

Module: Visual Supports

Steps for Implementation: Visual Boundaries

Smith, S., & Collet-Klingenberg, L. (2009). *Steps for implementation: Visual boundaries*. Madison, WI: The National Professional Development Center on Autism Spectrum Disorders, Waisman Center, University of Wisconsin.

Visual boundaries are a specific type of visual support that use furniture arrangement, labeling, and color coding to make the use of a particular space more obvious. For specific steps for implementation for visual schedules or visual supports, please see the related Steps for Implementation: Visual Schedules or Steps for Implementation: Visual Supports in this module.

Step 1. Defining the Need

1. Teachers/practitioners identify visual supports required by learners to acquire or maintain target skills.

Some questions to ask in determining and defining the need for visual boundaries include:

- Is there a safety concern?
- Does the learner have difficulty staying in one place?
- Does the learner know what s/he is to be working on in an area?
- Does the learner have trouble staying in one place?
- Does the learner ever leave a location because of frustration?
- Does the learner ever have difficulty with entering others' work space and or making use of others' work or personal materials?

Answers to these, and other questions, will lead teachers/practitioners to prioritize the need for visual boundaries and make clear the settings in which boundaries will be useful.

Step 2. Defining the Boundary

1. Teachers/practitioners define or establish where the visual boundary is or should be, if it does not yet exist.

Establishing the visual boundary will support learners so that they know where things begin and end, where they should be during a specific time of day, and what tasks or activities to do in a specific area or setting.

2. Teachers/practitioners use natural physical boundaries, objects, and furniture to clearly designate the boundary area

Some ways to do this include using furniture (e.g., tables, chairs, cubicles, wall partitions) to block off a particular area. When furniture is not available or it is not convenient to rearrange, you may use tape on the floor and wall to designate an area. Another strategy is to get a section of carpet in the size of the area you want to designate and use it to mark the boundaries. Labels

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may be used to individualize an area as well. For instance, in classrooms that have desks and cubicles for students to use for independent work time, the teacher may allow students to make a name sign to hang on their desks or on the wall over their desks. In some situations, it is appropriate to allow learners to decorate their own area, another way to define a boundary.

Step 3. Teaching the Boundary

Some important points to remember when helping learners recognize and use their own visual boundaries include the following:

- it is only through use of boundaries that learners will find them meaningful;
- it may take time for learners to incorporate appropriate use of visual boundaries into their ongoing routines;
- some visual boundaries will be temporary, others may be used indefinitely; and
- pairing obvious aspects of the boundary with language or aspects of the activity done in that area will help learners make meaningful connections between the space and their own actions.

1. Teachers/practitioners introduce the learner to established boundaries.

Once the boundary has been defined and visual supports have been put in place, it is important to introduce the learner to the boundaries (even if the learner is not new to the setting or the required activities of that setting). Teachers/practitioners may walk with the learner into the boundary area, pointing out the more salient aspects of the boundary and linking them verbally to activities done in that area. For example, Mr. Davis may walk with Bob as he enters the classroom to his desk and cubicle area and say, "Look, Bob. We hung your nameplate on the wall over your desk. This is where you sit to read during silent reading time." Another example might be a class-related boundary. Ms. Roark may point out to an entire class, "These black tables are where we do experiments in science. When we do experiments, it is important to stay at the black table until I check you out for the day."

2. Teachers/practitioners use modeling to teach the learner to stay within the boundary.

Teachers and other learners can model the appropriate use of boundaries. In a preschool or elementary classroom, the teacher might say aloud, "When I want to play with trains, I use the train table. The trains and tracks have to stay on the table until I am finished playing. Then they go back in their box." Video modeling may be an effective method for demonstrating and providing mental rehearsal of the use of a specific area. For instance, older learners who work in a cafeteria might prepare for work by watching videos of themselves using the automatic conveyer belt and hand sprayer to wash dishes in one section of the kitchen. A voiceover can be added that points out the appropriate behaviors for that area.

