

# A Day in the Life: Practical Application of the Pyramid Approach to Education

by Anne Overcash, MEd

Congratulations reader! You have worked your way through the *Pyramid Approach to Education* book and no doubt learned a lot. I am certain that you are energized about some new possibilities for your children or learners. However, you may be wondering how all of these pieces actually fit together in real environments. While a myriad of examples have already been given to illustrate each concept, it is often difficult to visualize these techniques and strategies when implemented during school, community and home based routines. In this chapter, we visit three classrooms and two families to see how many of these extremely important concepts are seamlessly incorporated throughout the day with many individuals.

Before we look in on these individuals, let's review! Remember that the *Pyramid Approach* is firmly based upon the science of learning - it is orderly and lawful. This foundation has allowed for rigorous research in the field of learning theory (Applied Behavior Analysis). The nine elements of the *Pyramid Approach to Education* are all important areas within Applied Behavior Analysis (ABA). Dr. Bondy recognized long ago that there are some elements of ABA that are so important they must be addressed first.

These serve as the foundation, or base elements, of the Pyramid. If these elements have not been properly addressed, then it may not matter how much thought has gone into the actual lesson design. The lesson may not be as effective as it could have been had these areas been first addressed. These elements are:

Functional Activities

Powerful Reinforcers

Functional Communication

Contextually Inappropriate Behavior

Once the base elements have been addressed, then proper lesson design is critical. These are the instructional elements and they comprise the top of the Pyramid. Whether you have an elaborate lesson plan or a less formal one, these areas must be addressed to maximize learning for your learner:

Generalization

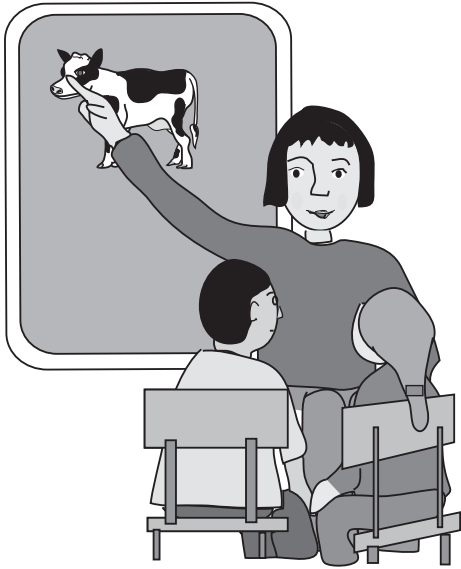
Lesson Formats

Teaching Strategies

Error Correction Strategies

Data collection and analysis are the glue that holds everything together. It is through the careful collection and analysis of information about progress, or lack thereof, that we make the best educational decisions.

After some learner and setting information is provided, the remainder of this chapter is divided into different time periods. We look inside a pre-school, middle school and high school setting. In each, two learners will be highlighted, but other people (learners and staff) are certainly a part of ongoing activities within each setting. The chapter will conclude by spending time in a two different home settings. You will see the *Pyramid Approach* in action in a variety of settings with individuals engaged in a variety of activities at many levels. I am sure you will see some similarities to your own setting, and perhaps gain even more insight into ways that you can begin to incorporate the *Pyramid Approach* into your work or home life.



### Miss Mindy's Preschool Class

All of Miss Mindy's learners have a diagnosis of autism and are taught in a separate classroom within a neighborhood elementary school. Opportunities for integration with peers who do not have a diagnosis of autism are provided as appropriate for each individual learner, both within small and large group activities. The classroom itself is visually divided into different areas, including a table for breakfast and snack time that is located near a kitchen area where both staff and learners work on food preparation as well as cleaning up after these

types of activities. Centered along one wall is a large area with a brightly colored rug where many large group activities take place such as language group, motor group and morning circle. A small free play area is tucked away by the windows complete with toy shelves, bean bags and a book rack. Just inside the door each learner has a cubby where coats and book bags are stored. Learners who use PECS or other alternative/augmentative communication devices will find those waiting for them upon entry into the classroom. Miss Mindy took the advice of her mentors and did not create separate spaces in her classroom for each learner to work either independently or within 1:1 lessons. Even though the children in her class have special needs, she is preparing them to learn alongside their same age peers and none of the general education preschool environments have cubicles. Individual instruction will certainly occur in this environment, just not in isolated areas.

A quick look around the room reveals strategically placed data sheets either on clipboards or taped to the wall. One thing Miss Mindy has learned over the years is that if the data sheets are not readily accessible throughout the day, no one will collect data. Of course, this does not mean that meaningful teaching has not occurred, but it does mean that it would be impossible to make sound teaching decisions about lessons without this important information. Visitors to this classroom also note large colorful posters. These posters contain pertinent information about each learner in the class. This information may include just about anything the team feels is important at this time, but at a minimum should include current preferences, current status of communication goals, including all nine of

the critical communication skills, current non-preferred items (especially if the learner is learning to communicate, “No, thank you” or working on Phase IIIA of PECS), minimum rate of R+ to be provided throughout the day, and any contextually inappropriate behaviors the team is currently targeting. This information is critical to the overall smooth functioning of any classroom setting.

When teaching staff have the information they need about any given learner at a glance, they will be as prepared as possible throughout the day. In addition to these very large public postings, other information is strategically displayed throughout the environment so it can be accessed at any point throughout the day when needed. For example, lists of preferred items for each learner have been placed on the lids of the small divided trays that contain small toys/edibles. This strategy allows for staff to “know” at every given moment who likes what inside the box. While it may seem like an insignificant strategy, it decreases any time teachers have to stop and think about each learner’s preferences and allows them to continue with the lesson/goal at hand. Currently, there are six learners in this classroom, two of whom will be highlighted within this chapter.

Ezra is four years old and currently has no vocal communication skills. He communicates via the Picture Exchange Communication System (PECS) at Phase V. In addition to a visually based communication system, Ezra uses a visual schedule for transitions throughout the day, and within certain activities such as gym class and occupational therapy. Currently, Ezra uses a token based visual reinforcement system. His tokens have been individualized to reflect his favorite characters, the Dalmatian dogs from 101 Dalmatians. Miss Mindy has laminated stickers and placed Velcro® on them so she and the other team members can deliver these stickers to Ezra as needed throughout the day.

### Ezra

Likes	Dislikes	Communication	Reinforcement
Dalmation dogs feathers glue colored pencils cheese pretzels juice milk	puppets loud music pudding	PECS Phase V attributes visual schedule yes/no with head gestures	Variable Interval (VI) 3 minute  *also working during transitions and less struc- tured time of the day

<b>Behavior Target</b>	<b>Functionally Equivalent Alternative Behavior (FEAB)</b>
hitting	Request to turn music off/down  Indicate “no, thanks” when offered non-preferred items

Janelle is five years old and uses speech as her functional communication system. In fact, her vocal communication skills are quite advanced for her age, but she struggles with the social aspects of language. Janelle’s team uses quite a few visual supports for her receptive understanding of language. Daily, Janelle uses a visual schedule as well as a visually based reinforcement system. Janelle earns letters that spell out the name of a popular televised word game. Upon completion, she chooses either a peer or staff member and plays an electronic version of that game for a few minutes.

**Janelle**

<b>Likes</b>	<b>Dislikes</b>	<b>Communication</b>	<b>Reinforcement</b>
all things Disney small figurines butter ketchup puzzles computer games word games word puzzles	not winning not being correct cheese popcorn	speech for all requests “help” request with visual spoken yes/no word-based schedule	VI 5 minute during transitions and less structured time of the day

<b>Behavior Target</b>	<b>Functionally Equivalent Alternative Behavior (FEAB)</b>
Shut-down (functions to gain additional attention)	Share disappointment with staff member  *also earns additional staff 1:1 time for the absence of this behavior
Yelling out (when help is needed)	Request “help” using a visual card



### Ms. Beal's Middle School Class

Ms. Beal is a Resource Teacher in a neighborhood middle school. She is responsible for nineteen learners; however, most of them are in and out of her classroom as appropriate throughout the school day. Ten individual desks are located in the central part of the classroom. An area for group activities that can accommodate 5 to 10 learners is located in the back corner of the classroom. This area is used for language activities, morning meeting and other group activities. A row of computers is located along one of the walls. Learners enter and exit

her classroom many times throughout the day. Team members are scheduled, either in the resource room or around the school building, with either one learner or groups of learners at various times of the day.

Due to the complex nature of the weekly schedule, Ms. Beal developed an elaborate color-coded visual schedule for the week that is situated above the chalkboard so that all team members are aware of where, and with whom, they are working at any given point throughout the day. All team members carry a laminated version of this schedule with them so changes to the schedule can be marked with a wet erase marker. Everyone rotates among all learners and groups. This helps with generalization and decreases the likelihood of any one learner becoming too dependent upon any one team member. One page summaries of each learner's preferences and all other pertinent information are affixed to the clipboard that follows each learner throughout the day. This provides quick access to this information for the person working with that learner at any given point throughout the day. In addition to all of the data sheets, each clipboard has a printed daily schedule with space to jot down notes that will go home with that learner at the end of each day. This enables Ms. Beal to quickly review how things are going with the learner and also allows school to home correspondence on a daily basis. Parents are encouraged to initial this sheet daily and provide any information they deem important to the team on the reverse side of the form.

Learners in the middle school have lockers located near their home-

room. Ms. Beal is the homeroom teacher for all of her learners. Each morning and afternoon she organizes all school/home correspondence and collects all relevant data sheets. For all transitions throughout the day, her learners transition alongside their peers when the bells ring to signal class change. Although space is at a premium in her class, Ms. Beal has designated a relaxation station for free time. This area is complete with bean bags, magazines, a community puzzle in progress, and a variety of other activities/items that change as her learners' preferences change across the school year. A separate area is designated for breaks. This area consists of a chair and no other items/activities. If learners request a break from a task, they will go to this area for a specified amount of time and then return to the task when an auditory signal sounds. This chapter will highlight Marquis and Joshua at various points throughout a typical day.

Marquis uses a sophisticated Speech Generating Device (SGD) for communication throughout the day. He is proficient with the device and, if he cannot find the correct icon, he may type the word into the device since it is programmed with picture retrieval. Alternatively, he can write the word. Marquis works on grade level for most subjects and needs occasional monitoring in his general education classrooms. A group of peer tutors/helpers naturally and informally developed. The behavior analyst at the school has initiated some structured sessions with Marquis and this group of learners where they work on specific social skills. Within the general education setting, these learners provide both reinforcement and reminders as needed.

**Marquis**

Likes	Dislikes	Communication	Reinforcement
High School Musical vampire books salty, crunchy snack foods Lemon Heads mini marshmallows flavored seltzer water intricate puzzles busy patterns	close proximity onions noisy environments	SGD for expressive	VI 5 minutes

Behavior Target	Functionally Equivalent Alternative Behavior (FEAB)
Pinching (functions to move away and to escape noisy environments)	Request person to move away Request a break in a quiet area Use earplugs or iPod with ear buds
Body rocking and humming (elicited by uncertainty or abrupt change in schedule)	Help create and follow a variety of schedules Tolerate “change” in routine Request a break in a quiet area

Joshua enjoys all things music-related. He is an easy going young man and over the years he has developed several close friends at school. Speech developed late for Joshua. During the period when he was completely non vocal, his early intervention, preschool and kindergarten teams implemented PECS. Even though Joshua no longer needs visual supports for expressive communication, he is quite independent throughout his school day in part due to visual supports for receptive communication, specifically his daily schedule which he either types or writes as a beginning activity each day. Most learners have long since memorized their schedules for A and B days, but Joshua is much more confident with transitions if he has the schedule to reference when needed. Joshua’s daily schedule is printed into a grid where he has additional columns to accommodate his visual reinforcement system. He has learned many money concepts and is able to monitor his own on-task and work behavior, so he and the team agreed that his reinforcement system could certainly involve earning money and be self-monitored. Each point he receives is worth \$1.00. Joshua’s iPod has an app that vibrates on a 15 minute variable interval schedule. Upon either hearing or feeling the device vibrate, Joshua assesses his behavior and if he is on-task, gives himself a point. Upon delivery of the 5<sup>th</sup> point, he has an opportunity to either take a 10 minute break, where he can listen to songs on his iPod, engage in a variety of other preferred activities, or he can “bank” the money. When he “banks” the money he records this in his checkbook register. The team, along with Joshua and his parents, developed a shopping mall of sorts where Joshua can write checks for specific items. Most of these items consist of music CDs, games, and candy bar/ dessert selections. In addition to the points Joshua earns throughout the day, his parents and team members may provide “bonus” points for excellence in work or instances of using a new social skill.



**Joshua**

Likes	Dislikes	Communication	Reinforcement
music (specific CDs) mini candy bars music magazines writing rhymes and songs treadmill and exercise	olives mushrooms	speech for most expressive skills  written/typed daily and activity schedules	Self-monitored VI 15 minute money-based visual reinforcement system which is combined with daily schedule
Behavior Target		Functionally Equivalent Alternative Behavior (FEAB)	
None at this time			



**Mr. Manuel’s High School Class**

Mr. Manuel’s classroom is located in a large high school. Currently, Mr. Manuel coordinates services for 12 learners. Some of his learners are in this classroom for the entire school day with the exception of physical education (PE), art, and tech classes as appropriate for each learner. In addition to the weekly structured PE class, nearly all of his learners spend time in the fitness studio for daily cardio and other fitness experiences. Mr. Manuel recognizes that many adults with disabilities struggle with weight gain, just like individuals without disabilities, and strives to

make fitness a fun and integral part of each day for his learners. He also recognizes that many adults engage in a variety of fitness activities as part of their recreation and leisure experiences for the rest of their lives. He wants his learners to be exposed to a variety of activities so that if preferences emerge, these may be carried over into their lives after school. Some of his former learners have participated alongside their classmates in swim meets, track events and weightlifting competitions.

Rose's new fascination with jewelry and hair accessories has opened up some exciting new possibilities for her both at home and school. She is non-vocal but uses PECS to communicate quite effectively throughout the day. She has recently moved into a group home part time. Everyone in the group home is quite impressed with her communication skills via PECS, as well as how independent she is with a variety of routines throughout the day when she has her photo schedule in place. They plan to teach some new routines, especially grocery shopping, meal preparation, yard work and gardening, since all of the residents are quite busy on a daily basis with the general running of their home. She has had a token based visual reinforcement system in place for years. Since she has become interested in jewelry and enjoys decorating things, she made a new set of glitzy tokens for herself and the other girls in her classroom. Rose's occupational therapist was impressed with how well she did with this task since it required her to don a pair of gloves, due to the use of super glue, and persist for quite some time with this fine motor task. This is a testament to the power of preferences indeed!

