regular education kindergarten setting.

Two years previous, Martin had been disruptive to the class. Problem behaviors included yelling and property destruction, and dozens of examples of verbal resistance to instruction. Problem behaviors had consumed approximately 1 hour of educational time per school day, and Martin required 1:1 support for much of the day.

At the time the transition was being planned, this student demonstrated minor problem behaviors (i.e., joking at inappropriate times, making statements that were the opposite of teacher directions) 1-2 times per week. He worked independently for up to 10 minutes at a time, on age-appropriate material. He raised his hand to answer questions and asked/answered peer questions.

The relatively simple components of the behavior plans that had yielded this improvement included:

- a daily point sheet, with progress monitored every 15 minutes and access to backup reinforcers 3-4 times per day
- planned ignoring of problem behaviors
- failure to earn points on a daily point sheet, following problem behaviors
- required follow-through with assigned tasks after his peers had finished (e.g., if he resisted a reading worksheet, after his peers finished and went to the gym, he was required to finish the worksheet)

(*Advanced program components are available, upon request)

The interventions listed above, along with other, more complex interventions, had effectively reduced problem behaviors and increased cooperation over the past 18 months. Yet, if Martin were allowed to remain dependent upon these interventions when transitioning to a new placement, the demands of program implementation upon his new teacher may be excessive.

We wanted to remove planned ignoring of minor problem behaviors from Martin’s behavior plan. We were concerned that attempts to implement planned ignoring in the new classroom would lead to excessive distraction of his peers. We replaced “required follow-through”, with earning of negative marks on his point sheet. This change was implemented in order to save personnel in the new placement from having to require Martin’s follow-through.

How did his current needs and learner repertoires correlate with the supports likely available in the proposed setting? See Figure 1, below, for a summary.

Figure 1: Comparison of Martin’s current levels of “Excesses” and “supports” and the levels required for a less-restrictive educational setting.

| <u>IGLR Category</u> | <u>Current Level</u> | <u>Levels needed for targeted setting</u> |
|----------------------|---------------------------------------|--|
| Behavioral excesses | 1-2 inappropriate jokes per week | 1-2 inappropriate jokes per month, and quick responsiveness to redirection |
| Behavioral Supports | Token system updated every 15 minutes | Point sheet monitored no more than every 30 minutes |
| | | 15 minutes independent on-task |

In order to help make Martin’s behavior plan easier to implement in his new setting, we removed “planned ignoring” and taught him to respond well to “verbal redirection”. We also removed “failure to earn points”, and taught him to respond to “earning a negative mark, translating to the unavailability of some highly preferred materials at home after school.” These interventions, though likely ineffective for a less-experienced learner, are more consistent with strategies naturally used in educational settings.

Also, we worked to decrease his dependence upon frequent point sheet monitoring, gradually decreasing checkups from every 15 minutes to every 30 minutes. Martin’s potential teacher in the new setting also requested that we build his independent task completion from 10 minutes to 15 minutes.

Finally, observations and teacher interviews in the weeks prior to his transition showed that his current teacher was occasionally appeasing some of his “rigid” preferences (IGLR, A7). For example, if the weather wheel was set for “sunny” and it later began to rain, he insisted upon updating the wheel. This would not, in itself, be a problem, except for the fact that he was insistent (IGLR, A2). What would happen if his new teacher declined to let him change the weather wheel? What would he do if she denied his request? It is likely that he would have whined, or at least made a snide remark. The teacher, in turn, would have been likely to intervene by either appeasing or by attempting to punish. Appeasement may lead to increases in the future rate of these types of behaviors. Attempts to punish, even if contributing to reduction in problem behavior, may have a host of negative effects (Sidman, 1989).

So, we made a point of structuring challenges at least several times per day, while assuring that he learned to tolerate, or overcome any of the challenges* that he would likely encounter in typical kindergarten.

*Behavior treatment plans are effective when they reduce problem behaviors, and truly meaningful when they establish resilience to the challenges previously associated with problem behaviors.

Who can use this book?

The current book is intended to help those not familiar with behavioral jargon, or measurement, to complete the IGLR for their learners. We will introduce only minimal jargon, and will provide immediate definitions and examples. Those interested in more thorough descriptions of behavioral terminology and techniques will be directed to additional readings.

Experienced behavior analysts will be able to skim through most portions of this book. One notable exception is the “Consequences” section. Many, myself included, feel that we can observe teaching sessions and assert whether the learner was motivated primarily by escape, or primarily by teacher praise, for example. A concerted effort is made in this book to describe how we arrive at these assertions.

Orientation to the scoring format

Scorers familiar with the IGLR and with the student being assessed can thoroughly complete an IGLR within approximately 2 hours. If unfamiliar with a student, it will be necessary to conduct direct observations and interviews of people familiar with the student. In that case, it can take

approximately 5 hours to complete the IGLR. In either case, but particularly for students with whom you are unfamiliar, it will likely be necessary to conduct several probes.

Each of the 10 categories in the IGLR is scored in a similar format. Scoring criteria are described at the beginning of each section, such as shown below for the category of “Resilience and Regulation”. In the current book, percentage ranges are provided to guide scorers in determining whether to score “almost always” – 3; “usually” – 2; “sometimes” – 1; or “almost never” – 0.

Some items will require the use of different scoring criteria. In those cases, criteria will be described within the cell posing the item to be assessed.

C. Resilience and Regulation: tolerates a variety of challenges without demonstrating inappropriate behavior.

| Scoring Key | | | | |
|------------------|---------|-----------|-----------------|-----|
| 3 | 2 | 1 | 0 | N/A |
| Almost Always | Usually | Sometimes | Almost never | |

Each item within each category of the IGLR can be assessed at least 4 times, working from left-to-right through the columns provided. We’ve filled in item C1 below as an example. This hypothetical student progressed from “almost never” surrendering reinforcers appropriately in March, 2009, to “almost always” surrendering reinforcers appropriately in September, 2010.

In the space provided for the date, we’ve filled in only the month and year. The specific date may be irrelevant, but scorers who prefer to include the date of assessment should feel free to do so.

The Inventory of Good Learner Repertoires should be updated approximately every 6 months. If it is clear that your student has changed significantly within less than 6 months, the IGLR can be updated more frequently. The IGLR should also be updated when planning to transition a student to a less-restrictive environment, or before any planned shift in services.

| Does your student: | Date: ___3/09___ | Date: ___10/09___ | Date: ___3/10___ | Date: ___9/10___ |
|-----------------------------------|---------------------|----------------------|---------------------|---------------------|
| 1. Surrender reinforcers readily? | 0 | 1 | 1 | 3 |

At the end of each category scored in *The Inventory of Good Learner Repertoires*, scorers are prompted to calculate a percentage. In the first row of this “Scoring and Percentage” table, supply the score attained by adding all scores within that category. The “Scoring and Percentage” table in the example below comes from category C, “Resilience and Regulation”.

There are 13 items in “Resilience and Regulation”, allowing a total possible score of 39 (i.e., 13 x 3 = 39). This potential total score is provided in the second row of the table.

In the interest of providing an example, we’ve scored one item “N/A” (i.e., “not applicable”) in the first IGLR scoring for this learner. Since no points could be assigned for that item, 3 potential points must also be taken from the “total possible score” in order to accurately calculate percentage. Note that in the 3rd row, “adjusted possible score”, for the student’s first scoring, we have filled in only “36” points possible.*

To calculate percentage, divide line 1 by line 3. For this student’s first score, a raw score of 19 divided by a total possible of 36 yields a score of 53%

| Scoring and Percentage: | | | | |
|---|-----|-----|-----|-----|
| 1. Total the score by adding the values for the column (0-3). | 19 | 21 | 22 | 33 |
| 2. Total possible score. | 39 | 39 | 39 | 39 |
| 3. Adjusted possible score (subtract 3 for each item scored “N/A”). | 36* | 39 | 39 | 39 |
| Divide total score (line 1) by adjusted possible score (line 3) to get your percentage. | 53% | 54% | 56% | 85% |

Following completion of this “Scoring and Percentage” table for each category, scorers are prompted to color in a percentage grid on page 33. Percentages in the grid on page 33 are rounded to the nearest 5%, as appropriate.

We’ve filled in this percentage grid only for category C, “Resilience and Regulation”, to continue with the current example. Note that the first 3 scores, 53%, 54%, and 56% all round to 55%. The first color code chosen was used to color the “Res. & Reg.” column to 55%. (And, the next 2 color codes were intentionally of similar shading, as they overlap perfectly with the coloring from the first scoring.)

Each update should be done in a new color. This student’s second and third scorings remained at roughly 55%. On the fourth scoring of “Res. & Reg.”, our student improved to 85%, as shown by the darker shading on the percentage grid below.

Sometimes, a student’s performance from one scoring to the next will worsen. Since it is impossible to “un-color” a grid to reflect regression, additional percentage grids are available for free download at: www.wholechildconsulting.com.

| Date | Assessor | Color code |
|-------|----------|------------|
| 3/09 | SW | |
| 10/09 | SW | |
| 3/10 | SW | |
| 9/10 | SW | |

| | | | | | | | | | | |
|-----|-------------|--------------|-------------|-----------|---------------|-------|-------|------------|--------|------------------------------|
| 100 | | | | | | | | | | |
| 95 | | | | | | | | | | |
| 90 | | | | | | | | | | |
| 85 | | | | | | | | | | |
| 80 | | | | | | | | | | |
| 75 | | | | | | | | | | |
| 70 | | | | | | | | | | |
| 65 | | | | | | | | | | |
| 60 | | | | | | | | | | |
| 55 | | | | | | | | | | |
| 50 | | | | | | | | | | |
| 45 | | | | | | | | | | |
| 40 | | | | | | | | | | |
| 35 | | | | | | | | | | |
| 30 | | | | | | | | | | |
| 25 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| % | Beh. Excess | Beh. Support | Res. & Reg. | Readiness | Pers. & Focus | Flex. | Cons. | L.C. Pref. | Spont. | Pot. to Benefit from Inclus. |

The Inventory of Good Learner Repertoires

| | | |
|--|--|--|
| Student: _____ DOB: _____ | Date _____ _____ _____ | Assessor _____ _____ _____ |
|--|--|--|

Place an "x" beside each question for which a N/A score applies

| | | | | |
|---|--|--|--|--|
| 9 | | | | |
| 8 | | | | |
| 7 | | | | |
| 6 | | | | |
| 5 | | | | |
| 4 | | | | |
| 3 | | | | |
| 2 | | | | |
| 1 | | | | |

| | | | | |
|----|--|--|--|--|
| 14 | | | | |
| 13 | | | | |
| 12 | | | | |
| 11 | | | | |
| 10 | | | | |
| 9 | | | | |
| 8 | | | | |
| 7 | | | | |
| 6 | | | | |
| 5 | | | | |
| 4 | | | | |
| 3 | | | | |
| 2 | | | | |
| 1 | | | | |

| | | | | |
|----|--|--|--|--|
| 13 | | | | |
| 12 | | | | |
| 11 | | | | |
| 10 | | | | |
| 9 | | | | |
| 8 | | | | |
| 7 | | | | |
| 6 | | | | |
| 5 | | | | |
| 4 | | | | |
| 3 | | | | |
| 2 | | | | |
| 1 | | | | |

| | | | | |
|----|--|--|--|--|
| 14 | | | | |
| 13 | | | | |
| 12 | | | | |
| 11 | | | | |
| 10 | | | | |
| 9 | | | | |
| 8 | | | | |
| 7 | | | | |
| 6 | | | | |
| 5 | | | | |
| 4 | | | | |
| 3 | | | | |
| 2 | | | | |
| 1 | | | | |

A
Behavioral
Excess

B
Behavioral
Supports

C
Resilience
&
Regulation

D
Readiness

The skill-specific grid (pages 34 and 35 in the IGLR) shown above can be scored item-by-item. In the example above, we've completed the "Behavioral Supports" column for a student. This student occasionally works well, and the only behavioral support with a robust effect is B5, "behaves well when primary reinforcers, such as edibles or preferred toys, are clearly available for appropriate behavior". They scored "1" on most items, demonstrating that it is irrelevant whether they are near someone with a history of punishing misbehavior, or whether a visual schedule is used.

The skill-specific grid on pages 34 and 35 can provide a more sensitive reflection of progress than the percentage grid on page 33. A student may, since the last IGLR update, have become more responsive when conditioned reinforcers are clearly available. Perhaps that score improved from "0" to "2". If no other scores in the "Behavioral Supports" category have improved during that time, this improvement may not show up on the percentage grid. Perhaps their overall percentage improved from 53% to 57%. Each of those percentages rounds to 55%.

Because student performance can decrease from one scoring to the next, and because scorers cannot "uncolor" cells, a blank skill-specific grid is available for free download at:

www.wholechildconsulting.com

Comments

The "Comments" section is not a place to censor your thoughts. If information seems relevant to you, put it in there. Perhaps you've noticed that your student tends to rip paper, but no one has ever told them not to. Particularly if you suspect that all your student needs is a statement of the expectation that paper should be left in-tact, you should include that information in the "Comments" section. You would then also likely include "respect for property" in the "Potential Targets" section.

"Potential Targets" should be completed at the end of each section for which they may be applicable. If behavior excesses are demonstrated with any regularity, they should be selected as potential targets. At this point, we are merely identifying behavior levels and potential targets. We are not yet selecting targets, nor analyzing the functions of the problem behaviors, nor making plans for how to address those targets.

The importance of using *sensitive measures

Accurate scoring of most components of the *IGLR* begins with the ability to identify subtle differences in the qualities of a learner's performance. If scorers attend only to "big" changes in behavior, such as aggression or task refusal, their measures will be insensitive. There is almost always a slight worsening in behavior before a significant problem behavior occurs.

Attending to slight worsening, or improvement, in behavior allows us to analyze a greater number of environment-behavior relationships. When assessing the reasons for a particular behavior, we look at what happened just before the behavior, and also what happened just after the behavior. Then, we look for patterns. If only one behavior is recorded, we can only analyze one "before" and one "after" to speculate about the reason for the behavior.

Analysis of the reasons for behaviors becomes much easier as we gain access to greater numbers of environment-behavior relationships. Even if we're only looking at occasions upon which behavior worsened, a sensitive measure can turn one significant problem behavior into 5 episodes of "slight worsening" of behavior. This would allow us to analyze 5 "before's" and 5 "after's".

*A measure is "sensitive" to the extent that it captures subtle variations in performance. Consider using pounds to measure the weight of paper clips, lady bugs, and other light things. Everything would weigh 0 pounds, and you wouldn't see differences between them. Milligrams would provide a much more sensitive measure. They would show differences between the weights of small and large paper clips, for example. Or, if 3 different people were throwing balls as far as possible, a measure of "yes/no", assessing whether they threw the ball forward would be very insensitive. A measure of feet would be more sensitive, and a measure of inches would be even more sensitive.

But sensitive measures can also record slight and major improvements in behavior. Now,

*“ABC” equates to “Antecedent”, “Behavior”, and “Consequence”.

Behavior analysts carefully observe ABC’s and look for patterns in order to form hypotheses about the function of a behavior. For an easy example, a student who usually whines when presented with writing tasks, and who is sometimes allowed to delay writing tasks by whining, is probably whining for escape or avoidance, especially of writing tasks.

considering the same 30 minute observation, during which only one significant problem behavior occurred, we can add 4 “before’s” and 4 “after’s” for instances of behavioral improvement. Where insensitive measures would only have 1 ABC* to analyze, we now have 9 ABC’s to analyze. Besides, we are at least as interested in what occasions good behavior as we are in what occasions poor behavior.

Not everyone will naturally recognize small changes in student behavior. So, it may be necessary to train observers to identify small differences in behaviors.

Let’s consider an example, reflected in the data below. The moment Darrin was asked to write, there was a slight worsening in the quality of his work. He worked more slowly, more sloppily, and

required reminders to continue. His facial expression worsened. A few minutes later, Darrin had shoved the work materials off of the desk and was lying on the floor.

While it seemed fairly obvious that Darrin didn’t care for writing, some observers were wondering why he was on the floor. Was it because his Mom was watching the session? No, she had been observing for an hour, and he had performed well. Was it late in the day? Yes, but it was only 2 minutes later than when he had been performing very well. Some would say it was a mystery, but Darrin was on the floor because he didn’t like writing.

Subtle vs. Obvious Changes in Student Behaviors

| Task | Speed of response | Clarity of response | # of responses | # of prompts | Affect | Minor problem behaviors | Major problem behaviors |
|-----------------------|-------------------|---------------------|----------------|--------------|-----------|-----------------------------|-------------------------|
| Matching | Very fast | Clear enough | 20 | 2 | Good | None | none |
| Gross Motor Imitation | Pretty fast | Mostly clear | 12 | 6 | mediocre | None | None |
| Fine Motor Imitation | Quite slow | mediocre | 15 | 11 | Poor | Some | None |
| Handwriting | Slow | poor | 10 | 10 | Very poor | Several | 1 |
| Object labels (tacts) | Very fast | Very clear | 25 | 1 | Good | None | None |
| Handwriting | Very slow | poor | 5 | 5 | Very poor | Several, with long duration | None |

Many teachers/observers would only have data on the 1 significant problem behavior that occurred during handwriting. They may not notice any of the other data reflected in this table. Since they only noticed the one major problem behavior, not precursors, they can't identify why the problem behavior occurred. They may attribute the problem behavior to dehydration, or lighting, or the moon, or something.

