

Program Book Definitions/Guidelines

Each new student and returning students will be given a VB MAPP assessment. Assessments are performed at the beginning and end of each school year. The pre- and post scores reflect learning throughout the school year. Your consultant will guide you through the assessment and scoring process. Below are some definitions and guidelines to aid in the programming process.

1. The word **“program”** is defined as a specific domain from the VB-MAPP– each of these would be considered a program. Motor Imitation, Echoic, Receptive, etc.

Programs are selected based on the areas of need identified from the student’s VB-MAPP assessment.

Teaching no more than 5 programs at a time is a general guideline. However, individual decisions should be made based on each individual student’s learning abilities/acquisition rate, the daily schedule of each student, feasibility of staff to carry out programs etc...

1. **“Targets”** are the skills that are being taught within each program. The number of targets is usually determined by the highest criteria stated on the VB-MAPP; however, keep in mind that the goal is for students to master skills to fluency and generalize the skills to their natural environment. Consultants will help you determine the targets for your learners as per the assessment results until you develop your skills in this area. Consultants will provide sample targets for all of the program areas, and some sample targets can also be found in the appendix of the VB-MAPP scoring guides.
2. **“Known”** skills are skills the learner was able to perform successfully during the assessment(s). These skills can be recorded on the VB-MAPP scoring forms provided or in the “Notes” sections of the student’s scoring booklet as shown above. It is very important to record these **“known”** skills during assessment. We maintain and build on these known skills; therefore, we use these them in daily programming. “Known” skills are also sometimes referred to as “easies” or “mastered” skills.

The Programming Sequence

Step 1 - The Assessment

1. Record all skills, if any, the student successfully performed during the VB-MAPP assessment on the scoring forms or in the student’s protocol in the **Note** section.
2. Transfer the scores to the grid in the corresponding section.
3. If the student scored a zero, then the dot at the bottom of the domain on the VB-MAPP grid should be filled to denote that the skill was tested but the student scored zero.
4. Review the completed assessment results with the team and/or your consultant to determine which programs you will begin teaching first. Once programs are determined, go to Step 2, the Skills Tracking Sheet.

The Programming Sequence

Step 2 - The Skills Tracking Sheet (example below)

Student: Mary

2

Criteria: at least two different actions for each object and novel actions with a wide variety of objects.

Skill Tracking Sheet

Skill: Motor imitation with objects

	Target	3	Date introduced	4	Date Mastered	5
1	Rolls ball	}	assessment	}	1/7/08	}
2	Bounces ball					
3	Stacks blocks					
4	Taps blocks					
5	Pushes car on table					
6	Pushes car down ramp	}	1/9/08	}	1/14/08	}
7	Taps drum with stick					
8	Taps table with stick					
9	Stir spoon in cup					
10	Turn cup over	3				

Create skills tracking sheets for active programs **only**. Skills tracking sheets are **not** used for recording previously mastered skills where programming **will never** need to be developed. Skills tracking sheets are used to record one or both of the following...

- a) **“known” skills** within active programs where only partial criteria has been met during assessment and further programming is necessary to meet the highest criteria.
AND/OR
- b) **future targets** to be taught within a specific program to meet criteria.

1. Begin by going to the specific domain (Mand, Tact, Listener Responding, etc.) in the student’s program book where you are creating the program. In the example above, we would go to Imitation in the student’s program book.
2. Record the student’s name, the mastery criteria in the boxes located at the top of the form.
3. Record the skills the student successfully performed during the assessment first, and then list targets to be taught. If there were no skills successfully performed during the assessment and programming is deemed as necessary, then only records future targets to be taught. (There will be no known skills to record). Determine the number of targets to be taught using the program’s highest criteria. Choose and record the targets considering the following...