### Rose

Likes	Dislikes	Communication	Reinforcement
pudding ice cream cookies magazines	fine motor tasks trying new foods	PECS Phase VI (photos) photo schedule uses visuals to request "help" and "break"  Responds to "wait" card  Responds "yes" and "no" with head nod and shake	VI 20 minute visual reinforcement system

Behavior Target	Functionally Equivalent Alternative Behavior (FEAB)
Pinching self when frustrated	Request "break" Use putty/small items for relaxation/calming
Pinching others	Request "help"

Darrin is a very diligent worker. He can also be quite single minded when it comes to task completion. He’s happiest when he has a “To Do” list and can mark off items as he completes them. His mom reports that from an early age he was always her helper and he seemed most content when he was able to assist her with tasks around the house. She remembers an early fascination with her vacuum cleaner, so she bought him a toy vacuum for his birthday. He was excited to have his very own vacuum cleaner until he realized that it didn’t “work” like his mom’s! All of Darrin’s teachers throughout his school years have incorporated his preference for helping with all kinds of tasks. When in middle school, he was the preschool “helper.” In this role, he assisted the preschool teachers by loading the dishwasher, washing dishes by hand, packing book bags, vacuuming, etc. Each year during the IEP, Darrin stated that he wants to have a job in a hotel or office building where he can help ensure the environment remains clean and organized. Darrin understands money concepts and is excited to have his first paying job. He now works at a local hotel as an assistant to the chief engineer. He works 5 mornings a week and enjoys changing into his uniform before going to work each day. Even though he is certainly aware that he receives a paycheck every 2 weeks, he also looks forward to breaks during the day where he generally chooses to surf the web on his iPhone to check out the latest NASCAR stats, peruse the websites of his favorite cleaning supply and organizational tool distributors, or chat with coworkers. He is a little forgetful when it comes to time, so he uses the alarm function on his iPhone to remind him when his break is complete!

**Darrin**

Likes	Dislikes	Communication	Reinforcement
organizing things and spaces high fives/social approval computer games talking about NASCAR talking about cleaning equipment and supplies	clutter	speech for expressive	paycheck (Fixed Interval 2-week)  self-monitored performance evaluation twice a day

Behavior Target	Functionally Equivalent Alternative Behavior (FEAB)
Cleaning personal space of others without permission	Differential reinforcement of refraining from this behavior (DRO)



### Arrival – Miss Mindy

Miss Mindy strongly believes that preparation each day prior to the arrival of her learners is critical to their success. It is well worth the effort when transitions run as smoothly as possible and materials are prepared and placed in predictable locations. All team members are responsible for different tasks. These tasks rotate, so that no one team member burns out on a specific task. Some of these tasks include: arranging single picture directions or visual schedules, preparing breakfast and snack items, filling the reinforcer trays, setting up the group and individual clipboards with appropriate daily or weekly data forms, vacuuming, washing dishes and sanitizing toys/surfaces.

Each learner has a cubby located near the door. If a learner uses an alternative or augmentative communication system, those are placed inside the cubby alongside token boards or other reinforcement systems. Ezra is having some difficulty saying goodbye to mom in the morning, so the team signals the first possible reinforcer just as they approach the classroom door. Signaling the availability of Dalmatian dogs has certainly smoothed his transition into the classroom. Once inside the classroom Ezra finds his cubby easily because his is the one with the bright purple tape outline that matches the tape on his book bag straps. This strategy was utilized with some of the learners at the beginning of the year and gradually eliminated as they learned to locate their cubbies by their name or their name and a couple of stickers of preferred characters. Of course, Ezra's cubby features Dalmatians!

Miss Mindy plans to change the position of the cubbies every 3-4 weeks. When the learners consistently locate their cubbies, even when the location changes, she will be confident that each learner is locating his/her cubby by name or decoration and not location. Ezra earns stickers toward some preferred Dalmatian figurines as he completes the arrival routine: take off book bag, unload book bag, place notebook on Miss Mindy's desk, check schedule, complete the toileting routine, check schedule and join the rest

of the class at a table with the first activity of the day. Generally, the first activity of the day involves some type of small manipulative. On this day, a variety of puzzles are available. Ezra is keen to join the other learners at the puzzle table as soon as he sees a variety of Dalmatian puzzles available alongside many others. Ezra is so keen to get started on his puzzle that he immediately constructs a Sentence Strip and makes a request via PECS, "I want + puzzle." Miss Marsha shows him the two puzzles she has available (Dalmatian puppies and Mickey Mouse). She makes a space on his Sentence Strip and places pictures of Dalmatian and Mickey on the front cover of his communication book. He immediately drops the picture of Dalmatian onto the Sentence Strip and exchanges the strip with Miss Marsha. She "reads" back the Sentence Strip as he points to each picture and then she provides access to the chosen puzzle. Ezra gets right to work on the puzzle.

After all of the other learners are settled around the puzzle table, Miss Marsha picks up a big puzzle piece and a small puzzle piece. The larger one is the one that will fit Ezra's current puzzle choice. She asks Ezra which one he wants. He begins to construct the Sentence Strip by dropping the Sentence Starter "I want." Just as he begins to reach for the picture for puzzle piece; she gestures to the picture for "big." Ezra drops that picture to the Sentence Strip and completes it by dropping the last picture. Miss Marsha will try to capture several more attribute requests during this motivating activity.

Even though today's activity itself is quite motivating for Ezra, he still earns Dalmatian stickers for staying on task. The team knows that when it's time to clean up the puzzles they will be glad that a deal is already in place! Since all of the learners are busy putting puzzles together, Miss Mindy and Miss Marsha decide that they can get in a couple of yes/no opportunities with Ezra. This is a relatively new skill for Ezra. While holding up either a preferred or non-preferred item they ask, "Do you want this?" Depending upon his reaction, Ezra will be prompted from behind to nod his head, "Yes" or shake his head, "No." At this point, the person situated just behind him needs only to provide the slightest physical prompt and he finishes either gesture quite independently. They have full confidence that by the end of this reporting period he will have mastered both of these gestures! In the beginning, they were worried that they would not be able to manage since two trainers are necessary to properly teach this skill. However, once they started embedding opportunities throughout lessons just like this one, they were surprised to note that on some days they had as many as 20 to 25 data points for this skill!

As with each activity throughout the day, many IEP objectives are targeted for each learner. Miss Mindy feels that this is the best way to address individual learner objectives. In some ways, it might seem easier to isolate each skill and teach it to mastery, but experience has taught her that when skills are taught in this manner, it takes more time to teach for generalization after mastery. Building in for generalization right from the start will go a long way toward ensuring that these learners have the skills they need throughout their daily lives, both while they are in school and out. During this lesson, some learners are working on fine motor skills, time on task, asking for help, making simple requests, making complex requests, responding “yes” and “no,” as well as peer requests. Peer requests are encouraged when the pieces for 2 puzzles are “accidentally” mixed up. In order to complete the puzzle, learners are taught to request specific puzzle pieces from a classmate. Initially, Miss Mindy and Miss Marsha had to provide quite a bit of prompting for both the request and the honoring of the request, but they have been quite pleased to see an increase in peer-to-peer requests since they encouraged this during structured activities!

At the beginning of the school year, Janelle was not at all pleased to say goodbye to mom and enter the classroom. On the first day, both she and her mother were in tears. Both of Janelle’s parents reported that transitions were difficult for her and this turned out to be true for her transition into the classroom as well. However, after about a week, Janelle was more than pleased to enter the classroom. Both Miss Mindy and Miss Marsha made an effort to fill the classroom with as many preferred items as possible for all of their learners. That first week was spent moving the learners from activity to activity, but the focus was on doling out as many reinforcers as possible and constant informal reinforcer assessments. Specially designed data forms were put on each strategically placed clipboard. These data sheets were simply large blank boxes with each learner’s name. Throughout the day, if a team member noted a preference or possible preference, it was listed. For example, while in the dress up area Janelle played with the wand, black top hat and Minnie Mouse ears. That information was noted in the space provided for her on the data sheet. Miss Mindy knew that if she relied upon her memory about what each learner preferred, she would miss too much!

Even though these morning transitions have greatly improved, Miss Mindy will keep Janelle’s visual reinforcement system, and all other visuals for receptive communication, in place. She has learned that even when behavior difficulties improve, or disappear altogether, it is a mistake to remove the supports that have played a significant role in these remarkable gains! Miss Mindy asks Janelle if she would like to work for an opportunity to play the word game with someone in the class. Janelle’s reply

is quick and positive, so the “deal” begins. On average, every 5 minutes a tone sounds. If Janelle is engaged in the planned activity or lesson, she will earn a token. Her tokens will either be given to her, or the team member working with her will give her the canister with all of the letters that spell out the name of her most favorite game show. She enjoys looking for the letters so, depending upon everything else that is going on, she looks for the next letter and places it on her token board. The name of her favorite game show has 14 letters in it. Technically, it could take her 70 minutes to earn access to some time to play the game with the peer or staff member of her choosing. However, it rarely takes that long for her to accrue all the letters since the team is diligent with differential reinforcement and may give out more than one letter at a time. They also switch to giving her letters for specific performance criteria instead of at the tone only. For example, if she is completing a math lesson that is more difficult for her, she will likely earn one token for each correct response. Typically, it takes Janelle 35 to 40 minutes to earn access to her favorite game.

Janelle is just as excited about this morning’s activity as Ezra, so she works diligently to unpack her belongings, use the toilet, check her word based schedule and join her classmates at the table. She is incredibly independent with her arrival routine and generally she can complete all of this in less than three minutes. Today, however, something is blocking her cubby. The large foam board is part of an art project for later in the day; Miss Marsha placed it in front of her cubby on purpose because this is something that generally elicits yelling from Janelle. Both Miss Mindy and Miss Marsha are ready as Janelle makes her way toward her cubby. Just after Janelle drops her book bag, but before she has a chance to yell, Miss Marsha prompts her to give the “help” card to Miss Mindy, who immediately removes the obstacle for Janelle. Miss Marsha notes on the data sheet that Janelle needed full physical prompts to exchange the “help” card. With her way freed of the obstacle, Janelle completes the morning entry routine that concludes with her independently going to her visual schedule, moving the typed words “table top activity” to the “current activity” box located at the top of her schedule, and joining the rest of the class at the table with the puzzles. The team has struggled to find naturally occurring opportunities to teach her to request help via a visual card (a blue card for help in the shape of a hand), so they try to create as many additional opportunities across each day. The baseline data for Janelle’s “yelling out” behavior indicates that on average she engaged in this behavior about 3 times per hour across each school day. So, the team has decided to capture or create between 4 and 5 opportunities per hour to teach this new Functionally Equivalent Alternative Behavior (FEAB). Depending upon the activities, sometimes this is difficult to achieve. However, without a specific goal in mind, they may not achieve as many opportunities as they



would like. During the puzzle activity this morning, Miss Mindy plans to give some of Janelle's puzzle pieces to her in a small canister that she cannot open to create some additional opportunities to teach this skill.

Even though Janelle can use speech to communicate, she is sometimes so independent that she really doesn't use her speech as much as she could, so the team will often create opportunities for her to use her communication skills. Today, they have "forgotten" to put out her all time favorite Disney Princess puzzles. Upon noticing, she taps Miss Marsha on the arm and requests the Disney Princess puzzle. Sometimes, a piece is missing, and this too provides another request opportunity. Janelle's favorite chair is the green one. At the beginning of the year, she would slowly wriggle her way into the green chair until the other learner was left standing at the table instead of sitting. The team taught Janelle another strategy for acquiring her favorite chair. This involved the use of partial physical prompts to tap the learner on the shoulder/arm and a picture/written reminder that represented, "May I sit in the green chair?" The visual prompt was enough to elicit speech for this request. Of course, the learner that surrendered the green chair was reinforced for sharing.

Over the course of the first reporting period, both the physical prompt for gaining attention and the visual reminder for what to say have been eliminated from this lesson. Janelle now has a more socially appropriate method for gaining access to her favorite chair. At various points during this 20 minute activity, Miss Mindy and Miss Marsha asked Janelle a yes/no question in the form of, "Do you want/need this?" while holding up either a puzzle piece that she needs or a piece from a different game. This is a relatively new skill, so both team members had to be ready prior to the question being asked. One would ask while the other paid close attention to Janelle's body language. If she reached out to simply grab for the item, the other teacher provided a vocal model "Yes!" or "Yes, please!" Since Janelle's vocal imitation skills are superb, she has a high probability of repeating words and phrases. When she imitates, she is provided access to the item within ½ a second. If, on the other hand, she began to push away the item or turn from it, a vocal model for "No!" or "No thanks!" would have been provided and that item would have been immediately put away.

### **Arrival - Ms. Beal**

All of Ms. Beal's learners ride to school on school buses and are independent with the transition from the bus to her classroom. Both Marquis and Joshua ride the same bus. Marquis' SGD is programmed not only with all of the things he loves to request and comment about, but also greetings and





other social exchanges. The team asked a group of peers to help generate the list of possible greetings and common social phrases for their age group. Ms. Beal and the rest of the team were delighted at the interest of all these learners in helping to put the list together. This process was a learning experience for everyone, and a source of enlightenment when the team realized how differently peers of this age interact compared to when they all attended Middle School. In the end, a set of phrases was added and Marquis quickly learned how to access these greetings and phrases.

Marquis greets the bus driver and some of his peers each day as he gets on the bus and is always ready with a greeting when he steps off the bus in the morning. Of course, he seeks out specific staff members and seems pleased to see Miss Garza, the building Principal, outside monitoring the unloading process. He greets her and then fills her in on a current favorite scene from *High School Musical*. Joshua is just as enthusiastic about greeting the bus driver and a few friends each morning, but he is not as interested in conversation. After first visiting their lockers, both Marquis and Joshua make their way to Ms. Beal's classroom. Upon arrival, all learners move their names to the "checked in" column on a magnetic chart. Some learners have additional picture support so they can correctly identify their name from the field of 19, but most of them are quite accurate. Just to mix things up a bit, Ms. Beal has typed all of the names in a variety of fonts on the computer so they continually build their generalization skills with written name recognition. In the future, some of them will wear name tags on the job and everyone from time to time will need this skill to find an item with their written name to identify something they have made in art class, or to find an assigned location, etc.

Both Marquis and Joshua write or type their daily schedules. Other learners in this classroom use picture based schedules. Regardless of the format of each individual schedule, all of them carry their schedules with them throughout the school building because they frequently change classes. These schedules all have a visual way to indicate when an activity is complete. For written or typed schedules, learners generally opt to cross off items as they are completed. For others, the pictures have a bit of Velcro® on both sides, so they can flip the card over where the word "finished" has been printed over a green check mark. Ms. Beal likes to cross things off of her "To Do" lists and she has noted that when some variation of this feature is included, learners tend to transition more independently. Of course, this was not a "magical" occurrence, the team worked diligently

to ensure that none of her learners developed prompt dependence on the phrases, “Check your schedule.” or “See what’s next.” Ms. Beal’s team recognizes that these types of vocal prompts when added to lessons can be quite difficult to eliminate, so they opted to teach the mechanics of schedule following using either gestures or physical prompts. Ms. Beal is convinced that the process of collecting data on schedule following skills also served as a constant reminder about the types of prompts that should be utilized with each learner, and decreased the tendency to over prompt, since team members regularly looked at, and recorded, data for each learner. For example, they saw on the data sheet that only a gesture was utilized for the past several transitions, so they used less of a gesture for the current transition and in so doing were able to quickly eliminate all prompts from this lesson.