If we further notice how much Darrin's behavior improved during "Object labels" (also known as "tacts"), we will add to our data-base. We now know not only that he dislikes writing, but also that he names items with confidence. Maybe he even enjoys naming items.

If teachers/observers can be trained to notice subtle worsening and improvement in behavior, they will be more capable both of completing *The Inventory of Good Learner Repertoires* and of

modulating their instruction and supports to their learners' needs. If scorers can only correlate major problem behaviors with the items assessed in the IGLR, the IGLR may be of little utility.

How do you grade response quality?

Darrin's facial expression worsened the moment the writing task was presented. Subjectively, you could speculate that he was thinking "Crap, writing!" He was a little slower to grab the pencil than he had been to engage in previous tasks. He resisted prompts to use an appropriate grip. He needed to be directed more than once to make many of the marks, and he was slow to make each mark.

Most scorers need training in this area. I like to begin with a simple intervention, asking trainees to observe a learner working with another teacher, and to subjectively rate the quality of the learner's motivation. Before explaining the small behavioral dimensions that should be observed, I simply ask what they think about the learner's motivation. How would they rate it on a scale of 1-5? Why? Some future teachers can do this quite well, and only need to be asked to do so. For those teachers, I do not introduce more complicated training procedures.

Below is an example of a data sheet I sometimes use for this training.

Gauging Learner Effort

Date: _____ Student: _____ Teacher: _____

| Activity | Approximate level of effort (1-10) | Reinforcers used |
|----------|---------------------------------------|------------------|
| | | |
| | | |
| | | |

(This data sheet was first presented in "What You Need to Know about Motivation and Teaching Games" (Ward, 2008), and was borrowed with permission from me, after extensive debate and name-calling.

Some trainees require more detail and more practice. For them, I describe the concept of “steam” (Ward, 2008). Though the concept of “steam” was introduced to describe motivation during play, it can be applied easily to cooperation with tasks, as well. “Steam” estimates of learner effort are generated by measuring:

1. Teacher directions-anything a teacher tells a student to do
2. Teacher prompts-things teachers do in addition to presenting instructions, such as verbal reminders, gestures, or physical guidance
3. The speed of student response to directions (also called latency)-when the teacher directs, or presents an offer, how quickly does the student respond or accept? An oral spelling test is an example.
4. The speed of student responding when the task doesn't require them to wait for individual teacher directions (also called rate)-when the student can respond as quickly as they like, how quickly do they respond? Independent completion of a worksheet would be an example.
5. The frequency with which extrinsic reinforcers are necessary-did you have to give them a lot of treats, toys, or tokens?
6. Student affect-what was their mood like?
7. Response magnitude-how “big” was the response? For example, how high/far did they jump? How loudly did they sing?

Gauging the relative level of steam of any activity

| Dimensions | Relatively low steam | Relatively high steam |
|------------------------------------|---|---|
| Necessity of prompts | <i>A lot of prompting is necessary. Intrusive prompts, like physical prompts, are required.</i> | <i>Little or no prompting is required. When prompting is required, non-intrusive prompts, like gestures, are effective.</i> |
| Inter-response time | <i>There is a relatively long inter-response time</i> | <i>There is a relatively short inter-response time</i> |
| Latency | <i>There are relatively long latencies</i> | <i>There are relatively short latencies</i> |
| Magnitude of response | <i>Responding is relatively “small”, lacking intensity</i> | <i>There is a relatively high response magnitude</i> |
| Affect | <i>There is a relatively poor, or flat affect</i> | <i>There is relatively positive affect</i> |
| Necessity of extrinsic reinforcers | <i>A lot of extrinsic reinforcers are necessary</i> | <i>Few, if any, extrinsic reinforcers are necessary</i> |

If you measure all of these, and see that directions and prompts are more frequent than student responding, then “steam” is low. If a task is presented that would potentially allow multiple independent student responses (e.g., a puzzle, or a book), and the student requires directions to continue with the task, steam is low.

Different types of tasks permit attention to different types of subtle behaviors. When working on vocal responding, for example, articulation and volume can provide sensitive feedback about the learner’s motivation, confidence and effort. When working on writing, improved legibility and posture may provide this feedback.

I occasionally ask trainees to take data with a sheet like the one below. I will ask them to identify each time the teacher reinforces a response, and ask them to put a + or – in the appropriate columns to note whether each reinforced response demonstrated relatively good or relatively poor levels of each dimension. I’ve filled in 3 responses for a labeling program for Darrin, and then 3 responses for a writing program.

| Activity | Correct | Articulation | Legibility | Speed | Affect | Posture | Volume | Independence |
|----------|---------|--------------|------------|-------|--------|---------|--------|--------------|
| Labeling | + | + | | + | + | + | + | + |
| Labeling | + | - | | + | + | + | + | - |
| Labeling | + | + | | + | + | + | + | + |
| Writing | + | | - | - | - | - | | - |
| Writing | + | | - | - | - | - | | - |
| Writing | - | | - | - | - | - | | - |

Note that Darrin was correct in his first 2 attempts at writing, but that other indicators of response quality were poor. A response can be correct or incorrect, but it can also be fast, loud, clean, etc. Attention to these additional response qualities increases the sensitivity of measurement. Sensitive measures provide more information about a learner’s strengths, weaknesses, and preferred learning styles. Sensitive measures improve the timeliness of teaching modifications.

Once a scorer is capable of gauging the quality of learner responding, they can assess:

Resilience and Regulation

Readiness

Perseverance and Focus

Flexibility

Consequences

Preferences for Learning Channels

A. Behavior Excesses

“Behavior excesses” refer to behaviors that happen too frequently. In most cases, these are behaviors that would preferably never happen, such as self-injurious behavior. In some cases, a behavior excess may be appropriate at a low rate, or in specific contexts, but is inappropriate at the level demonstrated. For example, it may be appropriate to ask a peer whether he likes “Barney”, but it is not appropriate to ask the same peer this question 5 times per hour.

“Behavior excesses” is perhaps the easiest category in the *IGLR* to score with perfect objectivity. We will provide a brief description of basic measurement procedures here. Those interested in much greater detail on measurement can read (Cooper, Heron & Heward, 2007).

As long as scorers are able to identify incidences of aggression, whining, self-stimulatory behavior, stealing, etc., they should be able to identify the frequency with which those behaviors occur. How often does your learner do any of these things?

Someone on the student’s team needs to know how to generate “operational definitions”*, permitting all observers to identify the occurrence of a behavior in the same way as all other observers identify occurrences of that behavior.

If a definition of “aggression” states that “Bobby viciously attacks people”, all observers will score an instance of this behavior when Bobby knocks a peer out with a flying forearm and follows that with a belly-to-belly suplex, but only some will score “aggression” when Bobby pinches a peer.

A better definition of aggression might be “Bobby hits, kicks, and scratches peers.” You may add a description of the outcomes of these behaviors, such as “...with intensity sufficient to leave marks”. If aggression is

defined in these operational ways, observers will usually agree upon what represents aggression and what does not represent aggression.

*An “operational definition” (e.g., Cooper, Heron, and Heward, 2007) of a behavior allows multiple observers to score the occurrence and non-occurrence of the behavior consistently.

*“Rate” is calculated by identifying the number of times a behavior occurs (i.e., the frequency) per unit of time. Rather than saying someone “hit 4 times”, we say “they hit 4 times per hour”. Rather than saying someone read 29 sight words, we say “they read 29 sight words per minute.”

Most items described in “Behavioral Excesses” assess the rate at which a behavior occurs. If someone told you that “Bobby kicked 7 times”, you would naturally ask follow-up questions, such as “today?”, or “this week?” There is a big difference between kicking 7 times per month and kicking 7 times per hour.

To calculate rate, begin by listing target behaviors on the left margin of a sheet of paper. Note the time that observation began, and the time that observation ended. Tally each occurrence of the behavior. Count the total tallies for each behavior. Divide that frequency by the unit of time observed, and you will have the rate at which that problem behavior occurred.

Calculating Rate

Start time: 10:00

Stop time: 12:00

Total time: 2 hours

| <u>Behavior</u> | <u>Frequency (tallies)</u> |
|--|----------------------------|
| Hitting | \\ \\ \\ |
| Throwing work materials | |
| <p><i>“Hitting” occurred 4 times in 2 hours. Divide 4 by 2, and discover that hitting happens 2 times per hour.</i></p> <p><i>“Throwing work materials” occurred 2 times in 2 hours. Divide 2 by 2, and discover that work materials are thrown 1 time per hour.</i></p> | |

Even better, you can gather rate data at the same time as beginning your functional assessment by gathering “scatter plot” data. Scatter plots allow measurement of a number of behaviors within specific periods of time. Perhaps problem behavior frequencies are tallied by hour, from 9 to 10, from 10 to 11, etc.

If measured in a school setting, it is probably more valuable to measure problem behaviors across periods of the day, especially if the student transitions from one class to the next, or if teachers work on only one subject at a time. Scatter plots measure the rates of problem behaviors throughout days and weeks, but also provide more detailed information about the times most and least associated with problem behaviors, which provides one step toward identifying why problem behaviors are occurring.

Figure ____ : Bobby’s scatter plot data.

| | 9:00-10:00 | 10:00-11:00 | 11:00-12:00 | 12:00-1:00 | Daily totals |
|-------------------------|------------|-------------|-------------|------------|--------------|
| Hitting | | | | 0 | 5 |
| Throwing work materials | 0 | 0 | | 0 | 3 |
| Totals | 2 | 1 | 5 | 0 | 8 |

From this data, we can see that Bobby aggresses or destroys property 8 times in 4 hours, which equals 2 significant problem behaviors per hour. (This, by the way, would earn a score of “0” on item A1, in the IGLR.)

But, we can also see that Bobby demonstrates most of his problem behaviors from 11:00-12:00. What class does he have at that time? Can he handle that material? Is he with a different teacher at 11:00 than he is at 10:00?

And, we can see that Bobby does best from 12:00-1:00. What is going on at that time? Is that a lunch/recess period? If so, perhaps his problem behaviors serve an “escape” or “avoidance” function. In looser terms, perhaps he misbehaves in order to get out of work.

Data about the times of best/worst behavior doesn’t help you score the IGLR, but it does get you started analyzing the reason(s) for the problem behaviors.

Low rates of problem behavior earn high scores on the IGLR. In this way, “Behavioral Excesses” are scored consistent with the rest of the IGLR (i.e., higher scores are always better than lower scores).

For all 9 items assessed in “Behavioral Excesses”, score:

3 = never

2 = Less than once per day

1 = More than once per day

0 = More than once per hour

A1-“Physical aggression, property destruction, or self-injurious behavior?”

Please refer to descriptions above for generation of “operational definitions” and measurement of problem behavior. Scores for item A1 relate to the total for all forms of aggression, property destruction, and self-injurious behavior. If, on average, Bobby kicks twice per day, hits once per day, swipes materials 3 times per day, and bites himself once per day, he is totaling 7 instances of aggression, property destruction, and self-injurious behavior per day. If the school day is less than 7 hours long, Bobby will score a “0” for item A1 because he is demonstrating significant problem behavior more than once per hour.

A2-“Less-intense problem behavior, like whining, crying, etc?”

Some of these behaviors will last more than several seconds, or much longer, per episode. This can be problematic, as you attempt to score the rate of problem behavior, not the “duration” (i.e., how long the behavior lasted).

Each time a behavior ceases (e.g., your student stops whining) for at least 10 seconds, consider that the end of one episode of that problem behavior. The next time the behavior begins, consider that the beginning of the next episode.

Additionally, if these behaviors tend to last more than 10 minutes per episode, on average, decrease your student’s score by “1”.

A3-“Self-stimulatory behavior? For example, do they engage in unordinary, repetitive behaviors such as flapping their fingers in front of their eyes? Do they repetitively quote lines from movies or songs without an audience, or make nonsense noises?”

Self-stimulatory behavior, similar to some of the behaviors described in A2, tends to occur for periods longer than a few seconds. Sometimes, self-stimulatory behavior is demonstrated by a very brief hand flap. Other times, students may “script” to themselves for several minutes at a time. Please use the same criteria described for A2 (i.e., 10 seconds without self-stimulatory behavior marks the end of that episode). Also, please apply the duration criteria (i.e., if episodes of self-stimulatory behavior average more than 10 minutes duration, decrease your student’s score by “1”.)

A4-“Inappropriate or reckless use of property? For example, do they pour shampoo on the floor, turn on taps and leave them running, or throw valuables out of car windows? Do they take strangers’ drinks/food?”

Behavior resulting in no negative impact upon self or others should not be counted. For example, it may be inappropriate to stare at the lines on a blank page, but it doesn’t damage the page. Dumping shampoo might make a mess, and wastes someone’s shampoo.

A5-“Inappropriate social behavior? For example, do they invade others’ space, smell others’ hair, sit on lap, touch others inappropriately?”

Some of the behaviors listed in this section may be relatively difficult to recognize. Most of

those types of behaviors are considered appropriate for learners less than 5 years old, particularly if they occur with one of their parents. Few would consider them appropriate for a teenager, unless, perhaps, they were doing so with a boyfriend or girlfriend.

*Social validity (e.g., Wolf, 1978) refers to the social acceptability of goals, processes, and outcomes, as judged by those experiencing or observing those goals, process, or outcomes.

These types of judgments are ultimately questions of “social validity”*. Behaviors should be considered “socially inappropriate” if most people experiencing or observing them would

deem them inappropriate for your particular learner.

This criterion can take your learner’s age and size into account, as well as the contexts in which they may demonstrate the behaviors in question. For example, let’s say you have an 8 year old boy who likes the smell of his mother’s shampoo. His lead therapist has long, curly hair, and has been working with him since he was 3. She has grown comfortable with him smelling her

hair, and doesn't think anything of the fact that he is now 8. You may opt not to lower his score on A5 due to smelling his therapist's hair.

But, he is now attending a classroom in which 4 of his peers have long hair. It would probably be fair to call hair-smelling inappropriate if he does it to his peers. Ultimately, the reactions of his peers will likely validate that judgment (i.e., if his peers tend to withdraw from him when he smells their hair, that behavior is socially inappropriate.)

A6—"Do they arrange and defend 'shrines'? For example, do they line up Barney characters and protest when others approach the characters? Does the kitchen faucet have to be pointing in the 'right' direction?"

Note that, within reason, it is appropriate to defend one's property. If your student has just built an awesome block tower, and their younger sibling is crawling toward it, it is very reasonable for them to defend their block tower from their sibling.

Scoring item A6 will require you to make a subjective judgment of whether your student's defense of property is appropriate. Broadly, if the arrangement of materials they are defending is atypical, or not functional, score it as an example of "defending a shrine".

For example, there is a functional reason for my preference that lights remain off in unoccupied rooms. No one needs the lights on, and illumination follows quickly if someone enters and flips a switch. I would not score my preference for lights remaining off in unoccupied rooms as an example of "defending a shrine". But, if I passionately assured that all light switches were left halfway between up and down, there would be no function served, and I would score this as an example of "defending a shrine".

Consider the intensity with which they defend shrines when scoring this item.

A7—"Rigid expectations? For example, do they protest if their sandwiches are not cut diagonally? Do they repetitively comment on the same things and require a response from a listener? Are they upset when math isn't the first activity after lunch?"

Rigid expectations are generally easy to identify. One notable requirement, however, is that scorers differentiate between protests/tension arising from change in expectation and protests/tension arising from change to a less-preferred context. For example, a student who dislikes math is not necessarily showing rigidity when "math worksheets" replace "recess" on

the schedule. A student who loves recess and loathes math is probably showing rigidity when they protest the cancellation of math, in favor of recess.

The final 2 questions in “Behavior excesses” return us to the functional nature of the decision making of behavior analysts. We are interested in the extent of the effects of any behavior excesses. These become questions of “habilitation”*, and are commonly used as criteria for determining whether a problem behavior warrants intervention.

A8-“Do any of the behaviors listed above interfere with instruction in any setting (e.g., table work, games, natural environment)?”

The easiest way to score this item is to note whether students are dismissed from instruction due to problem behaviors. If, for example, a learner yells in the middle of class, they are likely to be removed, and the yelling would therefore be interfering with their instruction.

If yelling delays instruction, it is interfering, but perhaps less dramatically. If a teacher tends to “work through” problem behavior, and the student tends to continue responding, and the problem behavior terminates shortly thereafter, then the behavior is interfering minimally. Scorers may choose not to score such behaviors as interfering with instruction. But, we recommend scoring items conservatively. In this case, a “conservative” scoring would count behaviors delaying instruction as behaviors that “interfere with instruction”.