- The skills that will be useful in the learner’s current environments (functional skills)
- The learner’s current mastered skills that can be built upon
- The learner’s current abilities
- The learner’s current interests (MO)
- The complexity of the target. (Targets can be broken down teaching parts of a whole at first)

4. Record in the Date Introduced column either...

- “**assessment**” if the skill was determined to be mastered during assessment

OR

- The **current date** the target is being introduced (taught)

5. Record in the Date Mastered column either...

- The date the skill was assessed and determined to be mastered

OR

- The date the target was mastered (see Step 5 – Weekly Probes for more information on mastery)

Step 3 - Creating a Graph and Recording Cumulative Graph Data

A graph is a pictorial representation of the facts. It displays a relationship between what you are manipulating, the independent variable, and the outcome, the dependent variable. More on this...

Dependent variables and independent variables refer to values that change in relationship to each other. The **dependent** variables are those that are observed to change in response to the **independent** variables. The **independent** variables are those that are deliberately manipulated to invoke a change in the dependent variables. In short, the dependent variable (DI) is the outcome and the independent variable (IV) is the “thing” you are manipulating for the outcome to occur. Example: IV – amount of sleep DI – test scores.

Since instructional decisions are based on data collected, we use the graph to provide a quick representation of facts. Therefore you will create one cumulative graph for each active program. See additional graphing information in the *Program Book Set-up Procedures*. (See the *Mand Probe and Rate directions for specific information on graphing Mand data not covered here*)

Preprinted graph grids are used but a graph can quickly be constructed using just graph paper. Regardless of the format you use, the following information is needed on the graph.

1. **Title** - Cumulative Graph for: _____

The title offers a short explanation of what is in your graph. This helps the reader identify what they are about to view. Place skill names here that are the same as those on the skills tracking sheets in your student’s binder from the ABLLS assessment. Examples: Matching Identical Objects, Receptive ID Body Parts, Tacting Pictures of Common Items, etc.

Example: Cumulative Graph for: Tacting Pictures of Common Items

2. **Student:** Record the name of the learner on this line.

3. **VB-MAPP:** Record the section of the VB-MAPP here (optional). Example: T3-b

4. **Y axis:**

On a line graph the Y-axis runs vertically (up and down). Typically, the Y-axis displays numbers (including percentages). These numbers represent the dependent variable which is your measurable outcome data. The Y-axis usually starts counting at 0 and can be divided into as many equal parts as you need.

To determine which numbers to place on the Y axis, count the number of mastered skills already recorded on **all** Skills Tracking sheet for a **specific** domain. This will become your baseline data. Baseline data provides a standard by which things are measured or compared. This number identifies conditions at the start of the training. The accumulation of data each day on the graph will display the learner's progress.

For behaviors, count the occurrence of the target behavior prior to the treatment to determine baseline. (Confer with your consultant for more information here).

Subsequent graphs

When your graph is full (end graph at least 4 blocks before the last one), start a new graph with the same number as the end data point as the previous graph. **Remember**, the Y-axis starts counting at Zero so always place a Zero on the first line regardless of the starting number... The first line will show 0 and then your beginning counting number. Example: 0, 28, 29, 30 ...

Approximate Guidelines - for choosing a starting number

- 0 – 20 skills – start numbering at 0
- 20 – 100 + skills – start numbering by 2's
- 100+ where acquisition is 5 or more skills per week - start numbering by 5's

Counting will begin by placing the starting numbers on the Y-axis and numbering up. Numbering will begin on the second, horizontal line up from the bottom left hand corner of the graph on the Y axis. (See example). Always place a Zero on the first line regardless of the starting number. (See example)

5. X-Axis

In line graph, the X-axis runs horizontally. Typically, the X-axis has numbers representing different time periods, sessions, or names of things being compared. Usually dates will be placed on the X-axis.

Write vertically on the line of a date (or indicate with a bracket at the date) if it is a weekend, mark off blocks or denote school holidays, in-services, etc. As the month proceeds, write in student absences as they occur, or mark "No Data" if unable to collect data for that day. Coding the graph aids in the analysis of student progress.

6. Recording the Data

Once the graph is prepared (title, name, month, X axis, Y axis) student data can be placed on it.