3. Teachers/practitioners model and use reinforcement when learners stay within the boundary.

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Just as it is appropriate to model the correct behavior and use of a specific area with visual boundaries, it is good practice to also model the reinforcement that goes along with it. For learners who may use a special piece of furniture such as a train table, the teacher can provide verbal praise for use of the equipment and for cleaning up afterward. In a work setting, the supervisor can model verbal praise and point out the aspects of the job well done in a certain area. For example, "Joe, you stayed at the dishwasher for half an hour and now you are caught up on the dishes. Good work!"

4. Teachers/practitioners model and use corrective feedback when learners do not stay within the boundary.

When learners do not use designated areas appropriately (e.g., sleeps instead of reading at his desk) or does not stay in the designated area (e.g., leaves the group table before group time is finished), it is important for the adult in charge to give calm and specific correction. In the first example, the teacher might wake up the learner and remind him, "Your cubicle is not to sleep in, go get a drink of water and then come back and read." For a learner who has previously demonstrated the correct use of the visual boundary, the teacher might give a more indirect prompt by asking, "What are you supposed to be doing at your cubicle during this time?"

An important part of corrective feedback is to follow through with directions and expectations. For instance, if the learner is sleeping at his cubicle, where he was sent to read, it is not enough to wake him up and ask him what he should be doing. Even if he gives the right answer, be sure to stay there or pay attention long enough to ensure that he turns his attention toward the appropriate activity. When he does, be sure to praise him for doing the right thing. If he does not, you may have to repeat the correction. *Hint: For some learners with ASD, breaking up the routine they are stuck in may help get them back to the correct behavior. So, sending the sleepy student for a drink or having him complete a short moving task may be enough to redirect him. Just be sure to not let learners get distracted and not follow through with the appropriate use of the space.*

5. Teachers/practitioners are consistent with boundary settings.

This may seem straightforward, but it can sometimes be tempting to allow learners to waver "just this once." For many learners with ASD, consistency is an important part of their organizational structure. It can become confusing to them if an area that has a designated use and clear visual boundaries is allowed to be used for too many activities. Therefore, it is important for staff to remain consistent in expectations, reinforcement, correction, and follow-through of the use of visual boundaries.

Step 4. Evaluating Success

1. Teachers/practitioners collect data on learners' use of boundaries.

Data should be collected on the learner's use of visual boundaries. Information can be gathered on how much time a learner spends in an area, how much of that time is spent engaged in the

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designated activity for that area, and how much support (e.g., prompts, reminders) the learner needs.

2. Teachers/practitioners collect data on learners' related target behaviors.

Data should also be collected on the learner's target behaviors that are related to the use of visual boundaries. This may include time on-task (or off-task), time spent in the area and on appropriate activities, the amount of self-stimulation in which a learner engages, the amount of work completed, etc. This information will be helpful in determining the effectiveness of the visual boundary as it relates to learner behaviors and goals.

3. Teachers/practitioners make data-based decisions regarding the effectiveness of established boundaries.

Data gathered on the use of boundaries and their impact on learner behaviors or goals can be utilized by case managers and other staff to determine frequency, type, and amount of instruction a learner needs to meet goals. These data may also be used to make instructional decisions related to the use, discontinued use, or expansion of visual boundaries to support the learner across the day, tasks, and settings.

4. Teachers/practitioners monitor on-going effectiveness of boundaries and their impact on learner behaviors.

Long-term monitoring of the effectiveness of visual boundaries is an important part of the successful use of this evidence-based practice. Often, we use techniques or strategies because they have always been there, regardless of how effective they are. By collecting and using data to inform instructional decision-making, we can make the best use of our time and the time of our learners and their families, as well as capitalizing on strategies and supports that promote success. Sometimes visual boundaries have positive effects on learners who were not being targeted by the intervention. For example, for a specific learner, we may use visual boundaries to highlight that a specific table is used for group time and find that other learners catch on and model the appropriate use of the table for the learner and for one another.