*Habilitation refers to maximization of short and long-term reinforcers, and minimization of short and long-term punishers. These benefits are not realized by simply assuring that a particular learner contacts a lot of reinforcement and very little punishment, regardless of their behavior. Rather, these outcomes are realized by establishing behaviors that will naturally contact reinforcers and decreasing behaviors that will tend to contact punishers. The concept of “habilitation” is closely related to the concept of “degrees of freedom”, which refers to options available to an individual as a function of their resources and behaviors. For example, a person living within walking distance of 3 restaurants has options when choosing to eat out. If their behavior has gotten them expelled from one of those restaurants, they have fewer options.

Of course, if your student doesn't demonstrate problem behavior, this is easy. They will score a "3", as absence of problem behavior precludes the possibility of problem behavior interfering with instruction. But, if any behavioral excesses are interfering with learning in the ways described above, A8 should be scored according to the frequency with which these behaviors interfere with instruction. If these behaviors interfere with instruction less than once per day, score a "2". If behavior interferes with instruction more than once per day, score a "1". If behavior interferes more than once per hour, score a "0".

A9-"Do any of the behaviors listed above interfere with your learner's ability to access or benefit from a wide variety of environments?"

You probably notice that there is some overlap between behavior excesses resulting in this limitation and behavior excesses interfering with instruction. If a behavior excess tends to result in removal from class, it would be fair to score that for your learner in both A8 and A9.

If behavior excesses don't frequently interfere with teacher-directed work, but do interfere with play time in a community park, or shopping trips, or attending their brother's baseball games, then their score should be reduced for item A9, but should not be reduced for item A8. Since instruction could occur at the park, in the mall, or at a brother's baseball games, that learner's score may also be reduced for item A8.

Many learners have learned to behave well while they are clearly "on the clock", or perhaps while behavior-reinforcer contracts are relatively clear and generous, but have not learned to behave well during less-structured activities. Those learners would tend to score lower on A9 than they would on A8. If behavior excesses occur at levels that result in removal from public/social settings, OR if caretakers tend to avoid those settings due to expectations that behaviors will be problematic, this should be reflected in that learner's score on A9.

It may come out during this assessment that limited access to various settings is more of a caretaker issue than it is a learner issue. Perhaps a learner is not accessing a broad variety of environments strictly because their caretaker is afraid that they may have problems. If you speculate that a learner may do well in a wider variety of settings, the best thing to do is test that hypothesis. Take your learner to a wide variety of settings, and observe whether their behavior is problematic. If you tend to manage their behavior with artificial supports in most teaching environments, you should leave those supports in place during these tests. For example, if you tend to use a token system during table work, bring the token system with you to the mall. You can use information from these tests to complete your scoring on A9.

“Comments”-If your learner does well in a wide variety of settings with 1 caretaker, but not with another, you should note that in the “Comments” section. The issue of different caretakers seeing different results will also be covered in section B, “Behavioral Supports”.

As with any category of the *IGLR*, space is available for making comments. These can include greater specificity of the behaviors reported upon in the questions above. These could include comments like “physical aggression occurs in the home, but never at school”.

B. Behavioral Supports

The only requirements on student performance in this section are that they are refraining from problem behavior, remaining in roughly the appropriate area, and “going along” with activities. They do not need to vigorously apply themselves, or demonstrate high quality responding in order to score well in the “Behavior Supports” section. Students can score well in this category even though the majority of their responses are prompted.

We are assessing here the relative ease with which a student can be incorporated into a variety of environments, with a variety of teachers. We are not assessing the relative ease with which students can be taught new skills in a variety of environments by a variety of teachers.

Do not attempt to judge whether a particular support seems to be responsible for a current level of behavior. Rather, if a particular level of support is sometimes present, merely score the level of your student’s behavior when that support is present. If that support is sometimes absent, merely score the level of behavior when the support is absent.

For example, if a student is sometimes exposed to visual schedules, whether or not these schedules seem to have an impact upon their behavior, score the level of their behavior when schedules are used. Perhaps the student will score a “3” because they tend to behave well with schedules, and will also score a “3” because they tend to behave well without schedules. In this case, we can suspect that visual schedules are unnecessary, because the student scored equally well in the absence of visual schedules. But, this does not mean that we should score them lower when visual schedules are used, unless their behavior worsens when visual schedules are used. If visual schedules are not used with this learner, score “NA” (not applicable).

B1-2-“Do they behave well near people with a history of punishing misbehavior (i.e., perhaps they are intimidated), or when punishing people are absent?”

Most educational programs intentionally refrain from using punishment. If this mandate truly trickles down to all personnel, this item will be scored “NA”.

But, in some programs, even if not officially recommended by supervisors, teachers will attempt to punish. Whether used intentionally or not, we can gather information about learners exposed to punishment. If there is anyone in their life who attempts to punish misbehavior, does this learner tend to behave well when near them? Do they behave better near people who have a history of punishing misbehavior, or away from them? Do they behave the same regardless of whether people who have attempted to punish misbehavior are present?

To begin scoring these questions, we need to know how well they behave, in general. If they consistently behave very well, regardless of who is present, they will score “3’s” on both items B1 and B2. If they sometimes misbehave, AND if there is any difference between how they behave near people with a history of punishing misbehavior and in the absence of those people, please let that distinction be reflected in the respective scores of B1 and B2.

If I were scoring for a learner who frequently misbehaves, and they behave a little better in the presence of people with a history of punishing misbehavior, I’ll score a “1” for B1 and a “0” for B2. Or, if problem behavior is a little less prominent, but a difference remains dependent upon the presence of those with a history of punishing misbehavior, I may score “2” and “1” respectively.

Scores on B1 and B2 need to provide us both with an assessment of the overall levels of behavior excesses and with an assessment of the effect of the presence of people with a history of attempting to punish misbehavior. If that difference is significant, let’s say “3” for B1 and “0” for B2, that tells us that punishment is at least one of the primary reasons that a student sometimes behaves. This will have major implications on our programming decisions.

Recommendations for scoring B1 and B2 provide a good example of how some scores throughout “Behavioral excesses” can be both absolute and relative. Scores of these items are “absolute” in the sense that each item will be rated according to the level of appropriate behavior correlated with the depicted condition. So, if Rose consistently behaves well in the presence of someone with a history of punishing misbehavior, she will score a “3” for item B1. If she consistently behaves well in the absence of such a person, she will probably score a “3” on item B2, as well.

But, if she tends to behave well in each condition, but behaves a little better in the presence of someone with a history of punishing misbehavior, you may score B1 and B2 “3” and “2”, respectively. This would be an example of scoring paired items relatively, and the reason to consider doing so is to identify that the variable depicted between a pair of items seems to be relevant to the behavior of your learner.

At the risk of sounding unscientific, I will note here that completing the *IGLR* is part art and part science. The “art” part is that we primarily use the *IGLR* to inform us of “what makes a learner tick”, and to contrast that with things “that make a learner not tick.” Towards these ends, if there seems to be a difference between how they perform when potential reinforcers are present, compared to when potential reinforcers are not present, we want our relative scores to reflect that distinction. Whether those scores (i.e., B5-6 and B7) end up being a contrast of 3-to-2, or a contrast of 1-to-0 will depend upon the absolute quality of learner behavior during each.

B3-4-“Do they behave well with visual schedules?” “Do they behave well without visual schedules?”

Score these items in both absolute and relative terms. For either item, if behavior is:

-almost always good, score “3”

-usually good, score “2”

-sometimes good, score “1”

-almost never good, score “0”

B5, 6, & 7-“Does your student behave well when primary reinforcers, such as edibles or preferred toys, are clearly available for appropriate behavior?” “Do they behave well when conditioned reinforcers, perhaps including things like tokens or money, are clearly available?” “Do they behave well when no potential reinforcers are clearly available?”

In B5, a teacher/supervisor makes it clear to the learner that goods are available for good behavior. This could be a spoken contract for a learner able to comprehend such a contract (e.g., “If you keep your hands to yourself the whole time we’re at Aunt Penny’s, I’ll buy you ice cream on the way home.”) For learners less able to comprehend such a verbal contract, an example may involve a teacher holding a bag of Cheetos, and telling the learner to get a napkin

and sit down. Perhaps the teacher extends this interaction, and continues to hold the bag of Cheetos while asking the learner 5-10 questions, before finally delivering a Cheeto. This is still an example of B5, “Behaving well when primary reinforcers, such as edibles or preferred toys, are clearly available for appropriate behavior.” Holding the Cheetos in front of the learner may implicitly communicate that Cheetos are available for the right behaviors.

B6 is different from B5 because the potential reinforcer is “conditioned”*. If a teacher/supervisor carries a learner’s token board with them, and tells the learner to “come line up”, the quality of the learner’s cooperation may be an example of B6. The student would be responding while a potential conditioned reinforcer remains clearly available. For some learners, we have started carrying clicker-counters (and occasionally establishing contracts). Student behavior while we wear the clicker is probably an example of B6...it has probably become clear to the learner that conditioned reinforcers (i.e., clicks) are available for appropriate behaviors.

For B7, a teacher is not communicating availability of any type of reinforcer in any way. They may simply say “come here”, or “wait here”. They are not describing reinforcement possibilities or showing the student that they have potential reinforcers in their possession.

*A “conditioned reinforcer” is one that has developed its value due to a history of being paired with primary reinforcers. Easy examples include things like tokens, stickers, clicks, and money. There are certainly advanced examples, such as praise, attention, signs of competence, indications that one is “moving forward”, etc, but those would complicate the discussion at this point.

B8-“Do they behave well when clear limits are set?”

If you say something like, “You can play with any of these toys, or anything in that room, but you cannot go downstairs”, will your learner respect that direction for an hour? Or, if you and your learner are in a relatively new environment, and you redirect or correct their behavior a few times, will they refrain from that behavior for an hour? Perhaps, during free play, they have hit peers. If you’ve followed this by shadowing their hands away from their peer and saying something like, “No, we don’t hit our friends”, have they respected this limit for an hour?

80-100% = "3"

60-79% = "2"

30-59% = "1"

Less than 30% = "0"

B9-"Do they behave well when supervised by a specific person?"

If they behave well for anyone, for any reason, for an hour, reflect that in your scores here. If they refrain from misbehavior and remain in the appropriate area from:

80-100% = "3"

60-79% = "2"

30-59% = "1"

Less than 30% = "0"

B10-"Do they behave well for an hour when supervised by any of 3 specific people?"

Score this item exactly the same as B9, with only the added requirement that they are behaving well for at least 3 different people. If a student scores well on this item, it suggests that the people supervising them do not need to have highly specialized skill sets.

B11-"Do they behave well for an hour when supervised by anyone? Essentially, any competent stranger, such as someone at the daycare center of a gym, could supervise this learner and behavior would remain appropriate."

Again, use the same criteria as B9, only adding the requirement that there can be no competent adult with whom they misbehave.

B12-"Do they behave well with 1:1 attention?"

Use the same criteria as B9, counting only times that they are supervised individually.

B13-“Do they behave well with 1:3 attention?”

Use the same criteria as B9, counting only times that they are supervised in groups of at least 3 children and 1 adult.

B14-“Do they behave well without any particular supports?”

This item essentially tests whether your learner requires any type of specific supervision above that typically offered for children their age. If you can take them to the mall, not hold their hand while walking, barely notice that they’re with you, and they’re fine, then they will easily score “3”. Use the same criteria, again, as in B9 above.

C. Resilience and Regulation

This category assesses a student’s ability to tolerate a variety of challenges.

C1-“Surrender reinforcers readily.”

When a student has control over a reinforcer, and is asked to “turn it off”, “give it to me”, “pass it to _____”, etc., they do so without hesitation or protest. Note, this is different than accepting the removal of a reinforcer, such as would be the case if the instructor had a remote control and turned off a preferred video. To score well on C1, a student watching a preferred video would need to turn it off by themselves, or pass the player to their teacher.

For the most part, your score should reflect the proportion of opportunities upon which your student readily surrenders reinforcers. If they quickly and calmly surrender reinforcers at least 85% of the time, score “almost always”, which is a score of “3”. If they quickly and calmly surrender reinforcers 65-84% of the time, score “2”. From 25-64%, score “1”. Below 25%, score “0”.

It is helpful to incorporate the degree of resistance into your scores. There is a difference, for example, between a student who surrenders reinforcers very slowly 20% of the time and a student who sometimes throws dangerous tantrums when asked to surrender a reinforcer. If

we were scoring a student who sometimes threw tantrums when asked to surrender reinforcers, we would automatically lower their score by at least 1.

Scorers, if thorough, will likely discover that students are much more likely to surrender some reinforcers than others. Regardless of the reason for these differences in performance, those differences should be noted in the “Comments” section.

C2-“Tolerate reinforcer withdrawal.”

For this item, the teacher has control over the reinforcer, and withdraws it. Perhaps they are pushing the student on a swing, and the teacher physically stops the swing to give another student a turn. Perhaps the teacher is blowing bubbles, and they stop.

It is not necessary, for this item, that the student hands an item to anyone, gets off of equipment, or turns something off. The only requirement is that the student does not protest when a reinforcer is withdrawn.

For the most part, scorers should rely upon the percentage ranges described above, for C1. It is also helpful to take into account the intensity of behavior problems following reinforcer withdrawal. If protests are significant, decrease scores by an additional “1”, after accounting for the percentage of opportunities upon which a student tolerates reinforcer withdrawal.

If a student tolerates withdrawal of some reinforcers better than others, note that in the “Comments” section. If a student has difficulty tolerating reinforcer withdrawal, please list it as a “Potential Target”.

C3-“Tolerate corrections.”

To score well on this item, a student does not necessarily need to learn well from corrections. In other words, corrections don’t actually have to be effective as teaching procedures. Students need only tolerate corrections, as evidenced by refraining from protests.

Using the same percentage ranges described for items C1 and C2, scoring should depend primarily upon the proportion of opportunities upon which a student tolerates corrections. Also, intensity of protest should be considered, again by decreasing scores by at least “1”.

If students tolerate corrections on some tasks better than others, this should be noted in the “Comments” section. If they accept corrections from some teachers better than from others,

this should be noted in the “Comments” section. There is a fair possibility that students will tolerate corrections for specific tasks better than they tolerate corrections for misbehavior. If so, that should also be noted in the “Comments” section.

Again, if students score less than “3” for C3, please add it to the list of “Potential Targets”.

C4-“Tolerate delays in reinforcer delivery”.

For this item, others must be in control of the reinforcer. We are not assessing whether a student will “wait for permission” to take an item within their reach, only whether they will tolerate delays in the delivery of reinforcers that are clearly under the control of others.

Score primarily by the proportion of opportunities upon which a student tolerates delays, and somewhat upon the intensity of problem behaviors following delays in reinforcer delivery. Also, please note whether they tolerate delays better from some teachers than others, or for some reinforcers better than others, in the “Comments” section. If they score less than “3”, please add “tolerate delays in reinforcer delivery” to the list of “Potential Targets”.

C5-“Remain attentive during delays in reinforcer delivery.”

For this item, a student should remain calm, but more importantly must be prepared to receive a reinforcer without excessive invitations following a delay in reinforcer delivery. For example, if a student asks for their turn with a toy, and they wait without protest for 10 seconds, how prepared will they be to take their turn with the toy? If a teacher/peer simply has to say “Ok, your turn” on most occasions, score a “3”. If a teacher/peer has to add, “Bobby, you can have the helicopter now!”, reduce the score.

For this item, you should also consider the length of delay as a variable. If a student is practically always prepared to take their turn with a reinforcer, or to receive a tangible, following a 3 second pause, they’ll surely score at least 1-2. If they are almost never prepared to access a reinforcer following a 6-7 second delay, they surely won’t score a “3”, and are most likely appropriate for a “1”.

C6-“Tolerate ‘no’.”

For this item, we are most-frequently assessing occasions upon which a student has requested access to a reinforcer, and a teacher/peer has responded negatively. (They may have said “it’s mine”, or “not in this lifetime”, as long as it was the equivalent of “no”.) Also, if a student has approached a reinforcer without asking permission, and they’ve been told “no”, that circumstance is relevant.

If a student has attempted to answer a question, and a teacher has informed them that they are incorrect, and the student sometimes misbehaves, that is also relevant here.

Base your score primarily upon the proportion of opportunities to which the student has refrained from protest. Note, if the student remains calm, but ignores “no” by taking the reinforcer anyway, this malfeasance will be accounted for later, when we assess “respects no”. For purposes of assessing C6, this student would still potentially score well.

If they tolerate “no” better for some reinforcers, or for some teachers, please note that in the “Comments” section. If there is “room for growth” in your student’s ability to tolerate “no”, please list it as a “Potential Target”.

C7-“Respect ‘no’.”