In preparing the Y axis, you have previously counted the number of mastered skills already recorded on **all** Skills Tracking sheet for a **specific** domain.

1. Place the data point (dot) where the count and date intersect.
2. If the student begins with no mastered skills, the first data point will be placed on Zero. Zero is the first line at the bottom, left hand corner of the graph on the X axis.
3. All subsequent data will be added to the total number of responses recorded during all previous sessions. If no skills were mastered, the data point remains in the same place as the previous data point.
4. Connect the data points with a line (except across phase change lines, or breaks/holidays).
5. Data either stay at the same level (flat-line) or increase. This means the steeper the slope on the graph, the greater the number of mastered responses. It would be rare to record a decrease on a cumulative graph. This would signify that retention of mastered skills is not occurring.
6. If data flat lines beyond the expected rate of acquisition for the student (aimline), this signals a programming review by the teacher or team. Observe trends, programming, targets, teaching sessions, and talk with instructor(s). Possible problems: target discriminations too close, prerequisite skills needed, barriers to learning (review barriers assessment in the VB MAPP), review effective teaching procedures, materials used not adequate, prompt level not enough to evoke correct responses, etc.

NOTE: Data should never go downward on a cumulative graph unless the student can not retain mastered skills. If retention issues occur, consult with your team or consultant.

Frequency Graph

The frequency graph is similar to the cumulative graph **EXCEPT**

1. It is titled **Frequency** Graph
2. Data recorded is **NOT** cumulative; therefore, the data **CAN** increase or decrease daily.
3. You will only record the count or **rate** for that specific day and **WILL NOT** add it to the previous day.
4. Multiple data points can be plotted simultaneously and a legend is included. (see legend below)
5. The frequency graphs reflect the total number of occurrences of a particular behavior during a specific time (per day, per session, per minute). The time interval **MUST** remain constant.

This is the type of graph we use to record frequency of mands (prompted vs. unprompted vs. spontaneous per minute, per 20-minute session, etc). A detail explanation of the data collection and graphing procedures for mand frequency data is covered separately in the mand rate and probe direction sheet.

Frequency graphs are also used for collecting problem behavior data.

7. The Legend

There may be an instance where multiple data is being collected on the same graph (i.e. mand frequency). The legend tells what each line represents. Just like on a map, the legend helps the reader understand what they are viewing.

For example, the mand frequency graph displays data the following way: a dot • represents prompted responses, the **X** represents unprompted responses, and the **O** represents spontaneous responses. The corresponding symbols are connected with a line to display increases or decreases in the specific behaviors.

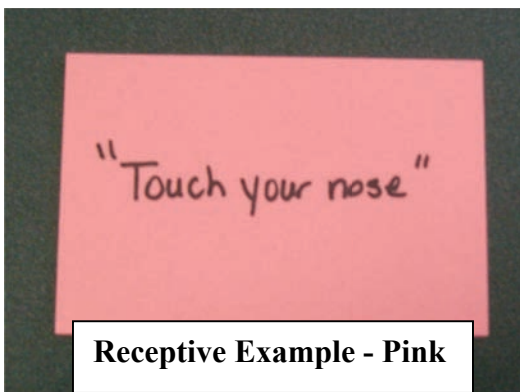
See COLD PROBES for more on data collection