While Marquis is adept at finding his conversation phrases, he seems to use them mainly in response to peer greetings and their attempts to engage him in conversation. The team continues to teach him how to initiate both greetings and conversation starters using his visual reinforcement system to boost his interest. He is starting to initiate some conversations that focus on High School Musical movies. Once he is more comfortable initiating, maintaining and ending conversations about High School Musical, the team will teach lessons on how to stay with a conversation even when the topic shifts.

Morning arrival into any school can be a bit chaotic and noisy, so this is a particularly challenging time of day for Marquis. In the past, he has engaged in pinching with the highest average frequency during arrival and dismissal. Ms. Beal and the team feel strongly that when a learner is able to transition independently throughout the day, this should be encouraged and reinforced. However, Marquis’ pinching created a situation where he had to be met at the bus and escorted to the classroom. As the year has progressed, Marquis is learning to request that others move away from him if they are too close, to request a break to a more quiet space, and to use either ear plugs or listen to music on his iPod. Since the episodes of pinching were so frequent, the team immediately went to work on teaching him several Functionally Equivalent Alternative Behaviors (FEABs). They found that offering Marquis a choice of either his iPod or earplugs worked best during the arrival and dismissal routines. Initially, team members boarded the bus as soon as it entered the line-up and offered these choices to Marquis so that he could be prepared before exiting the bus and entering the busy hallways. Some team members wanted to teach Marquis to exit the bus before the rest of his peers and enter the school building via an alternate entryway. Of course, the team carefully considered this option because if the route was not chaotic, he would probably not engage in

pinching. However, the team reasoned that sometimes in a person's daily life outside of school, there will be chaotic situations and people simply have to learn to deal with these situations. They view this as an excellent opportunity to teach Marquis an important life skill. Over time, a variety of earplugs and his iPod were placed in his book bag.

Staff members have stopped boarding the bus and the bus driver now provides a simple reminder if he notices that Marquis has not prepared for the transition. Some of these statements include: "It sure looks crowded in the courtyard." "Listen to all of that noise!" and "Man, look at all of the people!" The bus driver was asked to refrain from using a direct vocal prompt such as, "Marquis, put in your earplugs/iPod." The purpose of working with the bus driver to avoid direct vocal prompts is to teach Marquis to assess situations and make adjustments in his behavior. If he is prompted to remember everything, he will not need to attend to the natural cues (i.e., lots of people and/or noise) in the environment.

Joshua is generally very quiet on the bus ride to school. He either reads the current issue of Rolling Stone or Spin, or reads the song lyrics he has recently printed from one of his favorite websites. Upon arriving at school, he has no problems navigating his way to Ms. Beal's room where he greets some peers with a high five and staff members with either a wave or a snappy new gesture (chin lift) that all the "cool" middle school learners are using! He "checks in," unloads his book bag and settles in to write out his daily schedule in his planner. All of the learners in this school have the same daily planner. When he types out his daily schedule, he prints it out and tapes it inside his planner. Prior to getting started on this task, he looks at his checkbook register and notes that he has less than \$5.00 left to earn before he has enough "money" to purchase the new High School Musical soundtrack. Joshua used to identify his reinforcer prior to starting each new "deal." He would write in his preference to earn something specific or his intention to "bank" that set of points. As he has become more and more independent with this point system, he generally earns the points and then decides what to do with the points at the end of each "deal." When he banks the points, he writes in the date and time in the cash register and totals his points. When he wants to "cash in" his points, he lets a team member know his preference at that point and then takes a 10 minute break. By the time he has finished with his daily schedule, his iPod has vibrated once and he has given himself a point!

Some team members were worried that this type of self-monitored system would distract Joshua away from all of his tasks and work; however, they have not found this to be the case. His iPod vibrates for 5 seconds and automatically begins the next interval. He simply accesses his planner

(which is generally open and on the table or desk where he is working) and gives himself a point if he is on-task. In the beginning, both Joshua and a team member or peer would mark the points at the same time to ensure he was marking his point card accurately. To help Joshua properly self-monitor, the team created a small checklist and attached it to his schedule. Listed on that checklist are the behaviors he should check for that would indicate that he was on-task. Once he consistently achieved 90% agreement with all monitors for 2 weeks, he was allowed to mark his own points and a team member checks his accuracy for 1 class period each week. As long as his accuracy remains at, or above, 90%, he will continue with this self monitoring system.



### Arrival - Mr. Manuel

Darrin and Rose arrive at school in a van that transports several adults to different places in the community on a regular schedule. Due to limited space inside the van, all book bags and other items are placed in the cargo space in the back. Prior to placing her book bag in the cargo space, Rose removes her transition notebook. Rose uses PECS for expressive communication. Complete communication books are located in her classroom, at home, school and her group home. The transition

notebook is a nearly complete replica of her other communication books, but this one is used solely for transitions. If the transition book is lost in transit, at least she will not be without a way to communicate upon arrival at any location.

Once at school, Rose disembarks, gathers her book bag, places the transition communication book back inside and tries to zip the bag. The zipper snags on a loose thread. This is the type of fine motor task that has always been a challenge for Rose. She pushes back her sleeve to reveal a wristband with some miniature “help” and “break” cards attached with Velcro®. She removes a “help” card and tries to give it to Darrin, but he is already walking away. She turns toward the van driver and presents the small “help” card to him while gesturing toward her book bag. He quickly indicates his intention to help and moves in that direction. He pulls the loose thread free and closes the zipper. He hands back the “help” card and she places it back on the wrist band before putting on her book bag and making her way to Mr. Manuel’s class. If only her middle school teacher and SLP could see her now. In the past, similar scenarios resulted in shrieks and pinching behavior. To see her calmly request help and wait patiently for assistance would certainly be quite satisfying. The behavior plan which incorporated

the request for “help” as the FEAB has certainly benefited Rose.

Mr. Manuel has placed a time clock in his classroom and requires each learner to “swipe” his/her own magnetic card upon arrival. He found this time clock in a wholesale business equipment store. He reasoned that if he intends for each of his learners to spend time in the community working, then they would need a skill of this type and it was certainly not too early to begin making this a focus. Rose has had difficulty identifying her magnetic card among the others. Mr. Manuel added a sticker of a long stemmed red rose directly on her card to make it easier for her to identify. This strategy has worked quite nicely, so yesterday he removed a small sliver of the sticker. He is pleased to see that this gradual change in the lesson did not cause her the slightest bit of difficulty this morning. He makes a mental note to remove another small sliver of the sticker at the end of the school day. Fearing he will not remember, he places a yellow sticky note reminder in his lesson plan book for the next morning. Rose has no further difficulty with the book bag zipper and completes the morning routine of unloading her materials and checking her schedule. The first photo on her schedule is one of her favorite activities - taking a break in the recreation area of the classroom. During this activity, learners are allowed to spend time with self-chosen activities. Mr. Manuel embedded this activity on the days when some learners need more time/supervision in the morning to get ready for the day than others. Even though the learners are independent with the available choices in this area and need very little supervision, a team member has been assigned to oversee this activity. Mr. Manuel learned long ago that if someone is not given the responsibility for each and every lesson, every member of the team would assume it was someone else’s responsibility and this could lead to decreased rates of reinforcement and an increase in behavior difficulties.

Before making her way to the recreation area, Rose goes to her desk and makes a choice of something to work for from the choice board that was set up on the previous afternoon. Since it takes her about an hour and 40 minutes to earn the five tokens she needs before she cashes in for the chosen item, she occasionally changes her mind at the point when she has earned her last token. The team agrees that this is probably due to the passage of time and they certainly allow her to choose something different at that point. Last year, they tried to use a “choice” card to indicate that she could make the choice at the end, but this seemed to confuse Rose, so they went back to this strategy. Decision made, she takes the token card, grabs her communication book by the strap that she enhanced with rhinestones and beads, and makes her way to the recreation area. Rose is delighted to find that all of her favorite magazines have new issues so she is more than content to busy herself with a magazine while reclining in a comfortable

chair.

Just as it is about time to transition to the next activity, a tone sounds and Mr. Manuel makes his way to the recreation area where several learners are busy with their chosen activities. He digs through the tub of tokens for one of Rose's new glitzy ones. He lets her know that she's a star and presents his fist for a "fist bump." Rose always giggles when he does this, but returns the greeting, takes the token and places it on her token card that is affixed with Velcro® to the back of her communication book. A bell rings to signal the end of "chill time." Most of the learners put away their materials right away. For Rose, this transition is a bit more challenging because the magazines are new! A team member sees that she has not begun to put away the magazine, so she walks over to Rose, sees that she is working for hair accessories, and provides her with a reminder about this. Rose sighs deeply as she begins the transition process.

Darrin always seems more excited to get to school now that he goes to work at the nearby hotel each day. His first paying job has not been without challenges, but it seems to be working out well for both Darrin and his employer. Since Darrin has been especially keen to get ready for work, Mr. Manuel has decided to sabotage his morning routine a bit. Mr. Manuel placed some chairs in the hallway along with a pile of papers that appear to be bound for the trash. This is something that can potentially cause Darrin some distress. He strives to ensure that everything is neat, properly aligned and in its place. However, he has gotten into trouble over the years for re-arranging things "his" way when they were set up in a specific manner by another person. Darrin has learned to ask if he can re-organize or clean up something if it is not a task that he was specifically assigned. Darrin immediately notices the chairs and the papers. He asks Carmen if he can take care of this mess. Carmen replies that someone else will get to it soon, and reminds him that he needs to prepare for work. Now focused on getting ready for work, he continues with his morning routine which includes changing into his work uniform. He has no problem finding his magnetic card to swipe and then immediately busies himself with getting his freshly cleaned uniform from the closet and makes his way to the boys' locker room where he has room to change.

Some of the high school boys in the locker room comment about how lucky he is to have a paying job and Darrin beams with satisfaction. They ask him about the NASCAR race results and make comments about their favorite drivers. Darrin joins in the conversation and states that his favorite driver is bound to have a better race the next weekend! Before leaving the locker room, Darrin removes a small card from his wallet. This card has a work readiness checklist. He checks to ensure he has his name tag



pinned to his shirt, his lanyard with his work ID badge, wristwatch on, and his iPhone. The last item on the checklist reminds him to look in the mirror and tidy his hair if necessary. On the way out of the locker room, he checks himself in the mirror. Satisfied and ready for work, he returns to the classroom where another learner and team member are waiting. The three of them make their way out of the school building to the bus stop. When all three have everything gathered and ready, they leave the classroom. They must sign out in the main office before leaving school. Darrin lets folks in the office know that he is off to work and they give him the thumbs up sign from across the room. The Principal enters the office, greets both learners and admires how they look in their uniforms. After a quick high five, they are off!

The local transit authority has recently changed from tokens to a fare card. Darrin's team decided to use modeling to teach Darrin the new payment routine. So far, Darrin completes the routine independently as long as he boards the bus after someone else. Today, Carmen decides to test the waters to see how independent Darrin is when he is the first to board the bus. She breathes a sigh of relief when she sees that they are the only ones awaiting the arrival of this particular bus. She is also pleased to see the regular driver. He's been picking them up for this trip three times per week for the entire school year, so he knows a little about their backgrounds. Carmen is confident that Darrin will remember all of the steps, but also realizes that she might have to conduct error correction if he does not complete all of the steps in the correct order. Since it is the regular driver, he will likely be more patient if she has to use the Backstep error correction procedure than would an unfamiliar driver. Excellent work! Both learners board the bus independently and they are on their way. During the quick ride to the hotel, Carmen writes a brief note on the home/school sheet describing this success! This is an excellent start to the school week indeed.



### Midday - Miss Mindy

Today's large group language lesson involves some favorite books: *The Very Hungry Caterpillar* and *It Looked Like Spilt Milk*. The challenge with any group of learners is juggling everyone's objectives. Miss Angie, the speech-language pathologist (SLP), is so pleased that Miss Mindy uses many visual supports for the team around her classroom. The large posters of information designed for each learner help her keep track of each

individual learner's preferences. Individual preferences change rapidly so she would have no way of remembering all of this information week to week or even day to day! Each learner already has a "deal" in place and token cards are strategically placed so that Miss Angie can deliver tokens as needed throughout the lesson. One learner is also on a very rich reinforcement system (30 second DRI) for staying seated during large group instruction. It would be impossible for Miss Angie to maintain her lesson and this DRI, so one of the other team members will be responsible for this particular aspect of the group lesson, in addition to helping "back up" the group. Since so many IEP objectives will be the focus of this large group activity, both Miss Mindy and Miss Marsha assist Miss Angie. In addition to providing any needed prompts from behind the learners, they are responsible for collecting data. Each person backing up the group has a clipboard with relevant data sheets.

Before getting started with the book, Miss Angie begins the group either by enticing with some preferred items to elicit spontaneous requests or by asking the question, "What would you like?" Each learner is allowed an opportunity to request via their expressive communication modality. This is an excellent way to re-establish herself as "Grandma," since she does not see these learners on a daily basis. Everyone has now had an opportunity to request a preferred item, so the lesson begins with requests for specific props. Since this is a familiar story and activity, learners enjoy requesting the props that help Miss Angie tell the story. She learned long ago that activity boards and pictures for lessons should be prepared in advance. Making multiple boards for each lesson is another strategy that helps decrease the chaos during a large group activity. For example, PECS users will need access to pictures and possibly Sentence Strips. In addition, PECS users in any large group will likely be working at different phases. Pictures for relevant lessons may not always be housed inside each communication book. One side of the activity board will be for learners working on Phase I or II of PECS. This side will have only Velcro® strips so a single picture can be exchanged. Add additional non-preferred or preferred pictures and, voila, the activity board is ready for Phase IIIA or IIIB. A separate activity board will have Sentence Strips on both sides. One side features the "I want" symbol for the PECS user at Phase IV. The other features a variety of Sentence Starters and attributes. Being prepared enables Miss Angie to move quickly from one learner to another.

With the language lesson, Phase IV with attributes is the primary goal for Ezra. For example, "I want + 2 + green + leaves." Janelle's goals include responsive commenting via speech and requests for props. Janelle will occasionally use attributes within her requests and comments, but this depends upon her motivation for the specific item. Ezra is working



on attributes within PECS, so the team has worked diligently to embed many attribute opportunities. So far, this has been a challenge since attribute requests require a specific interest. During the language activity with the two books, Ezra requested big pretzel when big and little pretzel twists were offered at the beginning of the lesson. During *The Very Hungry Caterpillar* book, he requested strawberry, orange and ice cream cone in response to the question, "Which one do you want?" Miss Angie reads the final book, *It Looked like Spilt Milk* and asks some learners commenting questions. For Ezra and other learners, she asked them to point to specific things on some of the pages or asked them to count. In between the two books, she once again enticed the group with a variety of items. While Janelle is quite proficient with speech when it comes to requests, she does better with commenting and higher level language lessons when visual supports are available. So, even though she is not a PECS user, Miss Angie will often allow Janelle to use the activity boards and pictures when she is asked a commenting type question. One question she asked today was, "Does this look like a pig?" while pointing to the cloud that resembled a rabbit. Janelle said the word "No" right away, but then assembled pictures on the Sentence Strip to indicate, "It does not look like a pig. It looks like a rabbit." Miss Angie is pleased to see this level of complexity. In addition to exchanging the Sentence Strip, Janelle says each word as she points! If Janelle had not said all of these words, Miss Angie would have still been pleased, but since she did, she immediately gave Janelle two letters to add to her token board. This is a quick and powerful example of differential reinforcement and Janelle is delighted to have earned 2 letters!