As promised, we are now dealing with the student who may remain calm when told “no”, but does what they like, anyway. Whether requesting a reinforcer or approaching a reinforcer without asking, when your student is told “no”, do they refrain from taking a reinforcer? This should include behaviors such as passing through a doorway, jumping up from a seat, shaking a peer’s necklace, etc. Note, it is of course possible that a student both protests “no” and fails to respect “no”, so they may score poorly both on C6 and on C7.

If your student respects “no” on 85-100% of opportunities, score “3”. For 65-84%, score “2”. For 25-64%, score “1”. For less than 25%, score “0”.

C8-“If the learner initially respects ‘no’, how long does he refrain from that behavior without additional reminders?”

This question is easily answered if your student fails to respect “no” in the first place. In that case, continued respect of “no” is not applicable, so you can score this item “NA”.

If your learner does respect “no” initially, the only remaining question in scoring this item is “how soon do you need to remind them not to engage in that behavior?” Let’s say, you’ve told

them not to play with the curtains. If you now wait at least 10 minutes without using additional “tricks”, will your student require another reminder not to mess with the curtains? If yes, score “0” for this item.

What do I mean by “tricks”? One example may be that you transition your student to an area away from the curtains, and keep them there at least until they’ve “forgotten” that they were about to play with the curtains.

Another potential trick would be to go out of your way to engage the student in other interesting activities that are incompatible with curtain play. Let’s say you suggested playing “Twister”, a game you know they love, which is out of reach of the curtains.

Yet another trick would be to call them to work. If they are almost always cooperative with work, this will be an effective distraction from the curtains. If any of these tricks are truly necessary to prevent your student from playing with the curtains again, your student’s score should be decreased.

We are not suggesting that you sit next to the curtains without saying anything for 2 consecutive hours in order to accurately score this item in the absence of “tricks”. We are asking you to consider whether tricks are necessary to prevent your learner from requiring follow-up warnings for misbehavior.

So, all things being equal, if your student starts to play with the curtains, and you say “no”, and they stop, how long will it be before you need to say “no” again?

C9-“Does ‘yes’ function as a reinforcer?”

This item is the most-difficult to score that we have encountered, so far. First, we should note that we are assessing phrasings, and non-vocal behaviors, that are equivalent to “yes”. Head nods may be an example. Other possible equivalences include words like “sure”, “ok”, “go ahead”, “no problem”, “alright”, etc.

Assess the extent to which a student would engage in a neutral type of behavior. One example, used by Per Holth at the 2009 ABAI Convention, was for a student to make marks on a white board. First, it is necessary to assess, on multiple occasions, the extent to which a student would engage in this behavior without interference from a teacher. If given free access to a dry erase marker and a white board, how many marks would your student make? After establishing that baseline, give them the marker again and begin to say “yes” (or an equivalent) after each mark on the white board. Do they engage with the white board for a longer period

of time, or do they make more marks? If the answer to this question is clearly affirmative, then “yes” functions as a reinforcer for your student.

There are more natural, and clumsier, ways to assess whether “yes” functions as a reinforcer. If a student tends to wait for permission before taking reinforcers, and if they quickly take reinforcers after being granted permission, then permission (i.e., “yes”, and its equivalences) likely function as a reinforcer.

C10-“Wait for permission to take reinforcers?”

If reinforcers are within your student’s reach, and you tell them to “wait”, do they tend to wait? Note, this is different than waiting while a teacher clearly controls access to a reinforcer. This item has implications for prevention of stealing, and for a student’s inclination to reference a teacher for permission.

Score this item based upon the proportion of opportunities upon which the student will wait at least several seconds before reaching for a reinforcer. If they practically always reach for the reinforcer within a few seconds, they will score “0”. If they tend to wait at least several seconds, or until permission is granted, upon 85%, or more, of opportunities, score “3”. If they wait for at least several seconds on 65-84% of opportunities, score “2”. If they wait on 25-64% of opportunities, score “1”.

C11-“Appropriately seek comfort, when necessary?”

If a student hurts themselves, has a reinforcer stolen by a peer, or is scared by something, what do they do? Do they yell or cry? Do they aggress?

If the student: remains perfectly calm; calms themselves quickly; or, approaches adults for comfort, and calms quickly when that comfort is provided, they will meet the criteria for this item. Use the same percentage ranges as described for other items (i.e., 85-100%, 65-84%, 25-64%, and less than 25%.) Students scoring in the high end of this range will score “3”, and those in the low end will score “0”.

If a student consistently calms themselves, without the need of adult assistance, you may choose to score this item “NA”.

C12-“Calm self when angry?”

If something angers a student, do they calm themselves independently? If they scored “NA” for item C11, they may well score “3” on item C12. In other words, if they do not require adult comfort, they may be calming themselves.

If a student never becomes angry about anything, score C12 “NA”. Otherwise, use the percentage ranges prescribed for other items in the C category.

C13-“Calm self when excited, enough to productively participate in activities?”

If a student becomes excited by something, such as roughhousing, do they require assistance to participate in subsequent activities? Some students, when excited beyond a particular threshold, will aggress, laugh uncontrollably, destroy property, or run from the area. If any of these behaviors tend to follow student excitement, students will likely score “0” or “1” on item C13.

If teachers are generally required to intervene in between student excitement and engagement in a future activity, the student should score “0” or “1” on item C13. If a student sometimes calms themselves enough to engage productively in activities after becoming excited, use the percentage ranges prescribed above to determine whether they score 3, 2, 1, or 0.

D. Readiness

This category assesses a student’s tendency to benefit from instruction, both at and away from a work table. In most cases, students scoring poorly in this area should work on these repertoires prior to emphasizing other areas.

D1-“Recognize that instructors control some reinforcers?”

A student who clearly recognizes that instructors control access to reinforcers will not only refrain from grabbing items without permission, but will also look toward the instructor for permission. They may approach an instructor and request an item. They also take items relatively quickly after permission is granted. If a student fits this description, score a “3” for this item.

A student who clearly fails to recognize that instructors control some reinforcers frequently grabs items without permission, and likely doesn't reference their instructor (except, potentially, when the instructor IS the reinforcer). They may also grab work materials before their instructor has provided instruction. If an instructor is attempting to teach a mand, they may orient toward the reinforcer, attempting to grab it or even "climb the instructor" to get to the item. A student fitting this description will score "0" for this item.

For students in between these two extremes, we should consider: the frequency with which they approach/take items; the frequency with which they request items; and, any logistics related to item/instructor positioning. If the student pursues the item more frequently than the instructor, but not to the extreme described in the paragraph above, give them a score of "1". If they request from the instructor more frequently than they grab reinforcers, score "2".

Finally, if instructors are almost always careful about keeping themselves in between students and potential reinforcers, and if this is necessary for the student to attend to their instructors more frequently than to potential reinforcers, you may consider reducing their score by 1. If instructors are usually very loose in their positioning of potential reinforcers, you may consider increasing your student's score by 1.

D2-"Easily interrupted/redirected self-stimulatory behavior?"

If your student never engages in any self-stimulatory behavior, you can score this "NA". *A score of "3" could be considered appropriate, as well.

Apart from that, scores for this item should be based only slightly upon a student's overall rate of self-stimulatory behavior. A student who seems to be "always stimming", may score a "0", but if they consistently refrain from self-stimulation for several consecutive minutes of work, then they are demonstrating that their self-stimulatory behavior can be interrupted or redirected. A student who engages in self-stimulation during most of their downtime may, if still very responsive to work or social play, score well on this item.

The most accurate way to score item D2 is to consider the duration of productive engagement, whether work or play, without self-stimulatory behavior and the responsiveness to redirections of self-stimulatory behavior. If instructors:

-can work with this student for 15 minutes with no more than one instance of self-stimulatory behavior, and that behavior ceased after the instructor's first redirection, score a "3". If multiple redirections are required, score a "2".

-can work with this student for 10 minutes, with 1-2 instances of self-stimulation, and that behavior ceased after the instructor's first redirection, score a "2". If multiple redirections are required, score a "1".

-typically have to deal with self-stimulatory behaviors at least once per 3-4 minutes, and that behavior sometimes requires more than one redirection, score a "1"

-typically deal with self-stimulatory behaviors at least once every 1-2 minutes, and that behavior sometimes requires more than one redirection, score a "0"

D3-"Respect work materials (doesn't grab, etc.)?"

This item is scored primarily by absence of grabbing, but somewhat by the opportunities that are available for grabbing. This item also considers whether damage is sometimes done to work materials. For example, if your learner usually crumples the pages of books within 1 minute of use, they will probably score "0" for this item.

If an instructor can take up to 5 seconds to arrange an instructional array, and the student grabs items on less than 5% of opportunities, score a "3", unless there are some common items that they tend to damage through misuse. If they tend, for example, to damage markers by pressing far too hard or banging, you will reduce their score by at least 1, and should note the problematic materials in the "Comments" section.

If they prematurely grab work materials on 6-20% of opportunities, score "2", and, again, reduce that score by 1 if they also regularly damage materials. Grabbing items prematurely from 21-30% of opportunities should score "1". Grabbing items prematurely on more than 30% of opportunities should score "0".

D4-"Accept prompts?"

This item should be scored similarly to "tolerates corrections" and to "recognizes that instructors control some reinforcers". The similarities are that we are looking both at the proportion of prompts that are accepted vs. the proportion that are protested and at the magnitude of protests.

If your learner accepts 90%, or more of prompts and the magnitude of resistance is minimal, score "3". If they accept 75-89%, score "2". If they accept 50-74% of prompts, score "1". For any score, if the magnitude of resistance is significant (i.e., if they demonstrate significant

resistance, such as loud vocal protests, physical aggression, SIB, or property destruction), decrease the score by at least 1.

D5-“Attend to non-intrusive prompts (e.g., gestures, indirect verbal prompts, etc.)?”

This item primarily considers the actual type of prompt used. Students who usually depend upon full physical prompts will score “0”. Students who sometimes respond to partial physical prompts, or to vocal prompts, will score “1”. Students who rarely require full physical prompts, and can usually respond to vocal or gestural prompts, will score “2”. Students who consistently respond to model prompts, or partial vocal prompts, or subtle gestural prompts, will score “3”.

The score for this item should account somewhat for “prompt repetition”. If a teacher frequently has to prompt a response more than once, decrease the score for this student by at least 1.

D6-“Wait to be prompted, when appropriate? The learner refrains from ‘impulsive’, incorrect task responding?”

Interestingly, a student who is utterly prompt dependent would score a “3” on this item. This item questions whether students tend to respond incorrectly because they are responding too quickly. Some students fitting this description tend to respond before a direction is completed.

If a student either responds correctly, independently, or waits for prompts on 85-100% of opportunities, score “3”. If they respond correctly or wait on 70-84% of opportunities, score a 2. If they respond correctly or wait appropriately on 50-69% of opportunities, score “1”. Below that, score “0”.

D7-“Calmly recruit assistance, when appropriate? Score this across all circumstances in which a student may recruit assistance.”

Scores on this item depend both upon a student’s tendency to recruit assistance and upon their tendencies to either quit trying to solve problems or to protest. Note, a learner who is either never challenged, or who is taught using exclusively errorless teaching procedures would score “NA”, but this score on D7 should cause his teachers to consider whether their learner needs more opportunities to problem-solve.

Also, a student who consistently works independently until problems are solved would be scored "NA". If this student consistently works for 10 seconds or more to solve problems, this indicates very good problem-solving and independence, and may indicate a preference not to ask for assistance. In that case, asking for "help", or maybe asking for necessary information, would probably be a good target.

If a student calmly requests help at least several times per day, and does so in lieu of protests or "giving up" on problems, they score "3" on this item. If they request help several times per day, but display tension in some of their requests and/or demonstrate problem behaviors in lieu of requesting help on some occasions, score "2". If they demonstrate problem behaviors related to challenges more frequently than they request assistance, but they request assistance some of the time and their problem behaviors are not dangerous to themselves or others, score "1". If they either don't request assistance, or if problem behaviors are significantly more prominent than requests for assistance, score "0".

D8-"Remain in instructional area without blocking?"

Students should not be allowed to score "NA" on this item. If a student truly needs to be blocked into an area in order to remain, even if that is officially part of their behavior treatment plan, they should score "0".

If not physically blocked into an area, and the student remains for at least an hour, score "3". If they remain for at least 10 minutes, score "2". If they remain for at least 1 minute, score "1". Less than 1 minute, score "0".

D9-"Remain in an area for _____ without blocking or frequent reminders?"

This item is almost identical to D8, except that we are now also assessing the need for someone to remind the student to remain in their area.

Please assign the same scores for the same ranges of duration in area, as long as reminders to remain in the area are less than one per 5 minutes. If reminders to remain in the area are necessary more frequently than once per 5 minutes, decrease their score by 1.

D10-"Attend to name?"

When the student's name is called, do they orient their gaze in the direction of the person calling it? For all percentage ranges listed below, please consider whether the student attends within no more than 3-4 seconds.

90-100% = 3

75-89% = 2

50-74% = 1

Less than 50% = 0

D11-"Tend to approach others for social interactions?"

Under any condition, how frequently does this learner approach someone in order to interact socially? Examples should primarily include play or conversation, though greetings may be scored as well. We are primarily interested in whether the student enjoys social interaction as an end unto itself. Approaching others to request tangibles, or information about the location of tangibles, should not be added to this score.

When there are opportunities to approach others socially, please score:

At least twice per minute (*or sustained interaction after an initiation) = 3

At least once per 2 minutes = 2

At least once per 3 minutes = 1

Less than once per 3 minutes = 0

In the "Comments" section, please elaborate upon the types of social activities your learner initiates. Are they initiating conversations or jokes? Are they initiating "chase", or asking to be picked up?

D12-"Tends to approach others for access to items or activities?"

This item should be scored exactly the same as D11, except that the learner is asking for items or activities. They may be asking for edibles, access to preferred videos, a turn on the computer, or any other nonsocial activity.

D13-“Have intrinsic interest in some tasks? Appears to enjoy some tasks, perhaps evidenced by spontaneously engaging in them or performing without the use of any extrinsic reinforcers. Do not include activities that are strictly leisure, such as TV, in which there is minimal active responding.”

The easiest ways to identify examples of intrinsically-motivating activities is to watch what your learner does on their downtime, and to note which activities they request. Do not count activities that are strictly passive or self-stimulatory.

In some cases, it may be difficult to distinguish self-stimulatory behaviors from intrinsically-motivating activities that are relevant to your learner’s profile. For example, maybe they spend much of their free time engaging in repetitive actions with a toy train set. If they repeatedly engage in the same 1-3 actions, and are not responsive to social bids for reciprocity, or worse yet, if they are defensive when others approach, you should consider that behavior self-stimulatory, and not include it in their score for D13.

If, however, your learner allows you to engage with them and their train set, and they do so readily (i.e., there is no coercion or resistance), and they do so without the addition of extrinsic reinforcers, you may be able to score it as an intrinsically-motivating activity.

Other examples may include things like: playing certain structured games, working with numbers or letters, singing songs, imitating animals, reading interesting books, echoing funny sounds, working through educational software on the computer, answering questions about preferred topics, activities that involve gross motor movements, racing against a timer, tasks involving coloring/painting/drawing, etc.

More than 5 activities = 3

3-5 activities = 2

1-2 activities = 1

0 activities = 0

D14-“Learn from corrections? When the student makes an error, teacher correction yields improved performance several minutes after the correction (i.e., not just immediately after the correction.)”

In simple terms, we’re trying to identify the extent to which correction procedures are the reason for improvement. If you are running a program that collects “first probe data”, and correction procedures reduce errors by the second or third day of programming, your learner will score a “3” on this item. If errors decrease quickly because of extensive use of errorless teaching procedures, it may not demonstrate that correction procedures are effective for your student. Either score “NA”, or give a low score.

If multiple types of behaviors have improved through correction procedures, and have done so within a few days of introduction, you should score “3”. If you’ve been using “correction procedures” (in quotations because they are not “correction procedures” if they don’t result in corrected behavior) for the same targets for several weeks, you should score “0” for D14.

If you’ve identified at least one type of behavior (e.g., listener skills) that has benefited from correction procedures, you can score at least “1”. If you’ve identified multiple types of behaviors that benefit from correction procedures, score “2”.

E. Perseverance and Focus

E1-“Work well for _____, with regular reinforcement?”

All of the items in this category require the scorer to distinguish responding that is very good from responding that is very poor, and all points in between. In many cases, scorers may be observing responding that is technically accurate, but is also slow, whiney, prompted, sloppy, or in other ways less than ideal. To score “Perseverance and Focus” accurately, variations in these and other subtle qualities of student responding must be taken into account.

Apart from that, scoring “Perseverance and Focus” is easy. For E1, score:

Less than 5 minutes = 0

At least 5 minutes = 1

At least 15 minutes = 2

At least 30 minutes = 3

You could technically provide these scores even if 50% of the session was spent engaging with reinforcers. Issues related to the “schedule of reinforcement” will be explored later. Ideally, these scores reflect a learner who is spending more time working than accessing reinforcers. Sessions replete with intrinsically-motivating tasks provide one possible exception, in which case the work is the reward.