The Programming Sequence

Step 4 - Creating Card Sort for Intensive Teaching

NON-Picture cards

1. Use **pastel colored** and **white 3 X 5** note cards for teaching skills. Record the discriminative stimulus (S^D's) for **mastered** items on the index cards according to a color-coded system based on skill sets that include the operants. Colors are as follows:
 - **RED:** Listener responding (receptive discrimination skills that you do not use pictures for such as, “touch your nose”, “stand up”, “show me laughing”)
 - **GREEN:** Tacts (tacts that do not have pictures/objects for example, “This is my nose”, “what am I doing?” laughing)
 - **BLUE:** Intraverbal skills
 - **PURPLE:** Motor Imitation skills
 - **YELLOW:** Echoic skills
 - **WHITE:** Visual Performance – rarely used because the items themselves usually serve as cues for the teacher however, there may be cases where the card can be helpful for any specific instructions.
2. Begin creating “known” cards for the student.
 - a. Record the discriminative stimulus (S^D's) for **mastered** items on the index cards according to the color-coded system above. Place what the teacher is to say in quotes and the student’s response below not in quotes (may be helpful to underline the student’s response). Receptive responses will not appear on the card since the response is Non-verbal. The student will perform your directions as stated on the card. (See receptive example below)
 - b. Record each student’s initial on the back of any programming cards (Language Builder (LB) cards, colored “known” cards, etc.) This will prevent confusion or mix-ups among student cards.



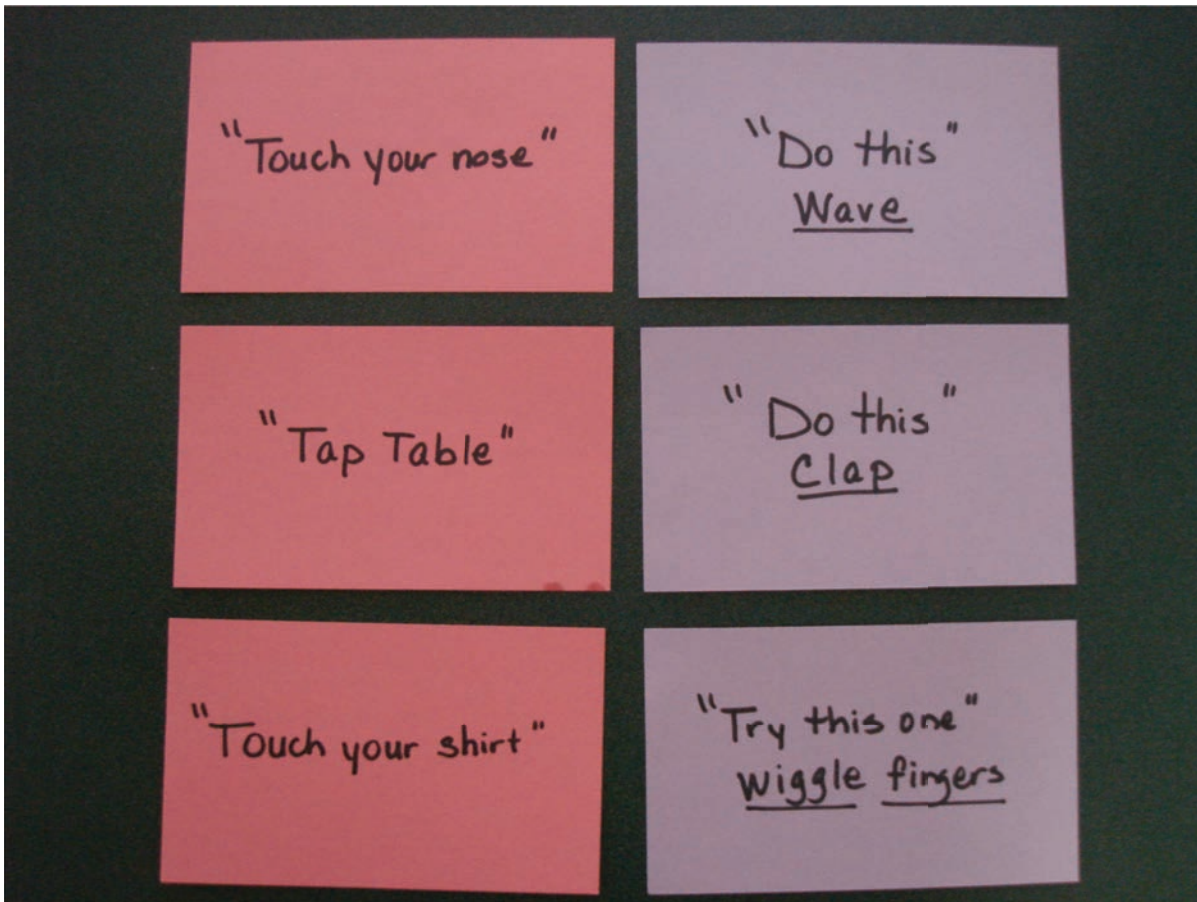
Do not create colored cards for tasks such as putting puzzles together. These skills can be maintained in natural environment teaching (NET) or when doing leisure or independent activities. We also avoid having a student perform skills such as “go jump on a trampoline” during IT, for instance, as this would slow down instruction time and it may be difficult to regain instructional control with your student. These mastered skills can be maintained where longer breaks are possible, in the NET, or during leisure/playtime.