As a conclusion to this language lesson, all of the learners gather around the art table to make some sponge paint or chalk clouds on blue paper. Even though the sample has white paint, Miss Mindy has decided to give the learners as many choices as possible, so many different colors of paint and chalk are available. Ezra only has two Dalmatian stickers left to earn, so he is keen to complete this task. Miss Marsha notices that Ezra has gotten ready for the activity by putting on his art smock. She is hopeful that he will request something and get started right away, but she is ready with some additional materials (glue and colored pencils) if he is not motivated to request paint or chalk. To their delight; all of the learners, including Ezra, make requests to get started with this project. Some learners are given instructions to follow that align with their IEP objectives (e.g., following written or oral directions). Midway through this activity, Ezra earns his final Dalmatian sticker. Miss Marsha is closest to the small tray of edible reinforcers. She grabs a couple of broken pieces of mini pretzels and gives those to Ezra after he gives her all of his stickers. It takes no time for him to consume those pretzel bits. Just as he is going back to work on his art cloud design, Miss Marsha presents the choice board to him once again so

he can make another choice to continue with his visual reinforcement system. This time he chooses milk.

At the beginning of the year, Miss Mindy felt overwhelmed with the number of objectives she needed to teach each learner. In part, this was because she felt like each lesson should focus on only one skill at a time. She quickly realized, however, that when she teaches using motivating materials within functional contexts, a little planning goes a long way. As long as she is prepared to teach multiple goals to multiple learners within each lesson, she has had less difficulty than she ever imagined! She is grateful to her mentor teacher and other staff members who have provided her with invaluable guidance. It has taken the entire team working together to make this year as successful as it has been.

The transition away from the art lesson begins with the class instruction to “Tidy up!” Each team member has been working diligently to avoid direct vocal prompts for these learners to check their schedules. They have seen too many learners become prompt dependent on the direct vocal prompt, “Check your schedule.” In addition, they feel that this is just another oral direction for them to follow and if they are going to provide that direction for each transition, then perhaps they should simply give the instruction about where to go next instead. The visual schedules are supposed to increase independence, so they have vowed to provide other types of prompts (e.g., gestures or physical prompts) if necessary, and rapidly eliminate those until the learners are responding to natural cues.

Ezra tries to place his artwork on the drying rack but has difficulty aligning the sheet into the small slot. Miss Mindy sees Ezra struggle and asks him if he needs help. Ezra responds with the head nod for “Yes” and Miss Mindy immediately steps in to provide assistance. Having stowed his artwork, Ezra removes his smock and places it back on the hook near the cubbies (this is the natural cue for him to check his schedule). At this point, Miss Marsha points to the wall where his visual schedule is located near three others. His schedule has his name and some Dalmatian stickers, and he finds it easily. He quickly removes the picture for language group and places it in the “finished” pocket located at the bottom of the schedule. He then places the next picture (ladybug center) up to the current activity box. As he makes his way to the correct center, Miss Marsha starts a small timer for 15 minutes and marks the data sheet near his schedule with a “G” for starting the schedule following routine. The team taught Ezra how to manipulate his visual schedule using backward chaining. This is an excellent strategy to use when the learner is eager to move to the next activity. Before teaching this routine, the team established the steps for teaching this skill and came up with the following:

Staff	Transition	Prompt level needed to begin transition			
	Morning activity	FP	PP	G	+
	Bathroom	FP	PP	G	+
	Breakfast	FP	PP	G	+
	Morning Group	FP	PP	G	+
	Center 1	FP	PP	G	+
	Center 2	FP	PP	G	+
	Center 3	FP	PP	G	+
Key	+ = independent	G = gesture			
	PP = partial physical	FP = full physical			

The data could be recorded as shown above for this specific transition. To simplify data collection, Miss Mindy generally highlights the important bit of data to be collected, so no time is spent scoring aspects of the lesson that have already been mastered, or creates a new data sheet.

So, the charting could also look like this:

Staff	Steps	Performance			
MG	Approach visual schedule	FP	PP	G	+
	Remove picture from current activity box	FP	PP	G	+
	Drop picture in "finished" box	FP	PP	G	+
	Remove top most picture Place picture in current activity box	FP	PP	G	+
	Go to location indicated by picture	FP	PP	G	+
Key	+ = independent	G = gesture			
	PP = partial physical	FP = full physical			

**Note:** Ezra has mastered all of the pictures on his visual schedule. Miss Mindy and her team began by teaching this skill (what each picture represents) prior to the introduction of the full visual schedule.

Today, the ladybug center is set for dress up! Ezra is thrilled to see an assortment of feather boas in this center. He dearly loves feathers and could spend the rest of the day in this center. Miss Marsha and Miss Mindy know that while Ezra is in the dress up area they can focus on teaching some attribute lessons, both expressive and receptive, and that they can probably stretch the time between tokens because this center is likely to be quite naturally reinforcing. While Ezra is busy picking up a stray feather, Miss Marsha gathers all of the feather boas. When Ezra constructs and ex-

changes his Sentence Strip, it reads: "I want + boa." He found the picture for boa inside his communication book on the dress up page. Duplicates of many of these pictures can also be found on an activity board filled with pictures related to the dress up.

Instead of simply offering one boa, or allowing him to choose by taking one, she asks, "Which one?" He studies the boas and his communication book and chooses the picture for "black" and places it at the end of the sentence so it reads, "I want + boa + black." Miss Marsha calmly says, "Hummm," while deconstructing the Sentence Strip. She points to the Sentence Starter, "I want." Ezra quickly drops that picture as she points to the picture for "black," which he places on the Sentence Strip. He then independently drops the picture for the boa, rips off the Sentence Strip and exchanges it with Miss Marsha. He points to the pictures as she "reads" it back to him. She pauses for 5 seconds before she says the word "boa." He doesn't say anything during the pause; however he does give her some excellent eye contact! He's quite pleased when she gives him the black feather boa. He grabs the white top hat and a cane to complete the ensemble. Before Miss Marsha has a chance to record the data, another learner is grabbing the feather boa from Ezra who begins to protest loudly. She must step in to referee but makes a mental note about Ezra's improper sentence construction when using an attribute. She marks the data sheet after the learners have settled back to playing.

Staffing assignments for center rotations feature one person assigned to the center that will require the most supervision. This is the center where they focus on teaching skills that are in early acquisition. It is at this point in the learning process where the ½ second rule is most important. Today, the Mr. and Mrs. Potato Head center is the one that will require the most supervision. Miss Mindy is stationed there and Miss Marsha floats between the dress up center and the workshop that features a work bench and a variety of construction materials and tools.

Janelle has independently transitioned to the caterpillar center which is set up with Mr. and Mrs. Potato Head game pieces. Janelle's occupational therapist is pleased that Miss Mindy routinely provides activities that require fine motor skills. Janelle is much more likely to persist with difficult fine motor skills if she is motivated by the activity and materials, and she really needs the extra practice! Because Janelle is really motivated by this activity, Janelle practices fine motor skills and Miss Mindy is able to incorporate many receptive directions throughout this lesson. For example, Miss Mindy asked Janelle for certain body and wardrobe parts to complete her own Mrs. Potato Head. Janelle is not accurate with every direction, so Miss Mindy has to conduct the 4-Step Error Correction Proce-

dure (4-Step) when Janelle makes an error. The error correction procedure is not Janelle's favorite part of the lesson, so she occasionally exhibits mild protest behavior within the 4-Step. Both Miss Marsha and Miss Mindy ignore the protests and proceed through the steps very matter-of-factly. Since Janelle loves as much attention as possible, they are aware that paying extra attention at a time like this could lead to the increased probability that this behavior will occur again in the future.

In addition to the receptive directions, Miss Mindy targets time on task within this lesson. Janelle is preparing to spend more and more time in a general education preschool classroom, so Miss Mindy has observed several potential classrooms and taken note of all of the skills she will need to be as successful as possible in that environment and has incorporated those skills into her IEP. During this activity, Janelle earns her last Disney sticker for her DRO. This system is in place to continually reinforce Janelle for the absence of "shut down" behavior. She earns a Disney sticker for every 10 minute period that goes by with no instances of this behavior. Once she has earned all five stickers, she cashes in for 1:1 time with a staff member. In the beginning, she would choose which staff member, but over time the team agreed that Janelle loves to spend 1:1 time with all of the team members, so whoever has time for this when she earns the fifth sticker is the one who hangs out with Janelle. The important aspect of this time is the 1:1 time just with Janelle. They may take her for a walk to the office or to run another necessary errand, play a short word game with her, or look up the weather on her favorite internet site.

Ezra earns his last Dalmatian sticker and immediately begins to remove the five stickers and hands them to Miss Marsha. She accepts the tokens, provides social praise, and immediately goes to his special bin of preferred items to find the stuffed Dalmatian that Ezra has so diligently worked to earn! She sets a small timer attached to one of the clipboards for 3 minutes. Ezra and most of his classmates have learned that the ringing of a timer ends the specified reinforcement period. Another learner also trades in her five tokens at about the same time. Miss Marsha resets the timer for 3 minutes so that both reinforcement periods will end simultaneously. Since these two learners are occupied with their chosen reinforcers for a couple minutes, Miss Marsha takes a moment to catch up on any data points that she did not have time to write down, and checks with Miss Mindy to see if she can be of assistance with any of the learners in her group. When there are only two team members in the classroom each day, and some skills require two trainers, everyone must be on the lookout for teachable moments and in some cases create opportunities to teach skills at a moment's notice. It happens that Janelle has earned her final letter for her visual reinforcement system and has asked another learner to join her in a round of her

favorite word game. The hand held electronic game is perfectly portable. The other learner is one who also enjoys word games, so this is an excellent opportunity for Miss Marsha and Miss Mindy to work together with the remaining two learners on skills that require two trainers (i.e., yes/no in response to the question, “Do you want this?” and initiation of requests).

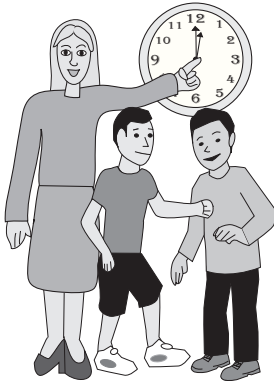
After the timer rings to indicate the end of the reinforcement period, Miss Marsha ensures that all of the learners either return to their tasks or start new deals by making another choice. Miss Marsha is grateful for the Audio Reinforcement Reminder Tones (ARRT). This is a set of CDs with each track featuring a different variable interval. Each interval features unique tones. This is important because in any given class, learners will likely need different rates of reinforcement. Miss Marsha remembers scrambling around to remember to reset timers. It was so busy this morning that she forgot to tell Miss Mindy about a new app that she just found online. This one is called *R+ Remind* and it functions just like the ARRT CDs, but is downloaded onto an iPhone which is certainly more portable than a CD player or laptop. Use of the *R+ Remind* app will help ensure maximum rates of reinforcement across the day.

The end of each center is also signaled by a bell, but this one you pick up and ring. This bell belonged to Miss Mindy’s mother who also spent her career as a teacher of learners with special needs. Just prior to the transition, Miss Mindy gives the honor of ringing the bell to a learner. Upon hearing this bell, learners straighten their areas and proceed to their visual schedules to see what’s next. Miss Mindy tries to remember to provide a vocal warning when there are three minutes left for each center, but sometimes she is caught up in teaching and forgets to give this warning. This typical phenomenon has actually helped many of the learners adjust to just listening for the bell instead of *always* needing some type of warning before a change in activity.

Ezra does not begin to put away the dress up items and he does not seem pleased that his time in this center with the feather boas has come to an end. Instead of reminding him that he should be cleaning up the dress up items, Miss Marsha reminds him that he is working toward his chosen reinforcer. Ezra protests vocally and does not begin to put items away. She assists the other learner in the center with the transition and returns to begin putting Ezra’s things away. Since he is not engaging in the expected behavior at this point when the tone signals the end of the 3-minute interval for his visual reinforcement system, she does not give him a token. His refusal to follow the routine and directions simply delays his access to the reinforcer. She does not lecture and she is not punitive. After all of the items have been put away and the other learners are busy checking their



schedules, Miss Marsha gestures toward his visual schedule. Ezra reluctantly leaves the area to see what is next. He completes the transition and settles into the next activity, at which point the tone sounds once again and Miss Marsha delivers a Dalmatian sticker along with a positive statement about how nicely he has gotten to work with the next task.



### Midday - Ms. Beal

Each year, Marquis' general education teachers are nervous about having him in their classroom. They are unsure about how much time it might take to adapt materials and accommodate his needs in this setting. However, after the first week or so, they are impressed with his skill level and enthusiastic about having him in their class. Marquis has been with the same peer group for quite some time and has developed many friendships. Marquis does not require any significant modifications to lessons. He reads on grade level and can follow both individual and group directions. He is proficient with his SGD and can write and type with the same level of proficiency as his peers. Marquis' main difficulties in this mainstream setting are: dealing with abrupt changes, close proximity, and social interactions with his peers during less structured times of the day. Twice a week, Marquis meets with his behavior analyst, Mr. Ryan, and a small group of peers for a "rap session." These are brief meetings where they discuss anything that may be going on, both in and out of school, and work on specific social skills. Mr. Ryan generally chooses one skill to address for each reporting period. This reporting period they have been working on conversation skills which include: beginning, maintaining and ending a conversation with an individual and a group.

The peer group that meets along with Marquis has chosen to join them twice a week during lunch. All of the learners either bring their own lunch or first go through the lunch line and then meet in the resource room. Mr. Ryan provides some additional lunch/snack items and everyone looks forward to these as well as their time together. Today, they consider everyone's preferences and discuss how people may have some common interests, but also may like completely different things. Over the next several sessions, they will focus on how conversations can evolve and shift and that every conversation cannot center on one person's interests. In addition to live role play, Mr. Ryan incorporates video modeling and lecture accompanied by a PowerPoint presentation to teach these important life skills. He also plans to meet with Marquis' SLP, Mrs. Matteo, to ensure

that Marquis' SGD can accommodate communication about a variety of different topics of interest, as well as some generic ways to participate in a conversation. For example, Marquis will need a fairly broad way to ask for more information such as, "Can you tell me more about that?" and "What else do you like about that?" It will also be useful for him to have statements like "WOW, that's cool." Mr. Ryan's conversation with Mrs. Matteo will include ensuring these statements are programmed and that Marquis can efficiently access them when needed throughout the day. He will also ask what steps he and the classroom staff can take to incorporate these conversation skills throughout the day.