E2-“Engage in multiple responses (within a single task) following 1 direction? For example, do they complete puzzles, sort items, or complete worksheets without reminders to continue?”

We’ve added the underscore to emphasize that we are looking for multiple, consecutive, independent responses. If your learner only demonstrates 1 response following an instruction, and then the teacher redirects back to the task, the student will score “0”.

If your student consistently (95-100% of opportunities) completes tasks requiring at least 5 responses, without the need for reminders or redirection, score a “3” for this item. Ideally, they should do this across at least 3-4 different types of tasks.

If your student completes these activities independently on 80-94% of opportunities, score “2”. For 50-79% of opportunities, score “1”. Less than 50% of opportunities, score “0”.

E3-“Get work materials?”

For this item, the student needs to identify the need for the materials and retrieve them. If the teacher has to direct the student to retrieve an item, do not count that as demonstration of a student “getting their materials”. It may be an acceptable prompt level, followed by a prompt level employing an “indirect verbal prompt” (e.g., “What do you need?”), but it does not qualify for scoring E3.

This item does require that a student travel from his area, or at least turn around and reach up or down, in order to retrieve his work materials. If the materials are within the student’s immediate reach, you’re assessing E4 (i.e., “Position work materials.”)

If, when presented with a task, for at least 2 different tasks, the student spontaneously retrieves the necessary items on at least 85% of opportunities, score a “3”. For 65-84%, or if they only retrieve materials for a single task, score a “2”. If they retrieve materials on 50-64% of opportunities, score a “1”. Less than 50% = “0”.

It may be relevant to note the specific tasks for which they will retrieve items in the “Comments” section.

E4-“Position work materials?”

This item is scored exactly the same as E3, and measures exactly the same thing, except that the materials are in the student’s immediate vicinity and they are moving them into a position that allows them to use the materials more efficiently. Examples may include things like “rotating a paper slightly in order to write”, “moving a block tower closer in order to support it with a second hand”, etc.

E5-“Put materials away?”

Similar to E3 above, only score this behavior if it happens spontaneously. Teacher support should be considered a prompt, and should not count as meeting criteria for E5. Score exactly the same as E3, above.

E6-“Engage in at least 3 consecutive tasks with 1 direction? For example, following a single direction, will they complete 3 consecutive worksheets without reminders?”

Again, we’ve added an underscore, this time in order to help the scorer distinguish E6 from E1. Each task must require a minimum of 3 responses, preferably more. The student has to go from the end of one task to the beginning of the next with no teacher support whatsoever. All tasks can be right in front of the student. A packet of 3 worksheets would qualify. No travel is required.

Again, please use the same percentage ranges as suggested for E3, above.

E7-“Engage in at least 3 consecutive tasks, requiring travel totaling at least 30 feet?”

This item should be scored exactly the same as E6, above, except that the student must travel to retrieve at least one task, and the total travel must be at least 30 feet.

E8-“Walk past potential reinforcers (while completing tasks requiring travel) without grabbing them?”

This item does not require the learner to be completing multiple tasks in succession, nor does it specify the distance the student must travel. They could be told to travel as little as 3-4 feet past a preferred item in order to retrieve a named neutral item.

85-100% = 3

65-84% = 2

50-64% = 1

Less than 50% = 0

E9-“Work to solve problems for at least 5 seconds?”

It is important to note that we are not referring simply to a multi-step problem, like addition with regrouping. E9 refers to problems that yield confusion and/or failure for up to 5 seconds. Struggling to grip a sock in order to pull it up would be one example. Searching for a necessary work material in a drawer full of materials would be another example. Working a combination lock is not an example, as long as the student knows the combination. In that case, they know what to do at each step, and are not solving a problem, but are instead executing a familiar behavior chain.

If your student scores “NA”, you may want to consider introducing opportunities for them to solve problems.

If your student gives up or demonstrates problem behavior within 5 seconds, score that as a failed attempt. Use the same 100-85-65-50 percentage ranges.

If a student consistently asks for “help” before persevering independently for at least 5 seconds, for the purposes of scoring E9, this will lower their score. Although asking for “help” is a potentially productive alternative, this student is not persevering independently, and we want to capture that fact here.

E10-“Work to solve problems for at least 20 seconds?”

Everything on this item is scored exactly the same as item E9, except that we are measuring 20 seconds of perseverance.

E11-“Respond to independent work schedules for _____? When responding to independent work schedules, your learner takes their direction from the schedule, not from the teacher. Your scores should reflect your student’s endurance without reminders to continue.”

Ranges are provided in the IGLR:

1 hour = 3

15 minutes = 2

2 minutes = 1

Less than 2 minutes = 0

E12-“Travel at least _____ feet to retrieve a named item?”

We will note, again, that the student must travel without reminders, or any other supports. A student who travels 5 feet, pauses, is reminded to continue, and travels another 5 feet, has not “travelled 10 feet”...he has travelled 5 feet, twice.

The distances are provided in the IGLR:

100 feet = 3

50 feet = 2

15 feet = 1

Less than 15 feet = 0

E13 & E14-“Work in environments barren of distraction?” and “Work in environments containing potential distractions?”

Scorers are reminded to pay close attention to the quality of learner performance, not just accuracy.

If your learner at least sometimes works in environments that are relatively quiet, you can contrast their performance in those environments with their performance in environments containing more potential distractions. If they have a “work room”, that room is likely less

distracting than the mall or the park. Transitioning within a structured classroom is probably less distracting than transitioning from one classroom to the next, while peers crowd the halls.

Both E13 and E14 can be somewhat tricky to score, based upon the confidence with which we believe we can assess “potential distracters”. We try to use common sense in this assessment. But, it is possible that a single peer with little blinking red lights on their shoes will prove an amazing distraction. For some children, if an open window shows wind blowing through trees, this can be distracting.

The simplest way to contrast E13 and E14 is to note whether your learner tends to be distractible. If they are distracted by blinking red lights, and by the wind in the trees, they will probably get low scores on E14. If it is possible to create an environment without stimuli that they find distracting, you will use that information to score E13.

Scores for E13 and E14 are both absolute and relative. If your learner typically requires a lot of supports in order to provide modest effort for 10-20 seconds at a time, neither score should exceed “1”. Then, if there is a difference when distractions are present, E13 will be “1” and E14 will be “0”. If their work is usually excellent, unless one of several potential distracters are present, E13 will be “3” and E14 will be “0” or “1”. If their work is generally excellent, and there are only a few potential distractions that only have minimal impact upon their behavior, their scores will be “3” and “2”. If they work wonderfully, and are not distractible, both scores will be “3”.

E15-“Inform teacher that work is complete? For example, do they raise their hand or call their teacher’s name?”

Score your learner well if they use any method of informing their teacher that work is complete. Some learners, just beginning to develop this repertoire, will merely cast a glance at their teacher after completing a very brief task. Some will touch a teacher’s arm to get their attention. I would score them well if they demonstrated those behaviors on a high percentage of opportunities, and would note the form they use to recruit teacher attention in the “Comments” section.

Note, if your student is not asked to do any independent work, this item should be scored “NA”. Also, teachers may want to consider adding at least some form of independent task completion to this learner’s program.

Use the same percentage ranges as we’ve most-frequently employed (i.e., 100-85-65-50).

E16-“Direct teacher attention to completed tasks, such as by pointing and describing the completed task? After recruiting teacher attention (E15), do they direct attention to the completed task?”

E16 is a component of “joint attention” (e.g., Mundy, et al, 1994). A student actually directs a teacher’s attention to something they’ve done, ideally by pointing, bringing the task to show it, and/or saying “over there” or “on my desk”.

Isolated (i.e., without directing teacher visual attention) verbal descriptions of tasks without directing teacher attention to the task may not qualify, at least not if occurring with supports. For example, if a student completes a puzzle and their aide says “Go tell Mrs. Johnson ‘I did puzzle’”, and the student travels and echoes this prompt, this should not contribute to their score on E16. Likewise, if a cue card rests beside their puzzle, and it contains a picture of Mrs. Johnson and the textual prompt “I did puzzle”, this should not contribute to their score for E16.

In order for isolated verbal descriptions to qualify for E16, they must be spontaneous, and cannot be rote. A student would have to be able to complete at least 3-4 different types of tasks independently, notice that they’d completed one of those tasks, find Mrs. Johnson, and correctly name the task they had completed. If they do all of this, and even if they don’t actually show Mrs. Johnson the task, this can contribute to their score on E16.

Use the percentage range (100-85-65-50).

E17-“Make multiple attempts to recruit attention?”

If your learner tries to recruit attention for any reason, even if simply to get a cookie, and that attention is not provided after their first attempt, will they try again?

If your learner doesn’t mand attention at all, their score on E17 will be “0”. If they mand attention, but listeners always provide attention immediately, score “NA”. *Depending upon the strength of this learner’s attention mand repertoire, teachers may want to consider sometimes withholding attention until the learner makes multiple attempts to mand attention.

For the number of opportunities your learner has to make multiple attempts to recruit attention, use this percentage range to score:

75-100% = 3

50-74% = 2

25-49% = 1

Less than 25% = 0

E18-“Calmly correct teacher behavior, as appropriate? If the learner asks for a cookie and the teacher presents them with a carrot, does the learner appropriately redirect teacher behavior?”

Many learners will protest, sometimes intensively, when a teacher “plays dumb”, or truly doesn’t understand what a student is requesting. To score well on E18, a learner must not only tolerate teacher confusion, but also correct teacher behavior.

If teachers always understand what a student is requesting, and never play dumb, score this item “NA”. Otherwise, use the percentage range prescribed for E17, above (i.e., 100-75-50-25) to score 3, 2, 1, or 0.

E19-“Ask for clarification (e.g., “which one?”) For non-vocal students, include behaviors such as pausing or looking back towards the teacher, if these behaviors seem to serve as requests for clarification.”

If a student always understands what their teacher expects of them, score this item “NA”. There may be a number of opportunities for students to naturally require clarification, though. Perhaps a teacher directs the class...“If you completed your math worksheet in class yesterday, you can go to the computer center. If you didn’t finish yesterday, please finish it now.” Many students would be confused by this direction, and a host of questions would be appropriate.

A student in a sewing class, who is directed to “sew along the crease”, may need to ask what the crease is. A student in a class that has been directed to “go to your centers”, may need to ask “which center?” A student directed to go get books from another classroom may need to ask “How many?”

Use the percentage ranges prescribed for E17 and E18 (i.e., 100-75-50-25).

E20-“Monitor their own behavior? (e.g., cross off completed tasks, write or clicker count occurrences of behavior, complete their own point sheets)”

All of the examples provided in the description of this item require a student to write, mark, or click. Conceivably, students could also demonstrate self-monitoring any time they notice that they are failing to emit an expected behavior, or emitting a behavior that is not expected, and they correct it. A student who has been taught to “be aware” of a hair twirling habit, who begins to reach for their hair and haults without any teacher reminders, is demonstrating “self-control”, which also means they are demonstrating self-monitoring. (If they hadn’t noticed it, they couldn’t have stopped it.)

A student who is making sandwiches to sell in the school cafeteria, gets temporarily distracted by a conversation, and returns to work after the conversation without any teacher reminders, is also demonstrating self-monitoring. Loosely, we could speculate that after the conversation, they thought “Now what was I supposed to be doing?” If we can follow this train of thought a little further, the student then assessed whether their behavior matched the expectation (i.e., self-monitoring) and corrected it (i.e., self-control). When learners demonstrate “self-control”, they are also demonstrating “self-monitoring.”

A student who cannot monitor any behaviors scores “0”. A student who can track less than 2 minutes of very easy task completion by checking boxes on a list should score “1”. A student who can track more than 2 minutes of task completion by checking boxes, but cannot monitor their behavior in other contexts, should score “2”. A student should score “3” if they can self-monitor in 2 or more of the ways listed below:

- track their on-task behavior with checklists
- record whether they’ve been refraining from problem behaviors
- record the frequency of appropriate behaviors not included in checklists (e.g., the number of hand-raises, etc.)
- track their tension levels

E21-“Help identify whether or not a goal was met? For example, in a “Beat the clock” program, do they check the clicker counter and compare that score with a goal?”

If there are no circumstances in which your student compares their performance against a goal, score “0”. If there is at least one program in which your student compares their performance with a goal, and they do so without teacher support, score “1”. For 2-3 such programs, score “2”. If your student regularly compares their performance with goals, especially if they do so across a variety of dimensions, score “3”.

Let me elaborate upon “a variety of dimensions”. With most students for whom we’ve addressed E21, we have done so by setting goals for rate of performance on one or more programs. We’ve timed them, provided a method for them to account for the rate of their performance (such as viewing a clicker counter or counting correct responses on a worksheet), and compared their performance with a number we’ve selected for their goal. When first introducing the concept of goal-checking to students, we usually arrange a number line and circle their goal for relatively easy comparison.

This example of goal-checking monitors one dimension...rate of response during brief timings. A student could also learn to check whether they’ve met goals for jumping a certain distance, jumped a certain height, holding their breath under water, refraining from hand-flapping, scoring a certain percent correct, lifting an amount of weight, shooting a basket from a certain distance, greeting a certain number of peers in the morning, etc. If a student checks their performance against goals for 2 or more of these dimensions, they’ll score “3” on item E21.

E22-“Help set goals? If you ask ‘How many should we try to do?’, do they suggest a number?”

If a student does not participate in goal setting without support, score “0”. If they provide somewhat realistic answers for at least 1 program, score “1”. For a goal to be “somewhat realistic”, their performance should come within 50% of the goal, plus or minus. If asked, for example, “How far do you think you’ll be able to jump?”, and they say “100 feet”, their response is not realistic. Hopefully, they’re joking. If they say “3 feet”, this goal will be considered realistic if they jump anywhere between 1.5 feet and 4.5 feet (i.e., minus or plus 50%, respectively).

If a student provides realistic goals for 2-3 programs, score “2”. If they provide truly thoughtful goals for 3 or more programs, score “3”. I’d consider goals to be “truly thoughtful” if a learner spontaneously checked their performance on previous attempts, observed the performance of peers, or in some other way showed consideration before setting their goal.

E23-“Help chart performance? On “beat the clock” programs, this usually involves filling in a celeration chart. Perhaps they color in a grid to reflect the number of correct responses.”

If a student does not help chart performance, score “0”. If they participate in at least one component of the charting process, score “1”. Possible components include: measuring their performance across any relevant dimension; reporting their performance to someone, coloring

in a grid to the appropriate number; placing a dot on a chart/graph for correct responses; and placing an X on a chart/graph for incorrect responses.

If your student demonstrates at least 3 of these components of charting, score “2”. If they demonstrate all components independently, score “3”.

F. Flexibility: responds well in a variety of contexts. When scoring this section, please pay close attention to how readily (i.e., quickly and willingly) the student responds in each condition. If the teacher has to work hard to recruit or maintain learner attention, do not give a high grade.

F1-“Tolerate/enjoy changes in routine?”

Some students, particularly those with Autism Spectrum Disorder, may protest changes in anticipated routines. They may scream if their teacher takes a new route to a park, or if they can’t use the slides before they use the swings.

Students who make frequent use of visual activity schedules seem particularly sensitive to changes in scheduled activities. The ultimate test of this sensitivity is to replace a scheduled, non-preferred task with a surprise favorite activity. Some students will throw a tantrum if you shift their schedule in this way. Those students will score “0” for F1.

For students who never protest anything, score “3”.

For some students, it will be more difficult to score F1. This is because we want to differentiate protests of “change” (as a form of worsening, in itself) from protests of “worsening conditions”. The student described in the paragraph above interprets change, or surprises, as a worsening condition, regardless of what the actual change is. But anyone would be displeased if a preferred activity were replaced by a non-preferred activity. If I turned on a tv to watch a football game, and found that it was replaced with Nascar, I would “pitch a hissy”. But, if I were surprised to find an unseen episode of “Dexter”, I would be most pleased.

You should first describe the conditions in which your student demonstrates protest behaviors. Once you have at least several examples of protest behavior to analyze, note the expectations that were in place at the time of protest. If many of those expectations involved a particular type of expectation, let’s say “writing”, then the protests were probably due primarily to the

type of task, not to “change” of expectation. It could also be that protests were due to working with particular teachers, or surrendering a reinforcer, or a multitude of other antecedents. If your data show relatively consistent antecedents associated with protest behaviors, then “change” is probably not the problem.

To really test this, occasionally replace a routinely-scheduled non-preferred activity with a preferred activity. If your learner protests, “change” is the problem.

Your learner’s scores on F1 should primarily reflect the percentage of changes that they tolerate, and to a lesser extent should consider the magnitude/intensity of protest behaviors.

If they tolerate 85-100% of changes, score “3”; 65-84% of changes, score “2”; 50-64% of changes, score “1”; less than 50% of changes, score “0”. If protests of changes to routines are intense, lower the score by at least 1.