3. Once all **colored** cards are written out, shuffle them so that the operants and skills are mixed and varied.
4. Place the cards in a medium sized container. You can buy/create containers considering the card size and number of cards.
5. Begin using the cards from the front to the back. Create a marker that states “START HERE” that is slightly taller than the 3 X 5 cards. Place it in the back of the box. If you do not get through the entire stack of cards in a session, place the used cards behind the marker with the **unused** cards in front of the marker. This will indicate which cards to use in the next session. When you come across the “start here” card it means you have gone through all the cards and, at this point you should shuffle all the cards and start over. Shuffling the used cards prevents rote responding.

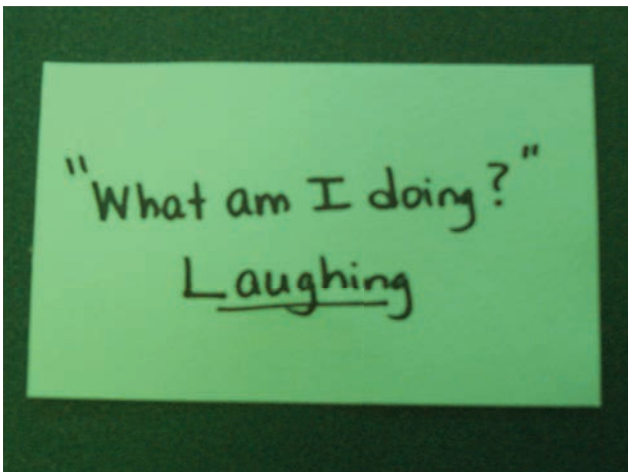
Colored Card Samples

Receptive – Pink

Imitation - Purple



Tact – Green

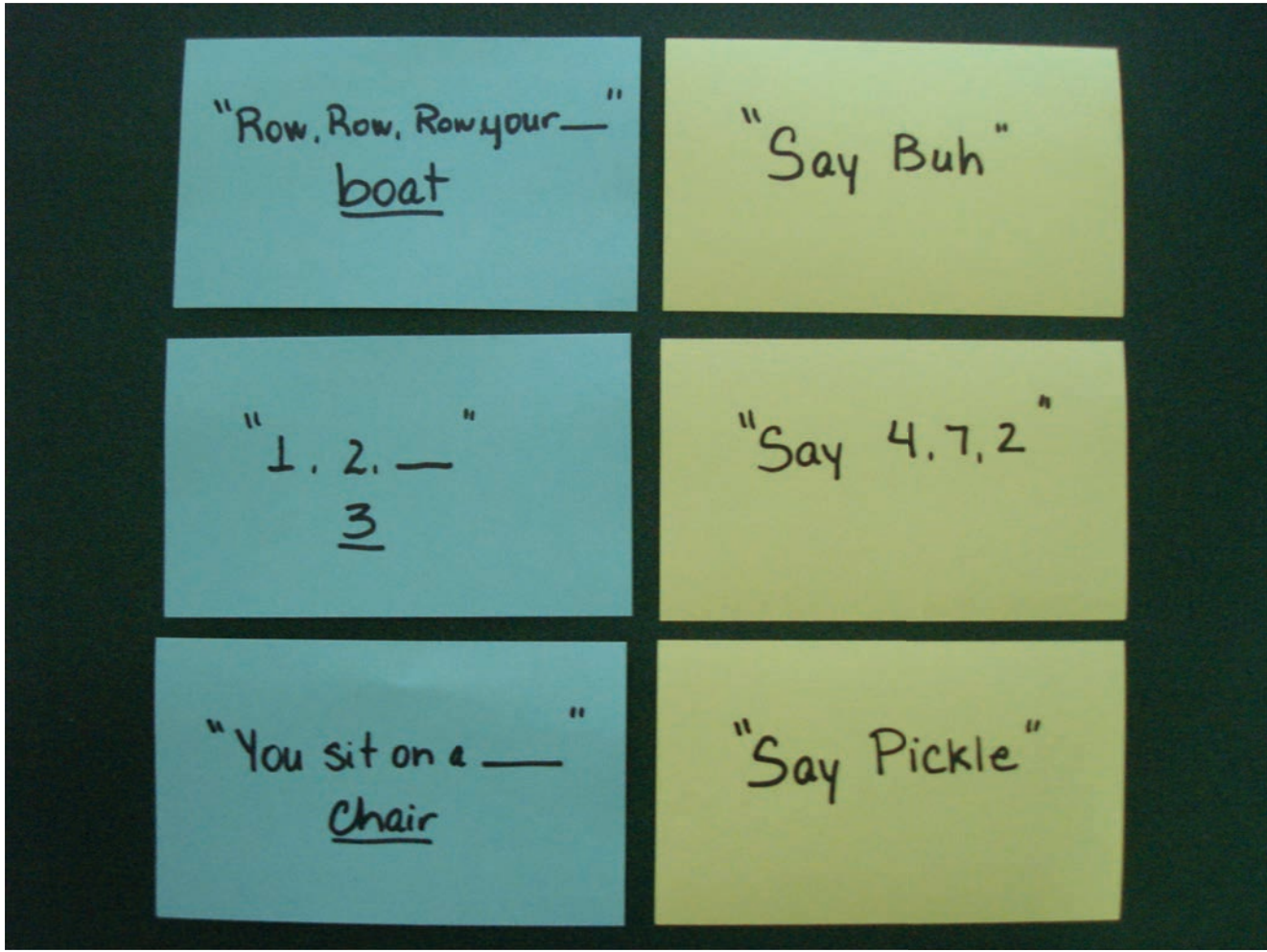


Many tacts are pictures or objects that do not require being written on a card. Refer to #3 above for more information on picture cards.

Color Card Samples

Intraverbal – Blue

Echoic - Yellow



PICTURE CARDS (shown right)

It is recommended to teach all items as both tact and receptive before including them in "knowns".

However, if there are some items that are only known as receptive or tact, these should be marked in some fashion. Put colored dots on the back of *Language Builder* (picture) cards that are "knowns".

Red dots = known receptives, green dots = known tacts. m. (Red and green markers, pencils, or stickers can be used to make the dots.) Keeping separate piles of cards for receptive discrimination vs. tacts helps increase the flow of presentation, since you don't have to check the back of the card before you present it. Optional: you can pencil in "M" (mastered) or "T" (target) under the specific colored dot to alert the instructor to the student's instruction level with that specific picture card. (If you have already devised a system for noting this and it is effective, continue to use it). If you are not using *Language Builder* picture cards, create picture cards from clipart, Google free pictures, or use specific picture making software.



MATCH TO SAMPLE

To increase efficiency of time and promote more effective delivery, keep a separate stack of pictures for matching (identical pictures, non-identical, associated pictures, etc.) according to student's matching skills. You may do the same with objects. Organize a container with mastered matching objects possibly bagged to reduce hunting for the matches.

TARGETS

All targets are kept separate from "known" cards.

1. Use a glide zip lock sandwich/quart size bag.
2. Place the student's name on the bag and mark the bag as "targets"
3. Place targets that you are teaching for that week in the correct bags.