This period, Marquis is in science class with Miss Myers. Now that he is in Middle School, most peer interactions occur during class change and during group activities. Today, Marquis arrives early enough to greet Alexis. She returns the greeting and proceeds to tell him about a movie she saw over the weekend. She asks if he has seen this one and he replies, "Nope," but goes on to ask her about her favorite part. She begins to reply, but Miss Myers calls the class to order before she can finish.

Marquis is quite adept at using his SGD to answer questions throughout lessons, ask for clarification of information, and request help as needed. He has learned to raise his hand before responding via his device. In years past, he would "call out" answers using his device before the teacher had a chance to call on a specific learner. Learning to wait until called upon, and that he may get to respond only once or twice per class period, was initially difficult. All of his teachers agree that Marquis still needs his visual reinforcement system in place because it has allowed them to reinforce at a certain rate even when he is not the one called upon to answer questions. At this point, Marquis earns 5 to 7 minutes of time with a preferred snack or activity about every 50 minutes. Initially, some teaching staff were concerned that this would detract from his focus on tasks and interfere with his class time to complete assignments. However, they all agree that Marquis remains on task and completes perhaps more work in the time that he is working than many of his peers who do not have similar systems. His "cash in" times do not always coincide with a time that is convenient for the teacher and this was also an issue at the beginning of the year. However, the team agreed that as soon as Marquis earns his last token, he should be given access to his chosen item/activity, and time to enjoy it. In reality, these intervals do not interfere with the flow of classroom activities as they had feared. All of his peers are quite familiar with Marquis as they have been his classmates for many years, so they are used to his "reinforcement breaks."



Today Miss Myers has planned a “game show” competition that will involve learners shouting out responses as quickly as possible. She knows that this level of noise and activity might be difficult for Marquis, so prior to introducing the lesson, she approaches Marquis to privately let him know that they are about to play a new game and that it may get loud in the classroom. She also reminds him that he can ask for breaks at any point and he also has his earplugs if needed. After her conversation with Marquis, she describes the game to the class and the learners are divided into teams. Marquis does not immediately ask for a break as he is on a team with many of his closest friends and he knows the material quite well. They let him know they are pleased to be on a team with him because he really knows the material so they are hopeful they will win the game.

As the game begins, the noise is not too bad, so Marquis participates by calling out with his device. A team member is keeping a close watch on the device and helps him “call out” answers because the volume on the device is not loud enough to be heard over all of the other guesses being called out. Between rounds of the game, Miss Myers approaches Marquis and gives him a token even though it isn’t quite time. She wants to focus on the fact that he participated in an activity that can be quite challenging for him. As the rounds continue, the score is close and the activity and noise level increase. Marquis places his fingers into his ears. In the past, this specific behavior occurs just prior to pinching episodes. One of his friends sees this behavior and immediately reminds Marquis that he should ask for a break. This is something that Mr. Ryan suggested at a “rap session” last year. Marquis leaves the team and approaches Miss Myers to deliver his request for a break. She suggests he take a trip to the library to either relax for a bit or find a book on the subject they have been studying. As he leaves, his team mates give him high fives and thank him for helping with the questions up to that point. Miss Myers is proud that Marquis participated in this activity for as long as he did before he asked for a break. At the beginning of the year he would ask for a break even before giving any noisy lesson/game a chance. She makes a note on his behavior data sheet that he appropriately asked for a break as she continues to monitor the game.

Joshua transitions to his math class alongside his classmates. He responds to greetings from peers and occasionally initiates a greeting. The pace of these hallway transitions does not provide too many opportunities for Joshua to interact with peers. If he makes it to class before the bell rings, however, he may interact with peers but typically prefers to look at a magazine instead. His iPod vibrates during the transition so, upon arrival in his math class, he gives himself a point. The only modification Joshua receives in this class is the choice to complete the assignment via paper/pencil or the computer. The mathematics curriculum has already been

adapted for both, so this does not require extra preparation from the math teacher, Miss Palmer. During this class period, Joshua earns his last point for this trade-in or bank period. He chooses to cash in for some time to listen to some of his newly downloaded music. He lets Miss Palmer know that he has chosen to earn some listening time and moves to a separate area in the classroom. Before choosing a song, he sets a timer (also included as an app on his iPod) for 10 minutes. He quietly listens to the music until the timer signals the end of this reinforcement period. Upon returning to his desk, he completes the assignment and writes his homework assignment in his planner. When learners complete class work before the end of the period, they are allowed to sit quietly at their desks completing math related enrichment activities or to form small groups and work on computer games that target math related skills.

Even though Joshua had a break during this class, he still has some time before the end of the period. He makes his way to a computer and chooses a game that can be played by one or more people. He starts the game in 1-player mode. Once he completes the first level, Rashi is watching him play. Joshua stops the game and asks Rashi if he would like to play. They reset the game in 2-player mode. Even though their time with the game is brief, they enjoy it! When the bell rings to signal class change, they shut down the program, grab their belongings and move on to the next class. Just prior to the end of this class period, Joshua has earned another point.



### **Midday - Mr. Manuel**

Rose has been busy completing each of the activities of the day. She is currently enjoying her time in the classroom with Mr. Manuel and several other learners. Each day, Mr. Manuel tries to embed one or two preferred activities. These could last 10 to 30 minutes, depending upon the rest of the daily schedule. During these activities he tries to incorporate many communication opportunities. He recognizes that his learners will be more likely to initiate communication during

preferred tasks. Today, Rose has an opportunity to continue working on her beaded jewelry. Her parents and the rest of the team were thrilled to see this interest emerge because fine motor skills have often been a challenge for Rose. This interest has been powerful enough for Rose to persist with an extremely fine motor activity. Rose's parents have taken her to a local bead shop for supplies on several occasions. These outings have been enjoyable for Rose and she has also gotten to practice using her debit card. The most difficult part of that routine for her was remembering to hit

“enter” after punching in her PIN. Rose’s mom can certainly relate to this as it seems that the cashier sometimes has to remind her to hit the “enter” key as well! Rose’s interest in this activity has also inspired Mr. Manuel to consider teaching her some additional attributes within her requests. He makes a note in his lesson plan book to ask her SLP about this and perhaps begin teaching this new skill as soon as possible. Some of Rose’s previous teams tried to teach her a variety of attributes via PECS, but her interest in the materials was never quite powerful enough, so those lessons did not go as well as they planned.

Mr. Manuel notices that Rose only has one more token to earn and he decides to stretch this interval a bit. When the tone sounds to remind him to deliver tokens, he lets her know that her work is beautiful and he loves how she is persisting, but does not give her the token just yet. He points to Rose’s token board and comments that she only needs one more token before she will earn cookies (these are cookies she made yesterday during a cooking lesson). He signals the end of this particular activity by saying, “Hey look at the time, it’s nearly 12:30! Let’s clean up our materials.” Rose wastes no time in organizing her jewelry making materials, putting them away, and going to her schedule where she sees that the next task is “coffee mug cleaning service.” This task is represented by a photograph of the cart that she uses to gather the coffee mugs. She places the photo of “make jewelry” in the “finished” pocket, moves the picture for the coffee mug activity to the current activity box, and proceeds to the kitchen area to get the cart. At this point, Mr. Manuel approaches Rose with her final token. Rose accepts the fancy new token and places it on her visual reinforcement card to complete the deal. She immediately begins to remove all five tokens and gives them to Mr. Manuel. He tells her how impressed he has been with her work today and indicates that she can help herself to two cookies from the green container on his desk. She stops by the kitchen for a napkin and a cup of water then makes her way to Mr. Manuel’s desk where she takes two cookies out of the green container and returns to her desk to enjoy them. Just as Rose is finishing cleaning up her quick snack, Mr. Manuel asks her what she would like to work for and she responds by choosing the photo of “magazines” from her choice board. She places the photograph on her token board and heads for the kitchen to gather the materials she will need for the coffee mug activity.

Staff members at this high school have the opportunity to sign up for a coffee mug washing service provided by Mr. Manuel’s class. Monies they raise for this, and a variety of other goods and services, go toward the purchase of grocery items for cooking lessons, reinforcers/snacks for the learners, and materials for art projects. Each day before noon, those staff members who have paid for daily coffee mug washing leave their coffee

mugs in a plastic bin located near their doorway. Rose uses a printed list to guide her to the correct classrooms. Her number matching skills are good, so she is quite accurate at finding the correct classrooms. Once she has gathered the mugs from a classroom, she marks that number off on the laminated list with a write-on/wipe-off marker. She has learned to quietly enter the classroom and gather all of the coffee mugs from the bin.

When Rose first began this job, Mr. Manuel found that he and the other team members were unable to eliminate the gestural prompts for her to look at the classroom numbers on the doors. After several weeks, the team found they were providing the same level of prompting. Attempts to delay the gestural prompt proved ineffective. Mr. Manuel decided that perhaps a visual prompt might be more beneficial for Rose within this task. The strategy was two-fold. He placed sticky notes that had a sticker or picture of jewelry that he had cut out of a catalog next to the relevant classroom numbers. Upon finding a classroom with one of these sticky notes, she would collect the sticky note and attach it a blank piece of paper on the clipboard, enter the classroom and complete the routine. At the completion of the routine, she would mark off the room number on her list and receive a token for each and every classroom. Of course, this new strategy took some pre-planning because a team member had to place the sticky notes prior to the routine and the person working with Rose had to be prepared with the items Rose might wish to work for within the visual reinforcement system. In order to speed the delivery of these reinforcers, a special choice board was developed. The choices available to Rose were items that would be quickly consumed so she could continue with the activity. This new strategy of increasing rates of reinforcement along with the decorated sticky notes helped Rose acquire the skill of independently looking at the classroom numbers. Over the next several weeks, Mr. Manuel began to place the sticky notes only on certain classrooms, so she would intermittently find sticky notes. Tokens were delivered in a less predictable manner until they were delivered on her typical variable interval 20-minute schedule. Rose treated her collected sticky notes like little treasures. She liked to keep the page on her desk for the rest of the school day. It did not seem to bother her that on some days she discovered 3 or 4 and on others only 1 - she simply seemed delighted each time she discovered one.

Once back in the classroom, the coffee mugs are placed in the dishwasher. When the cycle is complete, the mugs are dried and returned to the cart on freshly sanitized trays. Rose is careful to place each mug upside down to reveal the room number written on the bottom. She then aligns all of the mugs in ascending order so returning them to the appropriate classroom will be as efficient as possible. Depending upon her afternoon schedule, Rose will either deliver the clean mugs immediately or continue with her

schedule which would end with her returning the mugs to the classrooms as the last task of her school day. Today, she has another task to complete and then an outing, so she will return the mugs at the end of the day. If something happens and the van is delayed in returning to the school, one of the team members will return the coffee mugs.

While the coffee mugs are in the dishwasher, Rose moves to another activity. She will work on this activity until the dishwasher cycle is complete. Once the dishwasher cycle has begun, she moves to her schedule, removes the photo that shows the cart with dirty coffee mugs, places it in the “finished” pocket and places the photo of the shredder in the current activity box. Rose’s mother feels that shredding sensitive documents could be a perfect job for Rose. She cannot read, so it would be unlikely that she would try to gain information from sensitive documents. The entire shredding process includes several routines and on some days these routines are divided among learners. Today, Rose’s part of this process consists of going to the guidance office, setting up the shredder and shredding paper documents that have been gathered into boxes. Rose will either shred everything in the boxes or continue shredding until someone in the guidance office lets her know it is time to return to class. Mr. Manuel or another team member will watch the clock and listen out for the dishwasher cycle to end. If Rose has not returned to class, they will call the office and ask them to let Rose know she can finish up with the shredding task. Regardless of which way this task ends, Rose completes it by emptying the shredder one last time into special bags, returning the shredder to the space under the counter, and vacuuming the area. Rose’s return to the classroom generally results in the delivery of a token either just as she enters or just after. Mr. Manuel is careful not to be too ritualistic in the delivery of the token at this point so that, if he is occupied with something else, Rose simply continues with her daily schedule until he or another team member can deliver the token.

Darrin arrives at his worksite. He says a rote goodbye to the van driver and remembers to pause for the driver’s “turn” to say goodbye. He enters the hotel through the employee entrance and immediately swipes his ID card and punches in his birthday to clock in for this shift. He goes to his locker, opens it with the key on his lanyard, and puts away his belongings. Today, he will be at work through lunch, so he places his lunch bag in the refrigerator. Once everything is put away, he sets off in search of the chief engineer. This generally requires that he ask a variety of people if they know where Mr. Becker is at this time because he could be anywhere in the building. Initially, Darrin needed a reminder card that provided instructions about finding a person and what to ask because he would simply wait in the employee area until someone noticed that he had not yet checked in

with Mr. Becker. Darrin rarely uses this card now and only resorts to it if something has upset him, or his schedule, on that particular morning. Carmen makes a note on her clipboard to ask Mr. Manuel to check with Mr. Becker about teaching Darrin to use a walkie-talkie to locate him so he can be more independent and find him as efficiently as possible.

As soon as Darrin learns that Mr. Becker is in the ballroom, he takes his clipboard and sets out to find him. The ballroom is buzzing with activity. Mr. Becker is pleased to see Darrin and greets him with a handshake. He wastes little time and lets Darrin know that the first order of business is to set the ballroom for 750 guests. He takes Darrin to a table that has already been set for 8 people and tells him that all of the tables on the main ballroom floor need to be set exactly the same. He writes on Darrin's clipboard: #1 vacuum and #2 set tables. He draws a line across the paper and writes: "only if you have time" at the top and writes in two additional items. Many other people are busy moving the round tables into the ballroom and placing stacks of 8 chairs near each one. Darrin gets right to work. His attention to detail is incredible and he is a diligent worker. He rarely stops to chat with other workers unless they are in the break room, but if someone greets him or asks a question, he will respond. Darrin has learned that his break begins at 10:45 and ends at 11:15. He has adjusted to this early time for lunch and generally packs something light. He has set one of his alarms on his iPhone for 10:45am. He would happily keep on working through his breaks, but he learned that taking a break is part of going to work and it is important that he take his break at his assigned time. During his break, Darrin completes his performance evaluation that is also located on his clipboard. He checks off the following:

- Arrive on time
- Unpack and organize quickly
- Locate Mr. Becker
- Begin on assigned tasks
- Work accurately
- Work quickly
- Ask for clarification/help as needed
- Take break at scheduled time

At the bottom he has an area to write in any issues or comments he may have for that day. Mr. Becker and Mr. Manuel review these documents on



a daily basis and make notes as needed. While Darrin eats lunch, he checks the stats for his favorite driver and quizzes some coworkers who also like NASCAR. They add information about Formula 1 drivers, and Darrin listens politely but ends the conversation by saying that NASCAR is #1 as he hears a favorite country music song begin to play. This is the alarm for him to return to work.