F2-“Tolerate/enjoy creative use of materials? For example, if you flip a token in the air before handing it to them, do they mind? Do they enjoy it?”

I recently put a piece of tape over my mouth while working with a student. (*I’m sure many people would have appreciated this.) Apart from trying to have fun with this student, I was also trying to clarify that I would be communicating non-vocally. We didn’t get that far, because he was furious that the tape was on my mouth.

Typically, students who see work sessions as nothing more than a “means to an end” show little interest in creative use of materials. To some of these students, flipping a token in the air has only one relevant effect...it slows token delivery. These students may not only be dis-interested in your creativity, but may be annoyed by it.

Some students seem uncomfortable with the creative use of common materials. They seem to prefer “rules”, like “pencils are for writing”. Pencils are not for make-shift wiggling mustaches.

A lot of students enjoy creativity so much that, if you begin spinning their tokens on the table top, for example, they’ll soon be working more for the spinning than they are for the token itself. Or, if you hide their reinforcer and play “hotter/colder” to help them find it, they soon appreciate the game more than the reinforcer. If teachers can establish this type of interactive interest, it can greatly facilitate their working relationship with that student.

A student who sometimes enjoys the creative use of materials, and rarely protests it, should score “3”. A student who rarely enjoys it, and protests 5-15% of creative material use, should

score “2”. A student who protests 16-25% of creative material use should score “1”. A student protesting more than 25% of creative material use should score “0”.

F3-4“Post-mand instructions? After the learner has requested something, they will follow a few instructions.” “Pre-mand instructions? If the learner has not recently requested anything, they will follow a few instructions.”

Some teachers call this “working with a promise”. F3 and F4 should be scored mostly according to the “absolute” qualities of student performance, and somewhat by the “relative” qualities of student performance.

Students who work very well 90-100% of the time, regardless of whether they have just manded, should score “3” on each. Working well 60-89% of the time scores “2”. Working well 25-59% of the time scores “1”. If a student works well less than 25% of the time, score “0”.

Now, for the relative component...if performance “post-mand” is better or worse than “pre-mand” performance, score the better condition at least 1 above the worse condition. This should be true even if they are within the same percentage range. For example, if post-mand work is good 80% of the time, and pre-mand work is good 65% of the time, either score them “2” and “1”, or score them “3” and “2”. This may be somewhat complicated, or uncomfortable, to manage as a scorer, but if there is a distinguishable difference between post-mand performance and pre-mand performance, we want to identify that and use it to inform programming decisions.

F5-6“Fast-paced instructions?”; “Slow-paced instructions?”

Again, we want to carefully assess the finer qualities of learner performance, and again we want to score these in both “absolute” and “relative” terms.

These should be scored in exactly the same manner as F3 and F4.

F7-8“Interesting (to this learner) instructions (e.g., imitating monkeys, etc)?”; “Boring (for this learner) instructions?”

Once again, we want to use the same absolute and relative measurements as described for F3 and F4.

Of course, in a sense, learner responsiveness would be evidence of whether they respond to “interesting” instructions. If they don’t respond to “interesting” directions, then those directions weren’t “interesting”. In that sense, F7 could be scored “NA” if a learner doesn’t find any instructions particularly interesting. It will be more helpful for designing a program, however, if a learner showing no interest in any types of instructions is scored “0” for F7.

F9-10-“Instructions with a potential reinforcer in sight?”; “Instructions with reinforcer not in sight?”

For F9, you can count circumstances like: working right in front of a preferred swing before getting on; working in front of a tv or computer; working with a basket of edibles on the table; working with a token strip and tokens on the table, or any other circumstance in which it is apparent to both teacher and student that a particular reinforcer is available for appropriate performance. Written, or picture, “contracts” would also qualify as examples of F9.

For F10, reinforcers are out of sight to the extent that the student “does not know” when reinforcement is available, or which reinforcer will be available.

With that in mind, use the same “absolute” and “relative” scoring recommendations provided for F3 and F4.

F11-12-“Instructions at the table?”; “Instructions away from the table?”

The difference between these conditions should be pretty self-explanatory. I suppose for scorers who are profoundly literal, there may be some conditions not involving actual tables that could be scored as F11. For example, if a teacher placed a student in a chair, with no table present, and crowded in front of the student to assure they remained in the chair. In essence, this is the same as working at a table.

Use the same “absolute” and “relative” scoring recommendations provided for F3 and F4.

F13-14-“In-context instructions? For example, if engaged in an art activity, and directed to ‘pass a paintbrush’, does the student tend to cooperate?”; “Out-of-context instructions? For example, if asked to imitate random gross motor actions before accessing a computer, do they perform well?”

“In-context” instructions are logically related to the context in which they occur. In addition to the example provided above, a student may be asked to get their coat before going outside, to wash their hands before having a snack, to throw their clothes in the laundry before getting into the bathtub, etc.

“Out-of-context” instructions are not logically related to the context in which they occur. You could, for example, ask your student to touch their nose before going outside, having snack, or getting into a bathtub.

Use the same “absolute” and “relative” scoring recommendations provided for F3 and F4.

F15-“Instructions presented within ____ feet proximity?”

The distances are provided in the IGLR:

50 feet = 3

10 feet = 2

5 feet = 1

Less than 5 feet = 0

F16-17-“Instructions delivered in a loud or firm voice?”; “Instructions delivered in a normal voice?”

Common sense suggests that learners would tend to respond more frequently to loud or firm instructions. This is sometimes true, but sometimes the reverse is true.

Use the same “absolute” and “relative” scoring recommendations provided for F3 and F4.

F18-“‘Loosely’ presented instructions? For example, the learner will retrieve an item after the teacher says ‘Hey, do you mind getting that for me?’ Responding is not dependent upon very specific working or other specific conditions.”

The description provided in the IGLR probably suffices, here. Use the percentage range (100-85-65-50-under 50) to score 3, 2, 1, or 0.

F19-“At least ___ different instructors?”

The numbers are provided in the IGLR.

5 instructors = 3

3 instructors = 2

1 instructor = 1

Not for anyone = 0

F20-“Beat-the-clock contingencies at the table? If the teacher sets a timer, does the learner attempt to work quickly in order to finish a task before the timer beeps?”

A student who tends to work quickly will probably score well on this item, but we’re specifically attempting to measure whether they work quickly because of the “beat-the-clock” contingency.

To arrange a “beat-the-clock” contingency, present the learner with a set number of work materials. Set a timer for a period of time in which they are very likely, with decent effort, to finish before the timer beeps. If they finish working before the timer beeps, stop the timer and congratulate them for working quickly. Provide some form of effective reinforcement, preferably of greater value than would normally follow that amount of work.

After several successes, across different tasks, either decrease the time allotted, or increase the responses required, until your student has only a 75% of chance of beating the clock with decent effort.

After your student has experienced some successes and some failures, you should be able to note whether they “intentionally” work more quickly when racing against a timer.

Of course, for some more advanced students, you may simply be able to explain that you want them to go quickly, and that you’re timing them.

If your learner works more quickly than usual when racing against a timer on 90-100% of opportunities, and if they do so across at least 5 different table programs, score “3”. If they respond quickly when times on 70-89% of opportunities, or if they respond to beat-the-clock contingencies for fewer than 5 programs, score “2”. If they respond quickly on 50-69% of

opportunities, score “1”. If they work quickly less than 50% of the time that timers are used, score “0”.

F21-“Beat-the-clock contingencies away from the table? Does the learner perform tasks away from the table, such as dressing, quickly in order to finish a task before the timer beeps?”

Except for the fact that these performances occur away from the table, everything should be scored exactly the same as for F20.

G. Consequences-“What consequences effectively maintain quality responding for your learner? Some learners will respond well for all of the consequences listed below”...and that’s ok. Actually, it’s wonderful. Though arranged roughly in order from least-preferred to most-preferred consequences, categories are not mutually-exclusive. We’ll get into the relative values of different types of maintaining consequences later.

“Consequences” is the most difficult category to score, and will necessitate either robust data collection or reliance upon relatively subjective measures. In many cases, students will be working for more than one consequence at a time. In some cases, it will be difficult to objectively distinguish escape-motivated cooperation from cooperation motivated by positive reinforcement.

Note, if your student almost never works well, they will have low scores for most items in the “Consequences” category. Descriptions of how to score these items will become complex, so we will help our readers by beginning each section with a very brief, lay description of what the item is asking.

G1-“Escape.”

It is appropriate to score learners well on “escape” if they also work to earn access to positive reinforcers. Item G1 only asks whether your student works well when they are working for escape, not whether escape is the only reinforcer ever maintaining their cooperation.

To what extent is the student’s cooperation maintained by escape during any type of task? Note, even for students who are regularly cooperative, escape may be a primary reason for cooperation. It can be hard to see, so we are going to dedicate a good deal of space to potential assessment procedures for this item.

Problem behaviors maintained by escape or avoidance prove motivation for escape/avoidance, but the “Consequences” category assesses motivation for cooperation, not motivation for problem behavior.

Here are some ways to help assess the degree to which work is maintained by escape.

a) Conduct a functional assessment (e.g., Iwata, 1984; O’Neill, et al, 1997) of any problem behaviors your student may demonstrate. If your student attends public school and demonstrates problem behaviors, a Board Certified Behavior Analyst should have already conducted a functional assessment. A complete review of functional assessment procedures is well-beyond the scope of this book, and the interested reader should locate a local behavior analyst or read. If a functional assessment indicates that problem behavior is maintained by escape or avoidance, then it is possible that some of your student’s cooperation is also maintained by escape. This is particularly true if cooperation follows an escape extinction procedure.

b) Allow the opportunity to escape. At least for the purpose of testing and completing *The Inventory of Good Learner Repertoires*, seat the student in a position that allows them to walk out of a session whenever they like. If you continue to make “positive reinforcers” available, and find that they leave sessions more frequently than they did when you blocked them from leaving, then escape probably represented a significant proportion of their motivation. *This may not be the case if they were leaving the work setting to get things that they wanted.

c) Without altering instructional procedures, observe a session with an instructor very familiar with the student. Track the number of times the teacher: redirects the student to task, repeats instructions, or in some way forces cooperation. Compare these frequencies with the frequency of student response. If “teacher behavior” occurs at a higher rate than “learner behavior”, learner cooperation is likely maintained by escape.

d) Also note whether the teacher tends to lean into the student’s personal space (aka “gets in their kitchen”) in order to present instructions, or whether they tend to use a loud or firm voice. If either of these phenomena occurs regularly, “escape” likely accounts for a significant proportion to the student’s motivation. If, however, the session has a relaxed and natural feel, escape probably contributes little or nothing to the student’s motivation.

e) Without altering instructional procedures, observe a session with an instructor very familiar with the student. Track the rate of the student’s on-task responses and track self-stimulatory behavior, whines or other signs of tension, or attempts to leave the session. If any of these occur regularly, the student’s cooperation is likely maintained by escape.

f) After observing typical sessions and gauging teacher and student behaviors, request that they conduct another session in which positive reinforcers (e.g., edibles, tokens, toys, praise, etc.) are available much more frequently than usual. I'd ask that they at least triple the frequency at which positive reinforcers are available. If this intervention yields noticeable improvement in the "feel" of the session, as described in the 3 paragraphs above, then we'll be able to describe how "positively reinforced" cooperation looks, and may suppose that unaltered sessions were maintained by escape.

h) the ultimate test of whether cooperation is maintained by escape is to pick a type of response, or a response quality, for which we consistently provide escape. We set a timer on "count up", and we don't show it to our learner. *We need the timer to measure changes in latency from the beginning of each session to the demonstration of the behavior resulting in escape. So, let's say that our learner occasionally leans back in their chair. Every time they do that, say "it looks like you need a break", and provide a break. Do not deliver, or allow access to, any of the items that potentially serve as positive reinforcers. Let's say the first time this happened, it was 2 minutes into a session. After they've had a break for a minute or 2, call them back and run the same procedure...waiting for them to lean back in their chair and then telling them they need a break. If, after several repetitions of this contingency, the learner begins to lean back in their chair much earlier (i.e., with decreasing latency) in the work sessions, then work has been maintained largely by escape.

i) we could teach a student to request "break". This would have essentially the same effect as the "ultimate test" in the paragraph above. If our student began to ask for breaks at an increasing frequency, it suggests that they are working for escape. *We need to assure that they don't leave a work session and go to a preferred computer game, because we then would not know whether they were trying to get away from work or trying to get to the computer.

j) even better, teach a student to ask for "break", then include "break" on a menu of potential reinforcers, each at its own price. Let's say "break" costs \$5 (in laminate money); "squishy toy" costs \$3; "swing" costs \$7; and "swimming pool" costs \$15. If we then track the relative frequency with which our learner requests each of these reinforcers, we can actually quantify the relative value of escape. *If anyone really wants to do this, I'll remind them that they should calculate the duration of breaks, and also the duration that the learner will be engaging with potential positive reinforcers. They'll need to remember that "8 minutes on the swing" also equates to "8 minutes of not working".

OK, how do we actually score G1? If you've determined that escape provides a significant proportion of your student's motivation to cooperate and they tend to cooperate very well, score "3". If they work largely for escape, and tend to require multiple directions before responding, score "2". If they work largely for escape, consistently respond slowly or require multiple directions and teacher prompts, or they sometimes demonstrate minor protest behaviors, such as whining, score "1". If they sometimes demonstrate more significant problem behaviors associated with work, and rarely work well, score "0".

G2-"Primary reinforcers (e.g., edibles, swing, etc.)."

"Primary reinforcers" are unlearned. People appreciate them without the need for prior conditioning. Other examples may include: preferred computer games, videos, bubbles, roughhousing, etc. Contrast these with "conditioned reinforcers", such as tokens or praise. So, how well does your learner work when they're earning primary reinforcers?

The potency of primary reinforcers is more easily assessed than escape, above.

How can you tell whether primary "reinforcers" are effective for your student?

- a) one test for this is to make several top reinforcers available some of the time, and not available at other times. Praise good work in both conditions. If you note a difference when these top reinforcers are available, then your student works for primary reinforcers.
- b) if your student works better "post-mand" than they do "pre-mand" (F3 and F4, respectively), as long as those are not mands for "break", then they work for primary reinforcers.
- c) pick a relatively new behavior, let's say "attend to name", and gather baseline data on performance without the use of primary reinforcers. How frequently do they attend within 2 seconds of hearing their name? If they attend within 2 seconds on more than 50% of opportunities, select a different behavior. You want to find a behavior that occurs between 10 and 50% of opportunities. Then, introduce a potential primary reinforcer for every good response, and observe the effect on the student's performance. If they begin to attend to their name more frequently, they probably cooperate for primary reinforcers.

If, when primary reinforcers are used for work, your student works very well 90-100% of the time, score "3"; 75-89% of the time, score "2"; 50-74% of the time, score "1"; less than 50% of the time, score "0".

G3-“Secondary/conditioned reinforcers (tokens, money, etc.)”

How well does your student cooperate when they are working for tokens, clicks, etc?

Secondary/conditioned reinforcer effectiveness can be assessed in many of the same ways as primary/unlearned reinforcers are assessed. One additional consideration relates to the likelihood that secondary reinforcers have been associated with a variety of backup/primary reinforcers. For example, money can buy most things, some of which make us happy. *Note, when a conditioned reinforcer is associated with a variety of backup reinforcers, it is called a “generalized, conditioned reinforcer”.

Work maintained primarily by secondary/conditioned reinforcers tends to be more stable than work reliant upon primary reinforcers. As we assess the impact of secondary/conditioned reinforcers upon a particular learner, our best methods are to:

-observe sessions and employ the assessment procedures outlined above for determining whether cooperation is maintained largely by escape. If escape is a primary reason for cooperation, then tokens, or other conditioned reinforcers, are not a primary influence.

-run a session without conditioned reinforcers, but with primary reinforcers. Measure the readiness of student responding and any indications that escape may function as a reinforcer. If student performance in this session is significantly better, then conditioned “reinforcers” may not yet play an important part in their program.

-run another session with no positive reinforcers, and if student performance is roughly unchanged, then they are either working for pride, for intrinsic motivation, or for escape. *You should be able to see the difference between a student working for pride/intrinsic motivation and a student working for escape. The former is a much happier sight.

-select a relatively new behavior and begin following it with a conditioned “reinforcer”. For one student, we paired the sound of a clicker with the delivery of primary reinforcers, such as treats and preferred objects. After some time pairing the clicker with primary reinforcers, we selected the behavior of “sitting on the toilet” to test the effectiveness of the clicker. Her typical duration of sitting on the toilet, without the clicker, was approximately 5 seconds. On our probe, we clicked for every 3-4 seconds that she sat on the toilet, and she sat for more than 20 seconds. This impact upon the duration of sitting demonstrated the effectiveness of the clicker as a form of conditioned reinforcement.