By placing the targets in separate, labeled baggies, there is no confusion among instructors as to which is a "known" skill and which is a "target" or whose targets are whose.

You may also code the targets by placing a code sticker on the bottom right hand corner of the card (see example below). Once the target is mastered, remove the sticker (if any has been placed) and place the card in the "known" box so that the student maintains the skill. Then place new targets in the baggies.

Presentation of Cards

The purpose of using a card sort system is to guide the presentation of you teaching trials and to allow instructors to implement teaching procedures with ease.

The card sort system includes two general types of cards:

1. Picture cards (e.g. language builder cards) and...
2. 3x5 cards that list instructional items that do not involve picture stimuli or, for early learners, these cards direct the teacher to use some 3 dimensional materials (although with students who have many 3-D items, it is recommended to use a materials/object sort instead)

The card sort system also involves setting out four piles of cards in front of the instructor.

Pile one: known picture cards.

Pile two: known 3X5 cards.

Pile three: target picture cards.

Pile four: target 3X5 cards.

- Place the 4 piles in front of you. It is recommended that you place the "known piles" on the side of your dominant hand since you will be presenting more trials from these piles (80%).
- The following procedures should be used for presentation of cards:
 - Target piles: Errorless procedure (Prompt-Transfer-Distract-Check)
 - Known piles: Time delay (this means you will present the card and wait up to 2 seconds for the student to respond).
 - If errors occur: error correction procedure: End-Prompty-Transfer-Distract-Check
- Intersperse picture cards and operants cards during the presentation. (mix and vary instruction).
- Introduce the target at the appropriate time (see effective teaching practices) and keep it available for the check trial. Once the check trial is successful, put it back in its place for representation later in the session.
- If you get confused during card presentation, give the student in reinforcement and regroup. Don't let the student set idol while you regroup. However, make sure you do not deliver reinforcement if student is engaging in problem behavior.

- Bring the student's roll cart next to you and have all materials ready prior to bringing the student to the session. Down time increases likelihood of problem behaviors occurring and/or loss of instructional control by the instructor.
- Make sure that all reinforcers used during that session have value. In other words, check for motivation prior to instruction. The student may also mand for items which signals their value.
- Have reinforcers ready and within your reach and not the student's reach.
- Remove any clutter from the instruction area that might pose a distraction or reduce your efficiency.
- Make sure that the work station "fits" you and the student. Is the student seated in a position to have good view of the materials? Can the student appropriately respond with receptive or imitative responses due to seating arrangement? Can you reach the child to provide physical prompts if necessary? Is the table big enough to place all of the items on it necessary for instruction? Do you have your roll cart beside you?

The Programming Sequence

Step 5 - Weekly Probes (*Weekly Probe Sample next page*)

The goal of the weekly cold probe is to test the acquisition of target skills being taught. Therefore, the probe will be conducted prior to the student contacting any teaching of the targets for that day. Probing the targets can be done when the student arrives or prior to a session as long as teaching of that item has not occurred before the session. I recommend conducting the probes in the morning as this allows for instructional changes prior to sessions. Mastery may occur; therefore, you may be adding new targets, error patterns may be recognized changing future instruction, program books can be updated earlier in the day if time allows, etc.

Some instructors feel the need to run errorless corrections when errors occur during the cold probe. It is recommended that this decision be made depending on individual learner's patterns of responding during intensive teaching. Remember that targets are all "hard" items for the learner. If there are many errors during the cold probe and the instructor is running many errorless corrections in a row, this might increase the value of escape from instruction (problem behavior). You may also be starting the day or session off with many demands in a row where a learner may not be successful yet. Again, this may evoke problem behavior. Proper reinforcement may be difficult to provide with correct responses during a cold probe. Cold probing can turn into a "distorted" teaching session if you are not careful. If an error occurs, just move on to the next item and refrain from comments. Each learner must be considered when deciding whether to run errorless corrections during the cold probe. If allowing the error to occur is inhibiting acquisition, a correction may be warranted.