Back on the job, Darrin completes the last table setting. A coworker gives him a slap on the back and congratulates the team for a job well done. He joins Mr. Becker to assist with the last touches on the head tables and setting up the plants around the podium. Even before Mr. Becker can tell him what a fabulous job he has done, Darrin launches into a description of some cleaning supplies that he discovered are on sale on one of his favorite websites. Mr. Becker thanks him for the information and lets him know he will check on how their supplies look and whether or not that particular company is listed as an approved vendor for the hotel as they leave the immaculate ballroom. On their way back to the employee area, another alarm chimes and Darrin checks his iPhone. It's time to prepare for the bus ride back to school. He gathers his belongings and meets Carmen and the other learner by the employee entrance. She asks how his day at work was and he gives her his standard reply, "Awesome!" then adds, "Only four more days until payday!"



### Afternoon - Miss Mindy

In years past, most of the learners in Miss Mindy's classes loved going to gym so their visual reinforcement systems were sufficient. Gym class this year has been quite a bit more difficult for many of her learners. One learner, Frederick, is particularly sensitive to the noise level and echoes created by this large space. At the beginning of the year, he rolled around on the floor and refused to participate for the entire gym period. Frederick's team last year inadvertently promoted this behavior by waiting for him to drop to the floor and roll around and then taking him on 5 to 10 minute walks around the school building. Upon returning to gym, the scenario would repeat until the end of gym.

When this school year began, Frederick's team conducted an A-B-C assessment to determine possible functions for this set of behaviors and developed a comprehensive behavior plan because Frederick had essentially not participated in gym class at all the previous year. Once the team determined that the primary function of this group of behaviors was escape,

they developed a plan to teach Frederick that he could calmly escape this environment by requesting a break. His specified break area during gym class is in the hallway just outside the gymnasium entrance. In addition to teaching the Functionally Equivalent Alternative Behavior (FEAB), the team decided to use a fixed interval 1-minute DRO. Fortunately, Frederick loves the ball pit and to climb on a fixed climbing structure. The gym teachers agreed to have these available in the gym at all times, particularly in the beginning of this new behavior plan. The team was confident that increasing his rate of reinforcement for participating and giving him a calm way to escape by asking for a break would prove beneficial for Frederick.

Since Frederick is a PECS user, he is learning to request a break via the exchange of a “break” card. Teaching this skill as a spontaneous request requires two trainers. This could present a bit of a staffing challenge for the team because either Miss Mindy or Miss Marsha takes a break during this class period. However, Miss Mindy’s class attends gym with another class. Each class sends one staff member to gym, so there are four staff members during this activity because the gym teacher has an assistant. All team members agreed that one person was essentially working with Frederick 1:1 the entire class anyway, so they would utilize this as an opportunity to teach the FEAB of requesting a break. The baseline rate of this particular set of behaviors was about 15 per hour. This class is 30 minutes in length, so at the beginning of the year, Frederick was dropping to the floor and refusing to participate 7 or 8 times per class.

The school psychologist, Mrs. Horton, was asked to assist with this plan for the first several weeks, to model appropriate implementation of the plan and provide feedback to the rest of the team and the other staff members working with Frederick. Frederick was taught to exchange a bright yellow card printed with the word “break.” Staff utilized the two-person prompting procedure to teach Frederick to exchange the “break” card. The team member working specifically with Frederick would look for some initial signs that he was about to drop to the floor. Generally, these included refusal to participate or ceasing to participate, standing very still, and/or putting his hands to his face/ears. Upon observation of these behaviors, he was prompted to exchange the “break” card with one of the gym teachers. At that point, he was excused to the hallway to take a 1 minute break. Breaks were unlimited at the beginning of this intervention and there were days that Frederick took 10 breaks. Frederick learned this skill rapidly and was initiating breaks after only 2 classes. After several weeks he was still requesting about 10 breaks per class. At this point, the team tried to decrease the number of available breaks. They began to visually present the number of available breaks with a board and 12 “break” cards. Now, when a “break” card was exchanged, it was not replaced so he could see the



number of cards decrease as he requested breaks. Decreasing the breaks proved unsuccessful. If he used all of the “break” cards, he would simply revert back to dropping to the floor as a means of avoidance. Of course, when this happened, the team did not take Frederick for a walk, instead they followed the new reactive strategy described within his behavior plan. It was clear that the behavior plan needed some changes.

After these unsuccessful attempts to decrease the number of break cards available, Mrs. Horton suggested that the noise in the gym class may still be quite overwhelming for Frederick and scheduled a meeting with his occupational therapist to discuss other options. Meanwhile, the team continued with the plan and collected data. The occupational therapist concluded that Frederick was demonstrating behaviors consistent with an aversion to loud noises (covering his ears, humming, etc.). She also determined that he could tolerate wearing a variety of noise canceling headsets as well as earplugs. The earplugs may be the preferred method for noise reduction since these will be much more discreet than wearing a bulky headset. She had to wait for permission from the family to order a kit to create a custom set of earplugs that are molded specifically for his ears. Using this type of earplug greatly diminishes the possibility of the earplug getting lodged in the ear canal and allows Frederick to hear if someone is speaking directly to him. Once the custom earplugs arrive, they will place them in Frederick’s ears prior to the transition to gym. More importantly, they will continue with the Fixed Interval DRO as well as honoring his requests for breaks during this challenging time of day. If a marked improvement is noted, they will continue with the use of the earplugs, gradually increase the amount of time of the DRO, and gradually reduce the number of breaks he is allowed to take per gym class. All of these strategies are currently necessary to help Frederick participate in gym. Miss Mindy and the rest of Frederick’s team realize that this has involved a great deal of work, but it is certainly worth the effort as they see him participating in this class.

The entire school is preparing for an exercise challenge as part of a national competition. Both gym teachers agree that they want all of the learners in the school to compete if the families return the permission form. The competition will occur on a Saturday. During the competition, the organizers will play music for motivation and there will be lots of activity as several schools come together to compete. In preparation, they will play upbeat music during gym classes for the next several weeks.

Typically, Ezra is happy to participate in gym so everyone is taken off guard when Ezra hits a teacher during warm up exercises. Ezra has a behavior plan in place for hitting, so the person he hits responds by following through with the plan. At this point, the gym teacher realizes that he is

likely responding to the loud music and indicates that he will turn it down. Miss Marsha catches the attention of the gym teacher and asks him to keep the music at that level as she will step in to teach Ezra to make the request to turn the music down. Of course, Ezra transitioned to gym class with his communication book. He has learned to place his book on the blue line near the basketball net when he arrives in the gym. Miss Marsha and the teacher working with Ezra switch so that she can teach Ezra this specific request. Realizing this might be a more difficult time for Ezra because of the music, she decides to increase the rate of delivery of tokens.

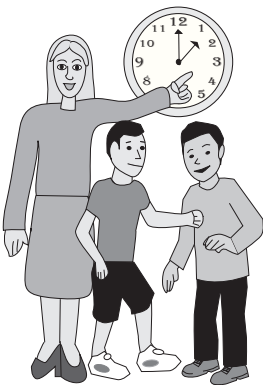
Generally, prior to hitting, Ezra will stop whatever he is doing and begin to hum, so these are the behaviors that Miss Marsha is looking for as they continue with warm up exercises. Just before the next set of crunches, Ezra stops. Miss Marsha immediately points toward his communication book. Ezra opens his communication book and constructs, "I want + music + down." He takes the completed Sentence Strip to one of the gym teachers and, even though he is teaching, the teacher makes his way to the audio system and turns it down quite a bit. After about 5 minutes, someone turns the music back up and, after several minutes, this gives Ezra another opportunity to request the music be turned down. By the end of the class, he spontaneously goes to his communication book to request the music be turned down. Miss Marsha records the hitting episode and also records his performance on requesting the music to be turned down. She also makes a mental note that during class time they should turn on loud music from time to time to provide additional opportunities for him to practice this request because they want him to participate as successfully as possible during the competition. Throughout the remainder of gym class, Ezra makes several more requests to lower the volume of the music. He also requests his favorite orange jump rope, the soccer ball and a peer when they need to pair up for the relay. In addition, he requests several items to begin his "deals" for his visual reinforcement system.

Janelle enjoys gym class when she is working on individual skills. However, when the activities involve competition and someone else or another team wins, this can be a challenge for her. While she excels academically, her gross motor skills are not always a match for her peers. Gym class has been a time of day when Janelle might shut down as a result of her not winning. Today, during the relay, her team came in last. Janelle sat down, folded her arms and refused to participate in the next relay. Her behavior plan specifies that when she engages in this behavior all adults are to ignore her and continue the lesson with all of the other learners. It is important that no one lectures her about this behavior because that would provide reinforcement for the behavior. In addition, she will not earn for any of the DRO or her visual reinforcement intervals while she is not par-

ticipating. Janelle's partner on the relay team is temporarily paired with one of the teachers. This gets her attention, because the function of these behaviors is to gain adult attention. After about 4 minutes, she rejoins the relay races and begins to earn again. Miss Marsha marks Janelle's behavior data sheet, which includes the duration of the episode. At the beginning of the year, these episodes occurred quite frequently and could last 10 to 15 minutes, so definite gains have been made. Before the end of gym class, Janelle earns some 1:1 time with the staff member of her choosing. She chooses the gym teacher. He continues to work with other learners with Janelle in the role of his assistant. She loves this!

Every gym class ends the same way, with a brief cool down. The gym teachers let the learners know it is time to gather for the cool down by clapping a pattern. Learners and staff all clap the same pattern back while making their way to their assigned spots around the gym. After stretching, Janelle quickly makes her way to line up and nicely deals with the fact that she is 3<sup>rd</sup> in line. Miss Marsha notices this and stands near her and gives her some extra attention by asking her about the weather today. Janelle just beams because she loves all things weather related! Ezra does not immediately line up at the end of stretching. Instead he first goes to the blue line to get his communication book and then joins everyone else in line.

This year, gym class has been quite a challenge for Miss Mindy and her team, but they are starting to see huge benefits. All of the learners, including Frederick, are now participating in gym class more than they were, and she knows with continued diligence and teaching that everyone will participate even more fully with the passing of each reporting period. Miss Mindy considers the many gains and is also happy with her decision to call in for the support of Mrs. Horton during gym class for the first several weeks after all of the intervention decisions had been made. In addition, it was wise for the team to rotate which team member would assist in gym. She knows that this strategy decreased the probability of staff burnout.



### Afternoon - Ms. Beal

Transitions between classes in this middle school are a bit noisy and chaotic, but it seems that the transition to the lunch period is the most boisterous. Marquis prepares for this transition by putting in his earplugs as he is packing up his materials. He will need his SGD, so he carries this instead of placing it in his book bag. His earplugs block out a fair amount of noise, but he can hear well enough if someone is directly ad-

dressing him. Upon arrival in the lunch room, learners choose where to sit. Most choose to claim a spot before entering one of the many lines. Today, Marquis enters the line serving hamburgers and hotdogs, chooses a tray and gets in line behind another learner, leaving adequate space so he does not feel too crowded. When another learner accidentally bumps into him, he turns around, but does not “say” anything at this point. Apparently, the learner understands and makes an effort not to bump into Marquis again. Ms. Beal is monitoring the situation from a short distance away and is pleased to see that Marquis does not attempt to pinch this learner.

Marquis orders a hamburger with lettuce, pickle, tomato and mayonnaise via his device. The person serving asks, “Will you have fries with that?” and Marquis shakes his head “No.” After receiving the hamburger, he joins the salad bar line. Just as many of the learners in this school, Marquis enjoys assembling his own salad and does so on most days. When another learner bumps into him in line, he quickly constructs a message on his device and presents it to the learner before hitting the “speak” button. The device says, “Please move away. When people are too close, I get nervous.” The learner mumbles a quick apology and makes an effort to give Marquis more room. After paying for his lunch items, Marquis is pleased to see some of his friends have already gathered at the same table. He enjoys this time of day because he has some time to converse with friends about the latest vampire book that everyone is reading, or High School Musical. Today, most of them are busy chatting about the upcoming school dance. Melissa asks Marquis if he will be attending the dance, and he lets her know he has not yet decided. She provides encouragement saying that everyone would be there and she hoped he would decide to attend. Marquis digs into his bag to find his iPod and switches his earplugs with the ear buds and clears his area. Marquis learned that taking care of this before the bell rings is much easier for him. He settles in to listen when the bell rings.

After lunch, Marquis goes to his next class where he is met by his teacher who informs learners as they arrive that there has been a change in the daily schedule and everyone should return to their homeroom class. She asks Marquis to see his daily planner so she can note the change because she knows that he may transition more easily if the change is made directly on his daily schedule. She asks him if he wants to write in the change and he shakes his head “No.” She asks if she can note the change, and he nods his head “Yes.” She quickly asks another learner from her homeroom class to help her inform learners of the change while she takes a moment to note the change in Marquis’ planner. Marquis begins to slightly rock back and forth and places one hand near his ear and presses a finger into that ear. His teacher lets him know that the sudden change has certainly come as a

surprise, but she will see him again soon. Just before he walks away, she provides him with a token and a reminder that if he needs a break at any point, he can always ask.

Ms. Beal is relieved to see Marquis enter her classroom with the rest of the learners filing in the room. This probably means that he tolerated the change fairly well so far and has not requested a break. Marquis sits at his desk with his SGD perfectly aligned with the right edge of his desk. He is busy looking at his planner which now has a line through one class and “assembly in gym” carefully written underneath.

As the last learners arrive, Joshua makes his way to his desk. His iPod vibrates as his R+ Remind app continues to run. He opens up his planner and gives himself a point to find that it completes that set. He decides to “bank” those points, so he removes his checkbook from his book bag and adds in \$5.00 for the points he has received. He also writes in “bank” on his daily schedule. After adding this to the balance, he sees that he now has enough to “buy” the High School Musical Soundtrack. He rushes to the front of the class to let Ms. Beal know. She is busy with several things, but acknowledges his excitement and then says, “I’m sure this will be the first thing you tell your dad when he gets home this evening!”

Once all of the learners have settled into her classroom, Ms. Beal announces that there will be a short surprise assembly in the auditorium. She glances around the classroom and notes that Marquis looks especially anxious. As soon as she was informed of the change in schedule, she altered the visual schedules for the learners that were already in the room. With the announcement made, she and the rest of the team work their way around the room to alter the written and picture schedules of the rest of the learners. She double checks Marquis’ schedule and is pleased to note that the change has already been made. She gives Marquis a token and a favorite puzzle to work on during this downtime. Joshua is already busy writing out song lyrics. Other learners access leisure activities either independently or when offered choices.

The transition to the assembly is uneventful and Ms. Beal is hopeful that Marquis will use his communication skills during the assembly and not resort to pinching or body rocking. She notes a couple of his closest friends were making their way to sit on the bleachers near him and is confident that they will provide reminders if needed. As soon as the Principal begins with the announcements, the audio system makes a terrible noise. Marquis winces and puts his hands to his ears, just like most of the other learners. He then uses his SGD to excuse himself from the row. He approaches Ms. Beal and asks for a break. She says this is fine and he leaves

the auditorium. He checks his watch. After three minutes pass, he returns to the auditorium, a bit less agitated but still not thrilled. He asks Ms. Beal if she has anything he can do for her. She thanks him, but says, “No,” and offers him her seat on the end of the row. After a moment, she asks him if he remembered his earplugs. His eyes light up as he reaches for his book bag and finds them. A visibly more relaxed Marquis remains in the auditorium with his class for the rest of the assembly.