Using these assessment strategies, if you can identify that secondary/conditioned reinforcers are effective as reinforcers, then you can use the same percentage ranges as employed for G2,

above, to score item G3. Remember, it is acceptable to score your learner as both “working for primary reinforcers” and “working for conditioned reinforcers”. The two are not mutually-exclusive, and the transition from the former to the latter can take quite a while...likely at least several weeks, perhaps a few years.

G4-“Positive teacher feedback. Responds well without coercion, primary reinforcers, or token systems.”

How well does your student cooperate when they are working only for praise?

If you’re thinking of giving your student a high score on this item, you should first assure that most of their cooperation with tasks is not reinforced by escape. Though it is conceivable that there are a few things they do merely for escape, and although few of the items in the “Consequences” category are mutually exclusive, a student who typically responds for escape is very unlikely to respond for positive teacher feedback. And, to be blunt, many teachers deliver positive feedback on the assumption that it functions as a reinforcer, but are really working students with escape as the primary reason for cooperation. *This is particularly true for teachers who steadfastly refuse to use “unnatural” reinforcers.

How can a scorer distinguish whether a student is truly working for “positive teacher feedback”? First, as mentioned above, scorers should rule out “escape” as the primary reason for cooperation. To do so, they should refer to the procedures above for assessing the extent to which escape is a reinforcer for their student.

If teachers are using neither primary reinforcers nor token economies with their learners, but their learners demonstrate high quality work and the sessions have a relaxed, or fun, feel, then those learners are working for praise and/or intrinsic interest in tasks. Either way, score them well and give yourself a huge pat on the back.

Next, some of the procedures for assessing the extent to which students work for primary reinforcers require teachers to work with their students without using primary reinforcers. Remember that teachers should still deliver positive feedback during those probes. So, on those probes, if a student demonstrates minor problem behaviors that are not typically present, the student clearly doesn’t value positive feedback nearly to the degree that they value primary reinforcers.

Can you identify any behaviors that are maintained strictly through praise? If your student starts to use a fork while eating, and teachers have never done anything other than praise it,

and fork use increases, then praise is a reinforcer. *You may need to be careful that the behavior is not simply part of a routine, or that it was first established through escape, or that the daily schedule naturally follows that behavior by a reinforcer. A potential example of this type of behavior would be “clearing one’s tray after lunch”. If your student ever tried to leave the lunch table without clearing their tray, they were probably redirected to clear their tray. That procedure could function as “escape extinction” (i.e., the student is not allowed to leave the area without first cooperating with the teacher’s expectation). Also, lunch is probably followed by recess, so you’ll have to consider the possibility that recess is the primary reinforcer maintaining tray-clearing.

If you can’t identify a behavior that was established purely through praise, pick a relatively new behavior that is no better than “emerging”, and begin praising it, but not delivering other reinforcers. If that behavior strengthens, then praise is effective as a reinforcer.

In many cases, again, praise is merely one of the reinforcers used during a session. Praise may function as a reinforcer, but may not “stand alone” very effectively, for some learners.

If:

- your learner clearly requires primary reinforcers for cooperation, and
- especially if their work quality varies with the current strength of motivation for those primary reinforcers (e.g., they work much better for a novel birthday cake than they usually do for cookies) and
- if praise alone is not maintaining any behaviors...score “0”.

If you are confident that praise is at least one of the reinforcers contributing to work quality, then you can score at least “1”.

If:

- other reinforcers can be employed minimally, and
- praise alone sustains several behaviors...score “2”.

If primary reinforcers and token economies are unnecessary, and your student consistently works well for praise, score “3”.

G5-“The learner readily demonstrates at least 10 consecutive responses prior to reinforcement.”

Does your student regularly do at least 10 things before you give them something?

As long as you are accurately assessing the qualities of your student’s work, this item is very easy to score. Regardless of what you need to use as a reinforcer, do they consistently demonstrate at least 10 consecutive, quality responses prior to reinforcement? *If you are using a token economy with your student, score this according to whether they tend to demonstrate 10 responses before earning a token, not according to demonstrating 10 responses, earning tokens along the way, and then accessing a backup reinforcer.

If you tend to reinforce after every 3-4 responses, and work quality varies, especially if work quality is rarely good, score “0”.

If you tend to reinforce after every 5-6 responses, and work quality is usually pretty good, you should run a few probes. Identify a handful of relatively easy, relatively preferred tasks, and see whether your learner will demonstrate 10 consecutive responses before reinforcement. If you can generate at least 2-3 such activities, score “1”.

If you can generate 4 or more activities for which reinforcement isn’t available until at least 10 responses, and your student performs well on at least 90% of opportunities, score “2”.

If your student typically works well on schedules of reinforcement no more generous than VR:10 (i.e., reinforcement is available, on the average, for no more than every 10th response), especially if the schedule of reinforcement is actually closer to VR:20, score “3”.

G6-“The learner readily demonstrates at least 50 consecutive responses prior to reinforcement.”

Does your student regularly do at least 50 things before you give them something?

Use all of the same procedures described for G5, but replace “10” with “50”.

G7-“Will respond to earn access to a consequence _____.”

Does your student do things in order to get things in the future?

This item is asking whether students work for “delayed consequences”. *Note, the author is aware of conceptual inconsistencies regarding “delayed consequences” (e.g., Michael, 2004). But, practically speaking, relatively advanced learners, especially with well-established verbal repertoires, can learn to behave in ways that earn access to future items or activities. Technically, the specific behaviors meeting reinforcement criteria are immediately followed by some form of conditioned reinforcement, which can sometimes be difficult to “see”. I’ll argue that, for most of us, those reinforcers are “automatic”, in the sense that we recognize our accomplishment and it “feels good”.

For item G7, it is OK if your learner earns access to tokens while working toward the backup reinforcer. So, a student who merely works well for 10 minutes, and earns no backup reinforcers during those 10 minutes, will likely score at least “1”. But, it is also not necessary that the student work for the entire 10 minutes in order to score “1” on G7. Let’s say, for example, that you said “Dad is coming home in 10 minutes. If your homework is done by the time he gets here, you can go with him on his bike ride.” If this is the reason that your child completes their homework, even if they only had 20 seconds of work remaining, then they will score at least “1” on item G7.

Loosely, we need to identify that the reinforcer accessed after 10 minutes provides a large portion of the motivation for the work. A student who only engages in their most interesting tasks for 10 minutes is responding mostly for intrinsic reasons, not for the backup reinforcer. That would not be scored as working for “delayed reinforcers”. *Please don’t think this is a bad thing...it just doesn’t qualify as working for delayed consequences.

Most students with minimal educational history require consequences to be delivered immediately. Those students will score “0” on this item.

Students who cooperate with anything because they can earn a reward after an hour, will score “2”. If they cooperate with anything, whether brief or of up to 2 hour duration, because they can earn a reward after 2 hours, score “3”.

G8-“Will refrain from responding in ways that have resulted in denied access to reinforcers _____.”

Does your student stop doing naughty things if you tell them you're going to give them something in the future?

One student typically behaved poorly at school, and his mother offered him small toys after school for "keeping his hands to himself". No token system was used, and teacher behavior was not modified in any way, and this student immediately improved from aggressing nearly every day to demonstrating no aggression, for a period of approximately 3 weeks. His mother later said that she couldn't get him toys anymore, and the aggression immediately returned. So, she reintroduced the toy consequence and the aggression immediately ceased. In research terms, this is known as an ABAB design, or a reversal design, and it is the strongest form of evidence available. I'm not saying this was an ideal intervention, but I am saying that the offer of the toy obviously impacted this student's behavior, without any other interventions. This student would score "3" on G8.

This is a clear example of G8, refraining from inappropriate behavior that has resulted in denied access to reinforcers in the future. On the surface, it is fairly easy to assess similar vignettes across shorter durations...10 minutes, 1 hour, and 2 hours. We can consider learners who can respond to verbal contracts, such as in the vignette above.

We can also look at learners operating in some form of daily point system, such as a system that requires the absence of certain behaviors in order to attend recess. (*Naturally, this point system would also offer points for the occurrence of appropriate behaviors.) After some time in this system, if a student valued recess, or whatever other potential reinforcer was contingent upon the absence of inappropriate behavior, would they refrain from inappropriate behaviors within 10 minutes of reinforcer availability? How about within 2 hours of reinforcer availability?

But, a more accurate/thorough assessment of G8 requires consideration of whether other variables may account for decreases in inappropriate behavior. In application, inappropriate behaviors are primarily treated through the arrangement of positive reinforcement contingencies, especially for behaviors that would serve the same function as the inappropriate behavior. If your learner's inappropriate behavior decreased primarily because of the reinforcement system, you can't necessarily score them well on G8. That's ok...it just means that as you plan interventions in the future, you'll know that you'll have to continue to emphasize positive reinforcement systems, and may not be able to rely additionally upon withholding reinforcers for inappropriate behaviors.

Or, if your student passed the 10 minutes to 2 hours in settings that would rarely evoke problem behaviors, perhaps that setting was more responsible for the absence of inappropriate

behaviors than the possibility of losing access to future reinforcers. For example, if your student usually aggresses when he has to take turns with a peer on the computer, and they resisted aggressing during 20 minutes of isolated computer access, this is an example of a student who has not been challenged. It is not evidence of a student who refrained from aggression in order to assure access to snack.

One way to identify whether a student refrains from inappropriate behavior in order to avoid losing access to future reinforcers is to bring it in after other interventions have been employed for a period of time. This is how most behavior intervention plans would be implemented, anyway. Behavior analysts would usually start with a variety of reinforcement systems, and redirection and/or extinction for problem behaviors. Let's say such a plan was implemented accurately for 4 weeks, resulting in a 25% decrease in problem behavior. If you now add a "response cost"* contingency, and the behavior decreases to 25% of baseline, that suggests that your student refrains from inappropriate behaviors in order to avoid missing future reinforcers. Better yet, let's say the original behavior plan had no impact, and the addition of the response cost contingency reduced problem behaviors to 10% of baseline. This would be pretty convincing. More convincingly, you could add a "return to baseline" condition, by temporarily removing the response cost contingency.

If any of these assessment procedures suggests that your student refrains from inappropriate behaviors for periods of time in order to avoid missing future reinforcers, use the times listed in the IGLR to create your scores.

No delay = 0

10 minute delay = 1

1 hour delay = 2

2 hour delay = 3

*A teacher is using "response cost" when they consequent a behavior targeted for decrease with removal of a reinforcer. The reinforcer may be primary, or conditioned. For example, if a student were watching a favorite video, and bit a peer who tried to change the channel, perhaps their teacher would turn off the video. Or, if a student had earned several tokens, and demonstrated a problem behavior, the teacher may remove one or more of their tokens.

H.

Preferences for Learning Channels (Input/Output Channels)

These are reviewed in The Inventory of Good Learner Repertoires, so I will not reproduce all of that information here. Briefly, “input channels” (e.g., Haughton, 1980) refer to the way a student perceives instructional stimuli. When an instructor vocally tells a student to “stomp your feet”, the input channel is “hear”. This is because the student “hears” the direction. If a teacher held up a card that read “stomp your feet”, the student’s input channel would be “see”, because he “saw” the card. (*More specifically, the input would be “read”, but we did not go into that level of detail when designing the IGLR.)

“Output channels” refer to the manner in which the student responds. In the 2 examples above, they would be stomping their feet, which would be “gross motor”. If the directions were to “twiddle your thumbs”, the output would have been “fine motor”.

Given this brief description, we suspect that most scorers will understand all of the input and output channels listed in the IGLR, with the possible exception of the “feel” input. This one is a little bit trickier, and refers to a host of stimuli, such as: the feel of a sock in a student’s hand, the feel of heat on a sunny day, the feel of wet, the internal state of hunger, etc.

Once a scorer understands all inputs and outputs, they can assess each input channel across all output channels within a learner’s program. For example, for the “see” input, consider how well the student matches to sample, imitates motor movements, copies text, follows a point, names pictures, or any other program involving a visual input. Consistent excellence across all programs involving visual input would earn a 5, especially if visual input is the channel to which this student best responds. Consistent poor responding across all programs involving visual input would earn a 1, especially if visual input the channel to which this student most-poorly responds.

Similarly, a scorer should assess each output channel across all possible inputs within a learner’s program. So, for the “write” output, they should consider the qualities of a student’s writing when they are: taking dictation (i.e., hearing letters or words and writing them down), copying, writing creatively, completing cloze readings, etc.

“Preferences for Learning Channels” is another category in which scoring should be both “absolute” and “relative”. In an absolute sense, a learner’s performance and quality of effort are compared with age-appropriate performances with the same material. Note that a learner with minimal skill but very good effort will score reasonably well, according to these criteria. Comparing the writing of a 10 year old with ASD to his typical peers would frequently yield low scores. But, if your student puts forth good effort with writing, this effort should be reflected in their score.

This also leads to the “relative” aspect of the scoring. A learner’s willingness and skill for writing is compared with their own willingness and skill for other learning channels.

Let’s say a learner typically responds slowly, and whines, for programs across most learning channels. Most learning channels, then, should be scored “1” (*there is no “0” score in the “learning channel” category of the IGLR). But, if this learner is relatively willing to perform gross motor actions, even if the absolute qualities of their gross motor performance are not very good, they should score at least a “2” for the “gross motor” output. This helps those creating programming to recognize that the gross motor output channel is a relative strength for this learner.

I. Spontaneity

Many of repertoires assessed to this point relate to a learner’s responsiveness to direction. It is critical that a learner also demonstrate spontaneity. Programs that exclusively emphasize learner responsiveness to teacher instruction do so at the risk of creating “robots.” These learners may become “paralyzed” or prompt dependent. Every learner’s overall programming, even for those demonstrating minimal responsiveness to instruction and maximal spontaneity, should contain at least a component that targets shaping of appropriate spontaneous behavior.

This category is truly easy to score, as long as the scorer understands which behaviors are being measured. With the exception of I11, “Learn new behaviors by observing others?”, all criteria specify targeted rates or durations for targeted behaviors. So, we’re just going to assure that scorers can identify the behaviors in question.

Just a reminder...we’re assessing spontaneity. So, if a student is directed to do any of these behaviors, those responses should not be included in your scoring of “Spontaneity”.

I1-“Mands”

Requests

I2-“Imitate?”

The learner sees someone do something, and they copy that action

13-“Echo?”

The learner hears someone say something, and echoes what they hear

14-“Tact?”

Labels of things the learner sees, hears, smells, feels, etc. If they spontaneously say “dog” when they see one, this is a spontaneous tact. If they spontaneously type “I’m hungry”, even though this is probably at least part mand, you can score it as a spontaneous tact.

15-“Converse?”

The student makes a comment or poses a question related to something someone else has said.

16-“Follow routines?”

The student puts their backpack away, clears their desk to go to lunch, puts their dirty clothes down the laundry chute, etc. without being told to do so

17-“Initiate social interactions in barren environments?”

The only trick to scoring this one relates to scorer confidence that they can account for an environment being “barren”, according to the values the learner places upon the things that are freely available to them. Basically, if one teacher hangs out in a room with nothing but floors and walls, it should be safe to consider that environment relatively barren. If numerous preferred toys are available, the environment is not barren.

Scorers also need to distinguish social initiations from non-social initiations. For purposes of scoring the IGLR, we draw the distinction at behaviors resulting in reinforcers that are “better with another person than they are without another person”. So, requesting “cookie” probably doesn’t qualify as a “social initiation”. Requesting “tickle” qualifies as a social initiation.

I8-“Initiate social interactions?”-this item is exactly the same as I7 above, except that other viable options for non-social behaviors remain available to the student.

I9-“Engage in independent leisure?”

Does your student engage with things like puzzles, books, toys, the computer, etc. in ways that are not self-stimulatory? If they stare at one picture in a book, or flap the pages in front of their eyes, this should not be scored “independent leisure”. If they occasionally turn pages, read, scan numerous pages, etc., then books should be scored as “independent leisure”.

I10-“Learn new behaviors by observing others?”

The only tricky part to scoring this item is to recall that we are looking for spontaneity, and in this case spontaneous behaviors through imitation of others. So, if you’ve directed a student to use a slide, and they also notice a peer using the slide, and then they begin to slide, this event does not qualify as an example of I10. Had there been no teacher instruction, and they had imitated their peer, this example would suffice.

You can also include behaviors learned through spontaneous imitation of vocal behavior.

In either case, imitation can be immediate or delayed.

J. Potential to Benefit from Inclusion

Many of the items from other categories, especially “Behavior Excesses”, “Behavior Supports”, “Flexibility”, and “Perseverance and Focus” are clearly relevant here. None of those items are repeated in this section.

*Author’s note: the extra categories referenced in the paragraph above may be more relevant to the potential for successful inclusion than some of the items listed within this category. A student scoring well on “Potential to Benefit from Inclusion” is a no-brainer for inclusion. Students scoring relatively poorly may still be good candidates for inclusion, particularly if they have a legitimate “interest in peers” (J3).