Weekly Probe Sheet Sample

Child's Name: Johnny Week of: 9/8/08

Weekly Probe Sheet

	Notes Previous Y'	# of days	operant	Target Skill	Mon 9/8	Tue 9/9	Wed 9/10	Thu 9/11	Fri 9/12
1			MI	"Do this" Clap	Y N	Y N	Y N	Y N	Y N
2			MI	"Do this" Wave	Y N	Y N	Y N	Y N	Y N
3			LR	"Hop"	Y N	Y N	Y N	Y N	Y N
4			LR	"Lift one foot"	Y N	Y N	Y N	Y N	Y N
5			E	"Say BA" Ba	Y N	Y N	Y N	Y N	Y N
6			E	"Say ee" ee	Y N	Y N	Y N	Y N	Y N
7			LR	"wiggle foot"	Y N	Y N	Y N	Y N	Y N
8			LR	"Say ma" Ma	Y N	Y N	Y N	Y N	Y N

Probe Procedures

- Place the learner's name in the **Name box**.
- Place the dates in the **"Week of"** box and in the specific **day's** boxes.
- Record total number of weeks the target skill has been active.
- Enter the category/operant (i.e., tact, Mand, IV, echoic, etc)
- Place the S^D in the **target skills column**. Examples not shown: *"touch your nose"*; *"what is it" cat (pic)*; *"what is it" car (object)*; *"1, 2," 3*; *"Match" car (object)*. Note whether the S^D is an object or picture, etc. for tacted or match to sample items as the student may have different instructors throughout the day. Also some students are working on approximations of skills. Therefore, it is important that all instructors know the specific student response required to score a Y. Probing has to be consistent among instructors.
- Prior to the day's teaching session, probe the student on the items listed on his probe. **DO NOT** prompt the student in any way.
 - Circle Y if... The student's response is correct **and** within 2-3 seconds.
 - Circle N if... The student's response is prolonged, an error, sloppy, not precise, or if no response occurs.
- Mastery is 3 consecutive "Y's" or as determined by the team. Highlight the Y's on the cold probe to signal mastery of the item has occurred.
- Find the Skills Tracking sheet located in the student' program book where the newly mastered target(s) is located. Write the date that the item was mastered in the Date Mastered column.
- Place new targets from the appropriate Skills Tracking sheets on the Weekly Probe.
- Make a colored card, gather materials, find pictures, etc., for the new target if applicable and begin teaching and probing the new target. Probing will begin the day after an item has been taught for the first time.
- Review your Weekly Probes daily for highlighted mastered items. Graph the mastered skills in each domain. Remember instructional decisions are based on the student's data. (See Step 3 for details on graphing).
- If a student is absent or a missed session occurs, you can write over the Y or N with an "A" for absent or "ND" no data to signal missed probes. Missed probed days do not affect consecutive counts. In the Note Previous Y's column, list any consecutive Y's carried over from the end of the prior week. For example, a Y on Thursday and a Y on Friday means that you would place a 2 in the Note Previous Y's column. A Y on the following Monday would give the student 3 consecutive Y's. When mastery occurs this way, highlight the number in the Note Previous Y's column and any Y'(s) in the day columns to alert staff on how 3 consecutive Y's for mastery was determined.

After the initial sep-up and programming is complete...

1. Begin teaching
2. Probe newly learned skills each day using the Weekly Probe
3. Highlight mastered skills on the Weekly Probe according to the criteria set for mastery daily
4. Record the dates of mastered items on skills tracking sheet in program book daily
5. Place new targets on the Weekly Cold probe from the Skills Tracking Sheets as targets are mastered
6. Prepare materials for teaching the new targets if applicable
7. Record mastered skills counts on graphs
8. Drop dots on cumulative graphs daily even if no items were mastered (in which case the dot stays on the same line (level)).
9. Begin teaching new targets and continue teaching existing targets.

Repeat steps 2-8