### Afternoon - Mr. Manuel

Some of Mr. Manuel’s learners did not leave campus today. They are busy with a fun weekly activity - putting together a grocery list. Mr. Manuel guides his learners to make choices of needed items based upon the dishes they plan to make later in the week. Some of the learners can read traditional recipes and others need picture recipes, so both are provided. When Darrin and other learners return from their job sites, Darrin types the grocery list and Rose checks the pantry for ingredients as Mr. Manuel asks, “Rose, do we have any \_\_\_\_\_?” After checking, she returns from the pantry and gestures “Yes” or “No.” Mr. Manuel grabs a recipe box filled with both photos and pictures of common grocery items as other learners return. Some of the learners make the trip to the grocery store which is a short van ride away.

The grocery store trip is now much less work than it was when these learners were new to Mr. Manuel’s class. He remembers teaching each of the many routines required for a successful and independent trip to the grocery store. Some of these routines included: entering and accessing cart(s), following visual lists, weighing produce, following oral directions (this is especially useful when items are forgotten along the way), waiting in line, bagging groceries, and paying with cash or debit cards. Of course, not every learner has mastered every routine, but he is impressed with the independence and confidence his learners have gained. He and the rest of the team agreed upon specific task analyses for each routine and taught them utilizing teaching strategies that were specific to each learner. For example, Darrin learned to pay with the class debit card by following the written instructions on the key pad, but he had to be taught *when* to swipe the card and he had to memorize the PIN. Darrin was taught to swipe his card using a forward chaining teaching strategy within two short sequences.

1. After the cart was positioned at front of the line, Darrin knew to



stand near the keypad. As soon as he stopped at the keypad, a staff member showed him a reminder card (orange sticky note) that stated, “Get your debit card ready.”

2. At the point when the cashier looked at Darrin and said, “Your total is \_\_\_\_” a staff member would gesture to the keypad for him to begin the sequence. Vocal social praise was offered as needed and the team tried to vary the praise statements used.

Over time, both the orange sticky note and the gesture to swipe the card were eliminated from this lesson.

Each week several copies of Darrin’s list are printed. Each learner is responsible for finding different items, so these are highlighted and distributed to each learner on a clipboard with a pencil attached. Once in the grocery store, the learners each grab their own carts and set off in different directions. Depending upon staffing for that day, they may be in groups of 2 or 3 with a staff member assisting either in close proximity or at a distance. Rose cannot read the printed words on the grocery list, so the person assisting her group shows her a photograph of each item she needs to find. Rose is given the picture when they turn down the appropriate aisle. When time permits, they tape the photos next to items on the list for Rose and she places a check mark by the photo after she places the item in the cart. The learner that Rose is paired with on this day is able to find aisles by number matching. On his list, Mr. Manuel has included the aisle number next to each item (this is an example of the usefulness of number matching in everyday life). Of course, it may be simpler to tell this learner that bread is on aisle 7, but this team strives to promote independence whenever possible.

Several learners request different items while in the store. Mr. Manuel says yes to some, but not all, of these requests. His learners have come to understand that sometimes they get to add a specific item to the cart and at other times they do not. Again, depending upon the amount of time they have, some learners will make separate purchases, either with cash or debit cards. Darrin generally takes a detour down the aisle of cleaning supplies and will happily announce the benefits of certain products over others to anyone who will listen.

While in the grocery store, Rose earns her last token. Mr. Manuel is relieved when he realizes he did not forget the tokens, but then discovers that he has not remembered the bag of reinforcers or the small plastic reinforcer tray. Rose has been doing quite well with the “wait” card and, at this point, it is truly Mr. Manuel’s only option. After Rose exchanges all of her fancy tokens he places the photo for pudding on the “wait” card and



apologizes for not having her pudding available right away. Rose sees that her favorite pudding is in the cart, so she tries to take it. Mr. Manuel blocks her access to the pudding and points to the “wait” card. He asks one of the assistants to accompany three of the learners to the bench by the exit and reminds them about the real estate brochures. Rose enjoys looking at all types of magazines. She waits with the group and looks at a brochure.

Even though the class has several carts while shopping, they consolidate the contents of the carts before going through the line when they are running short on time, as they are today. By the time all of the items are consolidated, Rose and several learners are already waiting on the bench. Darrin completes the transaction with the cashier, says “Thank you, have a nice weekend and I hope you enjoy the NASCAR race on Sunday.” The cashier says “Good bye!” Mr. Manuel notes that, this time, she looks at Darrin when she says goodbye instead of at one of the teachers! All of the learners help place the groceries in the van and pile in for the trip back to school. Mr. Manuel remembers that Rose is waiting for pudding. He would like to give it to her at this point because she has been waiting so well, however, he doesn’t have a spoon for her so he will arrange for her to enjoy the pudding, and perhaps an extra 5 minutes with an activity of her choosing, when they arrive back at school.

An “unscheduled” stop has been planned because one learner has difficulty when his parents make stops that are not indicated on his family outing travel schedule. This makes running errands quite difficult and the behaviors exhibited by this learner are potentially quite dangerous. He removes his seatbelt and grabs his mother around the neck. His mother says that he calms right down if she does not make the unplanned stop and continues with the stops in the order they are listed on her son’s visual schedule. Over time, she has stopped taking her son on trips by herself and has asked neighbors to run errands for her instead of surprising her son with an unscheduled stop. Mr. Manuel and the rest of the team agree that this must be a priority for this learner and they have developed a plan. This “unexpected” stop is part of the plan today. All of the reinforcers were left behind, however, so they decide it would not be in anyone’s best interest to begin this lesson today. Upon arriving back at school, everyone helps unload the van and all of the bags are taken back to class. One staff member stops by the office to sign the class back in to school. Rose receives her pudding and loads of praise for waiting so very nicely for this earned reinforcer. She is also given an opportunity to request something in addition. She requests a jewelry catalog and flips through the pages as she enjoys her pudding. One team member oversees the putting away of the groceries as Mr. Manuel makes some final notes in the home/school communication notebooks. Darrin completes his end of the day self evaluation and uses

the last five minutes of the school day to surf the web on his iPhone.

### **Evening - Ezra's Home**

Ezra lives at home with his parents and siblings. He has an older sister, Eliza, and an older brother, Elijah. Ezra's mom and dad recall that life used to be quite a bit more hectic, especially at night. They have worked in concert with Ezra's team to prioritize and address goals in the home environment. Initially, they felt completely overwhelmed with Ezra's behavior and, in many ways, simply did all they could to eradicate everything that might potentially "trigger" a tantrum from the home. They quickly realized that the entire family was stressed and that it was unrealistic to alter everything at home, because they simply could not anticipate or alter everything outside of the home. They want their son to accompany the family on outings and participate in neighborhood and religious events because these are important to the family.

After Ezra started school and settled in a bit, they observed, and were absolutely thrilled with, his progress. Of course, he still has challenging moments and some lessons are more preferred than others, but this is true for any preschooler. They met with Miss Mindy and the behavior analyst, Dr. Tony, and asked to schedule a home visit so they could get a fresh perspective and begin to develop a plan of action. They decided to address communication skills and develop some consistent routines. They also decided to collect some data on tantrums to begin the process of determining the function(s) they may serve. Even though they were eager to get started, they realized that putting in the time to organize, prioritize and start with only a few goals would certainly pay off.

Once Ezra began to make gains with communication via PECS at school, they began to teach PECS in the home environment. They found that Ezra generalized these skills quickly. He has a communication book at home and he takes this book on outings and transitions to school. He has a separate communication book in the school setting, so this one stays with him while he is with his family.

It has been several months since the initial home visit. We join the family to observe some of their evening routines. After eating dinner, Ezra's family plays a board or card game every other night. On most other nights, they play outside or watch a TV show together. Tonight, they are playing Candy Land. It has been adapted in two ways so that Ezra has an easier time playing along. First, they have taken the "doubles" cards out of the stack so it is an easier matching task for him when it is his turn. Miss Mindy suggested ways for the family to adapt other popular family games so that Ezra is not only participating but also applying skills he is learning

at school. For this game, Ezra will work on turn taking and matching along with the fine motor skills to manipulate his game piece and the cards. His game piece has been modified as the second adaptation. Ezra does not particularly care which game piece he uses, but sometimes has trouble identifying his after the game begins. A Dalmatian sticker is placed on the game piece he chooses. This has certainly helped him within this game and others that involve game pieces.

Bath time can be quite hectic in any household, especially when there are multiple children! Ezra has no problems getting undressed when it is bath time; he loves this time of day. His parents have been diligent in finding opportunities for Ezra to request via PECS. Granted, it might be easier to simply interpret his behavior and/or assume they know what he wants at any given moment. However, they understand that giving their son the power of communication is a wonderful gift. Of course, they would love it if one day he woke up and started talking. They are encouraged because they have learned that several other PECS users in his class have begun to use some vocal approximations or speech. They realize that there is no way to predict if Ezra will have this outcome, so they are pressing forward with functional communication training via PECS. Miss Angie, his SLP, continues to work on oral motor goals as well as sound imitation. Tonight, Ezra's mom, Elise, has "forgotten" to place his favorite blue washcloth and his 101 Dalmatians figures into the tub. Last night, she "forgot" to provide his bubblegum scented body wash. Some nights are too hectic, especially the nights when Eliza and Elijah have karate practice. On those nights, she simply ensures that all of his favorite tub toys and gear are available. Miss Angie has provided the family with many pictures as Ezra has gained PECS skills in the home environment. The pictures that are used at bath time are affixed with Velcro® to an activity board that hangs on little hooks on suction cups. These pictures are triple laminated and everyone was thrilled to learn that Velcro® still works when wet. Miss Angie let Elise know that these pictures may not last as long as all of his other pictures, but that they will last longer than she thinks. He also has a Sentence Starter "I want" and a Sentence Strip available so he can communicate via PECS at the same phase he uses the rest of the day.

During the bath, Ezra requests his Cruella figurine via PECS, "I want + Cruella (a photo) + figurine." He has a variety of 101 Dalmatians characters and uses attributes to specify which one he wants (e.g., stuffed animals, figurines, puzzles, etc.). He also requests his washcloth, "I want + washcloth." Elise is relieved that Ezra's visual discrimination skills are quite good. She learned how to conduct the 4-Step Error Correction Procedure, but thus far has not had to correct any errors within PECS. Elise set a timer at the beginning of bath time because if it were up to Ezra bath time would

last and last! The timer beeps and Elise shows Ezra his favorite Dalmatian Pillow Pet™. Ezra vocalizes in protest as she pulls the plug and the tub begins to drain. The loud protest increases in intensity and the tears begin to flow. Elise places the towel around her son and gives him a big hug and murmurs a few words of consolation. She does not give in. She steels her resolve not to give in to her son's protest. In discussions with his Miss Mindy and Dr. Tony, she learned that giving in taught Ezra that engaging in those behaviors would result in getting his way. She was ready for the increase in intensity and was grateful that they let her know to expect this. Elise still wasn't clear why they called this an "extinction burst," but she knew that changing her mind or giving in would only exacerbate the problem. Once he is all dry, Ezra is no longer crying and Elise gives him his beloved Dalmatian Pillow Pet™. He squeals with joy and hugs the pillow. Elise reaches for his pajamas and sees the pudding cup. She had planned to get at least one "No" opportunity during bath time by offering the pudding. Alas, she will try to remember tomorrow!

After Ezra is dressed in his pajamas, Elise tells him that it is nearly time for stories and then shows him his toothbrush. Using this reinforcer first strategy has helped Ezra tolerate less preferred transitions. He backs away from the sink. Elise makes a mental note to ask Miss Mindy if she thinks that a mini visual schedule might help with the evening routine as she turns to the task of helping her youngest son brush his teeth while her other two children are buzzing about also getting ready for bed. A laminated card has been taped to the mirror. This card has the steps for teaching Ezra to brush his teeth. She and her husband helped develop the list of steps on this card. The last three steps on the list have been highlighted. This visual aid helps remind the family not to provide help for these steps because Ezra has mastered them. Elise notes the time - it is getting late. Sometimes she asks Ezra which flavor toothpaste he would like. He generally prefers the bubblegum flavor and will use the picture for bubblegum as an attribute within his request.

Tonight, she opts to ask a yes/no question and this works perfectly because she did not have time for a yes/no opportunity while he was in the bathtub. She signals her other son to be sure he can provide a prompt if needed. She holds up the mint flavored toothpaste (Ezra does not like this one) and asks, "Do you want mint tonight?" Ezra begins to push away the toothpaste and clearly shakes his head "No!" Elise says, "No thank you!" and puts away the mint and asks him about the bubblegum flavor. He grabs for the toothpaste, but does not nod his head to indicate "Yes." Elijah helps him with the head nod by providing a slight physical prompt. Ezra is given the toothpaste and he seems quite pleased. Elise provides physical prompts for each of the steps indicated on the card and gives him some vo-

cal praise when she feels that he is more fully participating in a step. Once he reaches the step to rinse the toothbrush, she stops helping altogether and allows him to complete the routine. She is delighted and provides loads more vocal praise as she hands him his Pillow Pet™. They both exit the bathroom and head toward his room. It is time for stories with all three children. Elise is exhausted and she's not sure how long it will take Ezra to get to sleep tonight, but since they started this routine, he is beginning to settle down and get to sleep more quickly. She reminds herself that the family has worked diligently to set up routines as much as possible, but no one is perfect. Change takes time and just because the family has had to make some adjustments does not mean that their old ways of doing things were wrong, they just did not work well for Ezra. Initiating the home visit with Miss Mindy and Dr. Tony was an excellent first step. Elise and her husband will continue to learn ways to help Ezra in the home environment.

### **Late Afternoon and Evening - Rose's Group Home**

Since Rose does not live at the group home full time, her group home team created a special photo calendar that depicts which place she will be on specific days. They have multiple copies of a photo of the group home and a photo of her home. These are attached to a calendar in her room so she can see the entire month. This has helped Rose tremendously in the mornings. When she first moved into her group home she would get very nervous and agitated in the morning as she waited with her book bag. If the transport van pulled up, she would often have a tantrum. The staff at the group home created the photo calendar and they made sure that on the days when she was going home, she had her duffle bag in addition to her book bag. They also began to use a visual reinforcement system with her that stayed at the group home. They have tried their best to match the rate of reinforcement she was getting in the school setting. All of these strategies are helping because it has been a long time since Rose demonstrated any tantrum behavior in the mornings.