J1-“Refrain from disrupting others?”

Like many other items, “disruption” is defined primarily by its effect...(i.e., if peers are disrupted by your student, then your student is disrupting others). That said, there are some common behaviors that tend to be disruptive, and you may be able to assess your student’s tendency to disrupt others by assessing these behaviors.

If your student demonstrates no serious problem behaviors, such as physical aggression or property destruction, and they don’t make frequent loud vocalizations, and they don’t engage in “scripting” during group instruction, and they don’t get up and walk around the room without permission, they will probably score “3”.

If your student is aggressive, loud, or scripting during instruction an average of once per day, especially if those peers attend to your student’s behavior, score no better than “2”.

If your student demonstrates the behaviors described above an average of twice per day, score no better than “1”. If these behaviors occur more than twice per day, score “0”.

J2-“Work cooperatively with peers?”

Are there any tasks that your student does with peers? Some easy examples may include: a peer provides answers to a worksheet, and your student writes the answers (or vice versa); your student works a calculator while a peer arranges computations for story problems; your student looks up definitions and a peer writes them down; etc. Assembly line activities are another good example of working cooperatively.

If your student never cooperates with peers to complete activities in any way, score “0”. If they cooperate with at least one peer, on at least one activity, for at least one minute, without any teacher support, score “1”.

If your student cooperates with at least one peer, on at least 2 activities, for at least 2 minutes, score “2”. If they cooperate with one or more peers, on 3 or more activities, for 3 or more minutes, score “3”.

J3-“Show an interest in peers?”

This item, in the author’s opinion, is the most important item in this category. It is also the most difficult item to assess accurately.

Let's start with the easiest examples...if your student matches several of these descriptions:

- protests as peers approach
 - protects their materials from others
 - rarely, if ever, imitates or approaches peers
 - rarely, if ever, mands to peers or responds to peer initiations
- ...they should score "0"

If your student approaches peers, sustains conversations, reinforces peer mands, mands to peers, and imitates peers, score "3". Of course, these behaviors must be demonstrated spontaneously.

Now, for the more difficult assessments...looking again at the behaviors listed for a student scoring "3", does your student demonstrate at least one of those behaviors per hour? If so, you should be able to score "1". One exception is, if that "1 behavior per hour" is always manding primary reinforcers. This suggests that your student at least sees peers as people who can reinforce their mands, but does not show that they are interested in anything else about their peers. If you also notice that your student tends to look in the direction of peers doing interesting things, you can definitely score "1", maybe even "2".

If the behaviors listed above are demonstrated more than once per hour, and less than 75% of those behaviors are mands for primary reinforcers, score "2".

If your student demonstrates few "peer interest" behaviors, but obviously spends a lot of time observing peers, especially if they show what could subjectively be called a "pleased affect", you should be able to score "1", possibly "2".

J4-"Take directions from peers?"

It should be fairly easy to notice examples and non-examples of this behavior. If your student responds independently to at least 25% of peer directions, score at least "1". If they respond independently to at least 50% of peer directions, score at least "2". If they respond to at least 75% of peer directions, score "3".

J5-“Give directions to peers?”

Note, requesting access to a primary reinforcer does not count as “giving directions to peers”. Examples include things like: telling a peer it’s time for lunch, reminding a peer to put their worksheet away, telling a peer to “come here” or “sit down”, telling a peer “it’s your turn”, etc.

If your student demonstrates these behaviors:

- less than once per 2 hours, score “0”
- approximately once per hour, score “1”
- twice per hour, score “2”
- more than twice per hour, score “3”

J6-“Repair faulty peer actions, as appropriate? For example, if a peer fails to provide a requested item, will your student ask again?”

Other examples of “repair actions” include behaviors like: telling a slow peer to “hurry up”, reminding a peer that it is their turn, helping a peer open part of their lunch, pointing to assure a peer has seen an important sight, etc.

If your student demonstrates repair actions:

- at least once per day, score “1”
- at least twice per day, score “2”
- at least once per hour, score 3

J7-“Take turns without reminders?”

Whether playing games, working cooperatively, or taking turns with reinforcing items, does your student both wait appropriately for their turn and take their turn in a timely manner without reminders?

If your student independently takes their turn on 80-100% of opportunities, across 3 or more activities, score “3”. If they independently take their turn on 60-79% of opportunities, across at

least 2 activities, score “2”. If they independently take their turn on 50-59% of opportunities, score “1”. Below 50%, score “0”.

J8-“Attend well for their turn to respond?”

High scores on this item can be proven through high scores on J7, above. If a student is ready to take their turn, they’ve been paying attention while it wasn’t their turn. One potential additional aspect concerns the possibility that your student’s response depends upon the responses of their partners during their partners’ turns. Let’s say, for example, that you were playing “Intraverbal Pursuit”, and another player missed a question. Your learner would have a chance to “steal” by answering the same question. Did they listen to the question when it was asked of their peer? Do you have to repeat the question to them? If they’ve usually listened to the question that wasn’t posed to them, they’ll surely score “3” on this item. If they would usually need the question repeated for them, but are otherwise ready to take their turn, score “2”. Apart from that, score the same as for item J7, above.

J9-“Provide attention quickly when it is recruited by peers?”

What do peers have to do to recruit your learner’s attention? Can they just call their name once, from several feet away? If so, score “3”. Do peers usually have to repeat themselves in order to get your student’s attention? If so, score “2”. Do peers usually have to touch your student while saying their name in order to get their attention? If so, score “1”. If peers usually have to make multiple attempts, and need to touch your learner before earning their attention, score “0”.

J10-“Respond to peer questions?”

This item is only moderately about your learner’s ability to understand and answer peer questions, and is more about their tendency to try to answer peer questions. Naturally, ability cannot be separated from effort...greater ability may make your student more inclined to answer questions, and difficulty answering questions would likely decrease your student’s tendency to answer peer questions.

One way to assess this item with particular emphasis on your learner’s responsiveness to peers is to compare their tendency to respond to adult questions with their tendency to respond to

peer questions. In most cases, especially if language training has been necessarily intensive, students will respond better to adults than they do to their peers. *Later in this book, when we discuss how to address this repertoire, we will address the strategies that adults must employ in order to get your learner to respond to questions.

If your learner responds within 3-4 seconds to 80-100% of peer questions, score “3”. Meeting this criteria suggests that peers are not having to work very hard to get your student to respond to their questions. There is at least one potential exception to this assumption...if peers have been taught to hold reinforcers in front of your learner in order to get them to answer questions, you should not score “3”. Instead, you should probe how well your student answers questions with no special peer interventions in place. If they still answer questions, score “3”. If not, score less than 3, and consider reintroducing whatever interventions you’ve used to gain responsiveness to peers.

If peers have to repeat their questions more than 25% of the time for your learner, score no better than “2”. If they repeat themselves more than 50% of the time, score no better than “1”. If they repeat themselves more than 75% of the time, score “0”.

J11-“Imitate peers?”

This item is a repeat of I2, spontaneous imitation. Copy your score from I2.

J12-“Respond in group format?”

Consider whether your student responds in unison with peers, in what is called “choral responding” (Heward, et al, 1989). Also consider whether they “track” along in reading materials while someone reads. This is an activity in which students run their finger along a text in their book while a teacher or peer reads. Experienced teachers will test student participation by occasionally pausing as they read, and praising students who readily read the next word aloud.

Finally, consider whether they raise their hand to respond, or call out individual answers when an opportunity presents itself. Do NOT consider whether they answer when the teacher calls on them individually, while they sit in a group.

If your student responds to 75% of opportunities for choral responding and raises their hand to answer a question at least once per hour of group instruction, score “3”. If your student

responds to 60-74% of choral response opportunities, you'll probably score "2". If they also raise their hand at least once per hour to answer questions, you may score "3".

If your student responds to 30-59% of choral response opportunities, score "1". Below 30%, score "0".

J13-"Learn new skills in group format?"

Note, it is possible that your student fails to score well on J12, but still acquires some of the skills addressed in group. This could be due to individual response opportunities, which in a sense would mean that they did not actually learn the skill in a group format. If those skills, such as calendar, are only taught in the group format, and your student acquires those skills, let their score on J13 reflect that. Perhaps they learned, in part, by observing peers during their turns.

If your student has learned several skills in group formats, and shows some acquisition within the first 2 hours of group instruction on a skill/content area, score "3". If you can document that your student has learned at least 2 skills/content areas in group formats, score "2". If they've learned at least one skill or part of a content area, score "1". Below that, score "0".

J14-"Raises hand for attention?"

Does your student raise their hand to ask or answer questions? Do they raise their hand to request assistance, or to inform teachers that they've finished their work? Do they raise their hand to request items needed to work on tasks, or to ask for "seconds" at snack? Do they raise their hand to ask permission to leave snack or lunch?

If your student raises their hand to ask or answer questions at least 3 times per day, score "3". If they raise their hand for any of the reasons listed in the paragraph above at least 3 times per day, score "2", unless every hand raise is to request primary reinforcers. In that case, score "1".

If your student raises their hand at least once per day, for any reason, score "1". If they raise their hand less than once per day, score "0".

J15-"Learn new skills by observing others?"

This is exactly the same as item I10. Copy your score from that item.

J16-“Show interest in age-appropriate curricula?”

Whether or not your student shows competence with age appropriate curricula, do they show interest? “Interest” can be demonstrated by:

- spontaneously attempting to participate in an activity
- asking questions
- spontaneously orienting in the direction of instruction (*if they are prompted to look, this does not count as interest)
- demonstrating any comprehension of material that was not taught with intensive/intrusive instructional methods

If your learner clearly demonstrates more than one of the forms of evidence above, for 2 or more types of age-appropriate curricula, on a daily basis, score “3”. If your learner demonstrates more than one of the forms of evidence above for any age-appropriate curricula, score “2”. If they demonstrate any form of evidence of interest for any curricula, score “1”. If they do not show interest, score “0”.

J17-“Show competence with age-appropriate curricula, perhaps with modifications?”

Common modifications may include:

- the addition of visual supports (number lines, guided notes, etc.)
- word banks
- change in output channel (e.g., speaking answers that others are writing, writing answers that others are speaking, typing, selecting answers from arrays of pictures, etc.)
- breaking instruction into smaller chunks
- computerized instruction for students interested in computers
- story sequence pictures to facilitate retelling

- changing open-ended questions into multiple choice questions
- extra practice, such as pre-teaching
- using a calculator to help solve story problems (*simply using a calculator for math facts should not count as an appropriate modification, at least not in the sense that it demonstrates learner competence with the material)

If these, or other appropriate modifications, allow your student to independently participate in 2 or more age appropriate curricula with at least 80% accuracy, score “3”.

*We’ve underscored “independently” to emphasize that prompts delivered by teachers or aides are not “appropriate modifications”. An aide pointing at the correct answer, for a student lacking the prerequisites necessary for true comprehension, is a prompt that likely cannot be faded. A teacher telling a student an answer is another prompt that probably cannot be faded.

If your student, with only appropriate modifications, can participate in any age appropriate curricula with at least 80% accuracy, score “2”. Or, if they can participate in 2 or more age appropriate curricula with at least 70% accuracy, score “2”.

If your student can independently participate in any age appropriate curricular with at least 60% accuracy, score “1”. Below that, score “0”.

*Note, we’re trusting that scorers will add some common sense to their scoring on this item. If, for example, your modification was to break all instruction into a multiple choice format, with only 2 options, and your student is sometimes 60% accurate, this percentage reflects “chance”.

Summary

In the summary section, you should describe instructional strategies that maximize your student’s performance, as well as those that decrease success. This is also the place to speculate about how various strengths and weaknesses may inter-relate. For example, a student who is very independent, excelling in spontaneity and independent leisure, may not be very cooperative. In the “Summary” section, you may speculate that they “don’t recognize that adults control access to some reinforcers”, or that “signs of adult control of reinforcers seem to decrease the values of those potential reinforcers”, or that “their first inclination is almost always to scan the room for reinforcers, and they don’t seem to view adults as potential reinforcers”.

The “Summary” section is also a good place to describe some of the current program priorities, which potential targets may be addressed at a later time, and why. Here is one example of a student’s “Summary”.

Summary: _____R can be very affectionate when socially engaged in interesting activities (snuggling, singing, looking at books with animal sounds, etc.). Her strengths relate mostly to spontaneity (spontaneous echoes and motor imitations) during interesting activities. She is an excellent participant when it is “her idea”, and not a good participant when it is the teacher’s idea. With very good teacher timing, R is pretty relaxed about tangible reinforcers under teacher control. A lot of generosity is required, as well as physical positioning to clarify the fact that those items are under teacher control.

R does not appear to understand the “Do this for me and then you’ll get this in return” teacher-student relationship. With activities that are NOT better when shared with a teacher, such as edibles and most toys, R can become inappropriate in her pursuit of those items. In less-than-ideal conditions, R whines or screams fairly often.

Most of R’s needs are in the “Readiness” category, relating to things like understanding that teachers sometimes control reinforcers. She also has some needs in the “Behavioral Excesses” category, mostly decreasing the rate of whining. These 2 categories are closely related, and I believe the excesses will best be addressed by improving R’s readiness.

Program Plan Form

This form is used to briefly summarize current “behavioral adaptations”, “behavioral expectations”, and “content and learning channel priorities”. This form should be posted to allow all teachers to view it every day.

“Behavioral adaptations” refer to any unnatural type of support that is recommended for this learner’s program. Examples may include things like: frequent calm counts, a token economy with continual reinforcement for seeking assistance, a high proportion of “Beat-the-clock” programming, etc. “Behavioral adaptations” are things that teachers or aides do to help a student succeed.

“Behavioral expectations” specify which potential student behaviors will result in reinforcement, absence of reinforcement, or punishment. Examples may include things like: will work independently for at least 5 minutes; will request help by raising his hand, not by

whining; or, will wait for permission to take reinforcers on at least 90% of practice opportunities. Basically, any example of: manding (requesting); independence; or, tolerance of various challenges will be considered a “behavioral expectation”.

“Content and Learning Channel Priorities” refer to language, academic, daily living, or any other behavior that may not be specifically related to the ease with which your student can be taught. The complication here is that there can be overlap between “Behavioral Expectations” and “Content and Learning Channel Priorities”.

Let’s consider “vocal behavior”, as an example. As a “learning channel”, vocal behavior operates through the “say” output. We frequently list “vocal behavior” as a “content and learning channel priority”. This means that vocal behavior, as an end unto itself, is a priority. Vocal behavior may be pursued through a variety of instructional strategies, such as mands (requests), song fill-ins, echoing, labeling letter sounds, stimulus-stimulus pairing procedures (e.g., Sundberg and Partington, 1996), etc. Loosely speaking, we’d sometimes say that we are pursuing vocal behavior, as an example of a priority, “by hook or crook”.

Some of those instructional strategies, such as “manding” may also be “behavioral expectations”. This may be true because of the relationship between manding and a student’s willingness to cooperate with teacher expectations.

The potential relevance of the distinction between “Behavioral Expectations” and “Content and Learning Channel Priorities” should be weighed pragmatically. In application, a teacher uses a Program Plan Form to determine which behaviors receive the greatest density of practice and the most-generous reinforcement. A student for whom we’ve prioritized “manding” as a behavioral expectation and “vocal behavior” as a learning channel priority will be practicing mands, in part to improve vocal behavior, and in part for the contribution that a strong manding repertoire would make to their learner profile. For such a student, the distinction between “manding” and “vocal behavior” as “behavioral expectations” or “learning channel priorities” is relatively insignificant, because they need a stronger manding repertoire and improved articulation.

But, let’s say student #1 vocalizes better than they mand. Maybe they read and echo 2-3 word phrases clearly, but never mand unless a teacher holds a potential reinforcer in front of them and asks “What do you want?” “Manding” would be listed as a “behavioral expectation”, but “vocal behavior” would not be listed as a “learning channel priority”. In application, his teacher would arrange a lot of manding opportunities, and would reinforce most mands immediately, even if articulation suffered slightly while this student manded.

Let's say student #2 mands spontaneously at a decent rate, but tends to use poor articulation. "Manding" may not be listed as a behavioral expectation, but "articulation" may be listed as a learning channel priority. Their teacher would arrange a lot of opportunities to practice echoing, tacting (labeling), and perhaps reading. They would probably also arrange some manding opportunities, but they would do so in order to practice articulation in a motivating context, not because manding was a priority. When student #2 mands with relatively poor articulation, their teacher will not reinforce.

In summary, we hope that scorers will maintain perspective when completing a student's "Program Plan Form". One objective is to identify some of the strategies teachers will use to support/instruct their students. The other objective is to identify a few top priorities for a learner. If scorers want teachers to emphasize a specific learner repertoire, such as independent task completion, that should be listed as a "Behavioral Expectation". If scorers want teachers to emphasize a specific "Content or Learning Channel Priority", such as "money skills" or "responding to textual stimuli", then those should be listed as a "Content or Learning Channel Priority".

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