Rose is excited as the van pulls up to the group home. She takes her travel communication folder with her as she heads toward the back of the van to get her things. After placing her folder into her book bag, she races toward the door. She approaches the front door and waits. Miss Jill is busy with something in the yard, but she keeps a close eye on Rose. She is learning to unlock the front door with her key. She has mastered all of the steps except for the first one (i.e., take out the key). Everyone agreed that if a member of the team stood next to her on the porch each and every day, it was likely serving as a prompt. Not to mention, along with such close proximity, most people are more likely to provide some type of

subtle prompt but a prompt nonetheless. They decided to utilize the progressive time delayed prompting procedure and yesterday, Miss Jill had to step in to provide a prompt after pausing nine seconds. Today they have arranged for Miss Jill to “shadow” Rose at a distance. Miss Jill begins to count to herself, “one, two, three...” Everyone practiced counting at a very slow rate until they were counting at about the same pace. Miss Jill is not to step in or provide any type of prompting until she has counted to ten. She continues to count, “...five, six, seven...” and Rose reaches into her book bag and takes out her keys. She did it! Miss Jill is thrilled but she contains her excitement and continues clipping flowers. As soon as Rose enters the foyer, Mr. Kris greets her with a hearty hello. He is also pleased with Rose’s independence with this new routine and he wants to provide even more social praise, but Rose is generally not thrilled with that type of social display. Her team has learned that giving her more time with preferred activities functions better as differential reinforcement than additional socially based reinforcement, even when it comes from her most favorite staff members. As Rose makes her way to her room, Mr. Kris marks her data sheet for using a key to unlock door. He cannot resist drawing a star beside the date.

Rose puts down her book bag and takes off her shoes. She likes to wear slippers while she is in the house, so she changes into those. After picking up her communication book, she walks to the family room where several residents are watching a home shopping channel. She goes to the desk and takes out her purple folder. This purple folder contains her photo schedule for this setting. The first photo depicts choice time. This is a yellow card with the word “choice,” along with photos that depict many things she can choose and an open dot of Velcro®. Rose has a corresponding yellow sheet in the folder pocket. This yellow sheet contains photos of available choices. She also has a blue and green sheet for other types of choices. The choice photos on the yellow page are: make jewelry, magazines, Wii® and television. She wastes no time selecting the picture for “make jewelry” and placing it on the Velcro® spot on the choice card.

Rose heads right for the utility room where she has an entire shelf dedicated to her jewelry making supplies. She makes three trips and stacks all of the plastic bead boxes on a large table in the recreation room. This room also has a television, but it is currently not being watched. Mr. Kris stops by and lets her know he is setting the timer because there are chores to complete and a meal to prepare. He sets the digital timer for 40 minutes. This is 10 minutes longer than Rose would normally have for recreation time. He added time due to her flawless execution of the sequence when unlocking the door and entering the house. He tells her that he has given her more time and why. He tries to use simple, yet age appropriate lan-



guage. Rose's receptive understanding of language is inconsistent; however, most people address her as they would any other 19 year old except perhaps using fewer words and less "flowery" language because too much language tends to confuse her.

Rose has chosen to use some very small turquoise beads for this set of earrings. After several attempts to get three of them on the wire, she becomes frustrated and pinches herself. Mr. Kris has been monitoring at a distance as he completes some forms on the computer. He observes her pinching episode. Rose's behavior plan specifies ignoring this behavior if it has already begun. As unobtrusively as possible, he takes a clipboard from the desk. This clipboard contains all of Rose's behavior data sheets. He notes the time and approximate duration, 15 seconds. Once Rose is no longer actively engaging in this behavior, he approaches her and admires her work. He sees the small beads she has been working with and comments about the beautiful turquoise she chose for this set. Just as she begins to pick up the earring and try again, Mr. Kris notes that she seems a bit agitated and that she is humming and beginning to rock a bit. Both of these behaviors can be indicators that a pinching episode is about to begin. He offers her a choice between a squishy tennis ball and a very soft koosh. She carefully places the earring back on the gray towel, and takes the squishy tennis ball. After a moment of intense squishes, she sets it aside and goes back to her beading. Mr. Kris and the rest of the team are teaching Rose that when she is frustrated she can use items such as these to reduce some of the stress and, if needed, ask for help. So far, these procedures seem to be working. The team has noted a decrease in self pinching behavior and they are hopeful that this trend will continue.

Rose's mother has purchased some earring and necklace cards with Rose's name and a logo. She hopes that Rose will have enough jewelry complete in time for the next community festival so they can display and sell some of her creations. Rose has quite a bit of difficulty placing the jewelry onto these special cards. If she asks for help while making jewelry, it is usually with this task. Mr. Kris gives Rose only 1 token for this task because it is one of her preferred activities - the rate of reinforcement certainly does not need to be as rich as it is for more difficult or less preferred tasks. However, he still had Rose choose something to work toward just as she prepared to follow her visual schedule for the afternoon. When the digital timer sounds, Rose does not immediately begin the process of putting away her materials. Mr. Kris is still busy at the desk and he waits to see if Rose will stop the timer and begin the process on her own. His patience is rewarded when Rose silences the timer, and begins to organize her materials. Once she has nearly all of the materials back in the plastic trays, Mr. Kris approaches with a token and lets her know she is a "rock star!" This is

Rose's second token. She places it on her visual reinforcement card which is located near her communication book. Her book is discreetly hidden inside a trendy purse. Her mom made this for her. When the outer flap of the purse is lifted, it reveals her communication book.

While putting away her materials Rose has a difficult time balancing some of the boxes on the shelf because she has placed the smallest one on the bottom of the stack. After two attempts, she places them on a lower shelf and goes to her communication book. She constructs, "I want + help + boxes." and hands the Sentence Strip to Mr. Kris. He sees the boxes on the shelf and helps her by placing the largest one on the bottom. She finishes by stacking the rest. Once all of the materials are properly stored, she goes back to her purple folder to find another choice card; this one is green and indicates choices of outdoor chores. There are two Velcro® dots next to the "choice" photo. This indicates that she will complete two different activities. The choices included on the corresponding green sheet are: water plants, rake leaves, pull weeds, and pick up magnolia leaves. Rose places her two choices, "water plants" and "rake leaves," on the green choice card and moves it to the current activity box. She picks up her materials and is making her way to the back yard when Mr. Kris asks her where her home/school notebook is. He shows her another resident's book to provide some additional information. She makes her way back to her bedroom to find her book bag. She quickly locates it and tugs at the zipper. It is jammed once again. Rose takes her purse off of her shoulder, flips open the front closure to reveal her communication book and constructs, "I want + help + zipper." and takes this to Mr. Kris along with the book bag. He frees the loose string and opens the zipper for Rose. Once she has removed the home/school notebook, he asks her if he can keep the bag for a few minutes to attempt a repair. She leaves him with the bag and begins to make her way to the backyard. She steps out the doorway to the patio. Ms. Jaime sees that Rose has forgotten to put on her work boots. She casually approaches Rose and says, "Uh oh, forgot something pretty important." She provides a slight physical prompt for her to go back up the steps and back into the recreation room. She points to Rose's work boots. Rose slides out of her slippers and puts on her work before going back outside.

Now properly attired for yard work, Rose places her communication book, visual schedule and visual reinforcement system on the picnic table and saunters over toward the garden hose. She's quite proficient with this routine, so she grabs the sprayer, turns on the water at the tap, and begins to unwind the hose by pulling it in the direction of the flowerbed at the back of the lot. The "shower" mode on the nozzle has a bright blue star that serves as a visual reminder for the residents about which mode should be utilized. She turns the nozzle to the appropriate spot and begins to

water the flowerbed. The team working with Rose has had several discussions about how they can promote even more independence for Rose within this task. They have decided to incorporate a timer that can either be worn around her neck or clipped on her clothing. Today Ms. Jaime will introduce this new part of the routine. Rose is sometimes resistant to changes in routines, so the team has decided to first incorporate the use of the timer and over time incorporate her wearing and setting the timer independently. Over the years, Rose has had experience with many timers in the school and home settings, so when the timer begins to beep, Ms. Jaime simply points to the other garden plot. Rose stops spraying the flower garden and moves in the direction of the vegetable garden. Ms. Jaime sets the timer once again. While Rose is watering, Ms. Jaime realizes that it is about time to give her another token. She will give Rose the token in between this task and raking leaves because a quick stop at the picnic table makes more sense at that time. The timer beeps and Ms. Jaime points at the place where Rose will stow the watering hose. Rose stops watering and begins the process of cleaning up as Ms. Jaime checks on the progress of the rest of the residents who are just as busy as Rose with other outdoor chores.

Once Rose has put everything away and placed the token on her visual reinforcement card, she makes her way to the shed to get a rake. She is independent with this part of the task, but has difficulty staying with it for a very long period of time. Rose has learned all of the steps in this task, so the team works on increasing another quality of the task, duration. They use shaping to achieve this goal. Rose knows how to hold and orient the rake, but only pulls the rake toward her body 4 times on average. The lesson plan clearly states the process for increasing this particular skill. The person working with her should withhold social praise and the delivery of a token until she pulls the rake toward her body 5 times and quickly deliver a token. Ms. Jaime knew that the rate of token delivery would likely increase during this task so she holds Rose's visual reinforcement card during this task. Ms. Jaime counts and waits. She is tempted to jump in with a prompt, but she understands that pure shaping requires no prompts and utilizes increasing the amount of work required before gaining access to the reinforcer (in this case a token, the conditioned reinforcer). As soon as Rose pulls the rake toward her body the 5<sup>th</sup> time, Ms. Jaime provides both social praise and the token. Rose places the token on the card that Ms. Jaime is holding. It's the last one! She takes the tokens off of the board and exchanges them with Ms. Jaime who immediately provides Rose with a ring that has a large pink stone. Rose seems delighted and places the ring on her finger.

Ms. Jaime starts a new deal with Rose (the photos for her to choose between are attached to the back of the card with Velcro®). Once again, Rose

chooses jewelry. This is a fairly consistent choice for Rose at this time of day, so Ms. Jaime is prepared with other baubles. Ms. Jaime says, "Alright, you are working for more jewelry, let's get back to work." Rose picks up her rake and gets back to work. Within the rest of this lesson, Ms. Jaime will continue to increase her expectations as long as Rose is independent. This type of within-lesson shaping is very important so Rose does not think that raking involves moving the rake only a certain number of times. This type of "ritualistic" behavior can develop if staff members are ritualistic about their delivery of reinforcement. Once Rose is able to stay with this task for longer periods of time, they will begin to work on another quality of the task such as raking until all of the largest leaves are in piles. Rose quickly earns another five tokens and is delighted when Ms. Jaime presents the set of pearls with a flourish!

The staff members that have assisted in this group home for more than a year are all impressed with the amount of work the residents complete each day. They have been committed to ensuring that the residents in this group home take part in the everyday operation of their home. It seems as if the staff members have less and less to do with each passing week. They are pleased that their adherence to the *Pyramid Approach to Education* has enabled them to teach so many skills over this past year. Even the data collection that Miss Anne told them about has been more manageable than they ever expected. They were all convinced that taking data would somehow detract from the skills they wanted to teach. They learned that once you start taking data it simply becomes part of the lesson and the process has become more efficient over time. They are also pleased to see all of the progress the residents were making on so many goals. The group home manager, Ms. Catherine, analyzes the data for all residents on a weekly basis and she shares this information, often in the form of graphs, with the entire team at weekly staff meetings. This meeting time is important for so many reasons. It provides a time to discuss success stories as well as challenges. This is also a time when they practice new teaching techniques or specific behavior procedures. All of the staff members enjoy these meetings, in part because Ms. Catherine is a huge source of reinforcement for each of them. In many ways, she has become a conditioned reinforcer because of all the ways she has devised to reinforce every person that works in this group home. She is delighted that her company hosted the *Pyramid Approach to Education* training last year. She knew it would be a perfect fit for her, her staff and, most importantly, the residents in this group home.

## Summary

Of course, there is no way to capture all of the energy within any setting. I hope, however, that these glimpses into the classroom and home

environments of these individuals gives you, the reader, a sense of how the *Pyramid Approach* works together as an integrated whole. Examining the structure piece by piece is necessary and beneficial. However, the whole is so much more than the sum of its parts. Professionals and parents who are equipped with a working knowledge of Applied Behavior Analysis, as presented within the *Pyramid Approach*, will encounter each unique situation well prepared to answer critical questions. Dr. Bondy trusts that when the appropriate questions are asked, professionals and parents alike will indeed come up with the right answers. Use the *Pyramid Approach* to guide your formulation of these questions. Remember to concentrate on the structural issues first.

*Functional Activities:* Is this a functional lesson? Am I using materials that are meaningful from this learner's perspective?

*Powerful Reinforcers:* Is this learner adequately motivated by the natural reinforcers within this lesson? If not, can I add artificial reinforcement in a way that speeds up the process of shifting from these artificial reinforcers back to more natural ones?

*Functional Communication:* Does this learner have all of the expressive and receptive communication skills s/he needs to properly access this lesson?

*Contextually Inappropriate Behavior*

*Preventative strategies:* Have we determined to the best of our ability the function(s) of this behavior? Does the plan involve a heavy emphasis on teaching Functionally Equivalent Alternative Behaviors? Should we explore the usefulness of developing a reinforcement system for the absence of this behavior?

*Reactive Strategies:* Is everyone familiar and comfortable with the reactive part of this plan? Do we have adequate resources to successfully implement this plan? Is there a plan to review the data on a regular basis to ensure the plan is working?

Developing specific lesson plans for skills is a tremendously important part of education. However, if questions like the ones listed above have not been fully addressed, these lessons may not be as effective as they could be. The instructional part of the *Pyramid Approach* may lead to questions like these:

*Generalization:* Have we adequately planned for both stimulus and response generalization of this skill?

*Lesson Plan Formats:* Are we offering opportunities for both learner- and

teacher-led lessons? Is everyone clear on the distinction between discrete and sequential lessons and which lesson format this particular skill requires?

*Teaching Strategies:* Has the best possible prompt for this learner within this lesson been selected? Is everyone clear that we will use one, and only one, type of prompt? Have we developed a plan to shift from prompts to natural cues?

*Error Correction Strategies:* Is each team member proficient with the error correction strategy associated with this lesson? Does everyone understand the importance of utilizing error correction instead of simply fixing errors when they occur?

*Data Collection:* Have data collection systems been developed for this lesson? Are they efficient and well understood by all team members? Has the team developed a minimum number of data points to collect each week for this lesson?

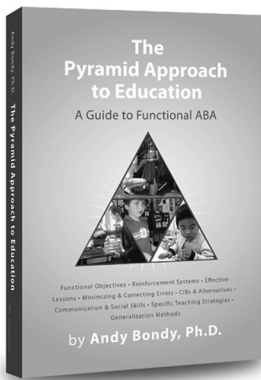
Of course, this is only a sampling of the types of questions that a team may come up with for creating an effective educational environment or lesson. Certainly you have gained insight throughout your reading of this entire book. No doubt many of your current ideas about teaching have been validated and others were challenged.

As you begin to create an environment based upon the *Pyramid Approach to Education*, remember to start small and address each element. Careful attention to the construction process will result in a solid educational foundation for your current learners and many learners to come. You will certainly achieve great things as you strive to enrich the lives of those you serve!





This chapter reprinted from *The Pyramid Approach to Education: A Guide to Functional ABA* by Andy Bondy, PhD.  
©Copyright, 2011 Pyramid Educational Consultants  
[www.pecs.com](http://www.pecs.com)



Hard copy of *The Pyramid Approach to Education: A Guide to Functional ABA* available in its entirety at [www.pecs.com](http://www.pecs.com)



eBook available on Amazon Kindle