

Using Visual Supports with Individuals with ASD

An OCALI Parent Package



 educational service center
of central ohio
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Welcome to the presentation on using visual supports with individuals with ASD. This presentation is part of the Ohio Center for Autism and Low Incidence's (OCALI) Parent Packaged materials series; materials designed to be used by parents and parent groups to increase knowledge about topics important to families of those with disabilities. These materials were developed by the expert staff at OCALI with funding from the Ohio Department of Education, Office for Exceptional Children. For further information on all the parent packaged materials please contact Donna Owens, family and adult services administrator at OCALI, 614-410-0381 or donna_owens@ocali.org

Objectives

- Participants will be able to identify common visual supports
- Participants will be able to describe the benefit of visual supports for individuals with ASD

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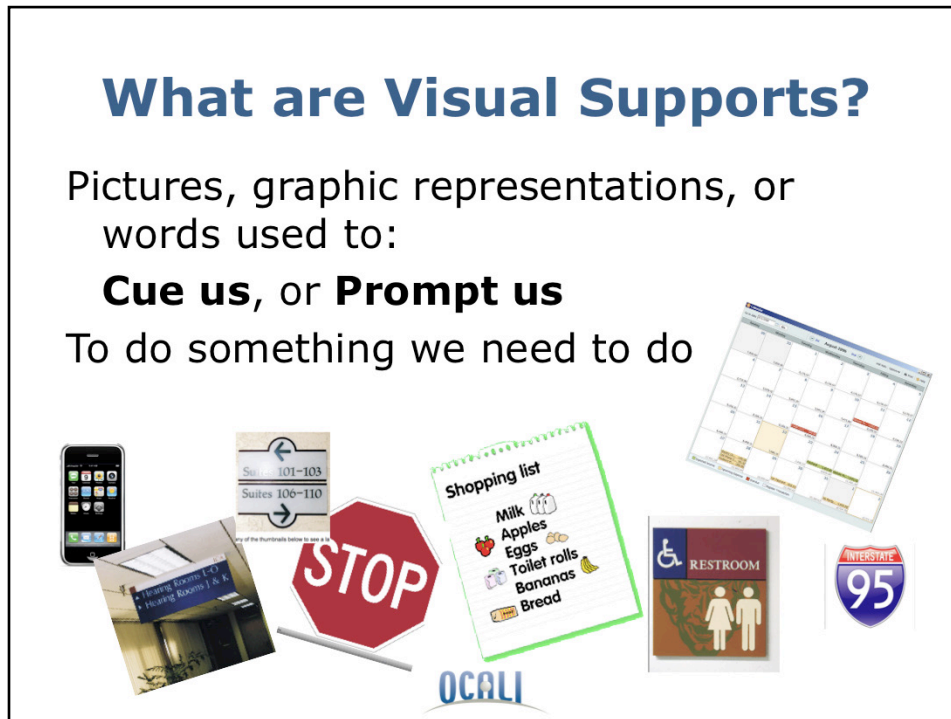
The objectives for this training are listed here. We hope in your time spent today we can help participants become more aware of visual supports and how they can be used to support individuals with ASD.

What are Visual Supports?

Pictures, graphic representations, or words used to:

Cue us, or Prompt us

To do something we need to do



Our session today will focus on visual supports for individuals with ASD. Visual supports can be anything presented visually to cue or prompt us to do something we need to do. These supports occur all through our every day life. They can be signs on the freeway letting us know when to exit, or calendars and clocks that prompt us about time and appointments, they can be as simple as the STOP sign, that tells us to stop. Visual supports are any tool presented visually that supports the individual as he or she moves through the day.

What are Visual Supports?

“A tool that enables the child to keep track of the day's events and activities and at the same time helps him or her to develop an understanding of time frame and an appreciation of environmental sequences.”

Diane Twachtman-Cullen (1995, p. 145).

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People with ASD may have a strength in visual perception. You may have heard that individuals with ASD are “visual learners”. In addition to the strength in the visual, they may also have deficits in “auditory processing’ or listening to and comprehending verbal communication. It might appear that they are “tuning out”, or they may only retain the last things said at times. In addition, they can have difficulty shifting their attention from one activity to another. These difficulties can make the environment confusing with lots of distracting information coming at the individual; it can be very overwhelming.

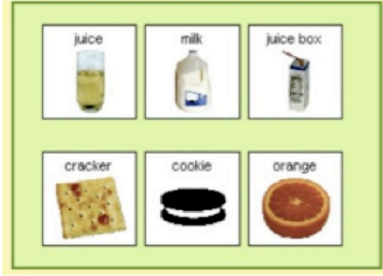
Visual supports build on the strength in the area of visual perception and can become an important factor in helping the individual meet the expectations of their current environment. Visual supports provide structure and grounding – something to focus on and help sort through the environmental “noise”.

Visual Supports Can Include:

- Pictures
- Written words
- Gestures
- Schedules
- Scripts
- Timelines
- Objects within the environment
- Arrangement of the environment
- Visual boundaries
- Maps
- Labels

The OCALI logo is located at the bottom center of the slide. It consists of the word "OCALI" in a blue, sans-serif font, with a stylized blue and yellow graphic element underneath the letters.



Visual supports can include any of the items listed on this slide and I am sure there are many more we have not listed here. Pictures, written words, gestures, schedules, scripts, and timelines are just a few of the many possible visual supports. Visual boundaries can be created through a variety of means including furniture arrangement, labels, and color coding. Labeling can be done using pictures or words. The idea is to match the visual support to what the individual might need, be it photos, words, graphics – whatever works best for the individual.



Making food and drink choices visual and available can:

- help the individual communicate his wants and needs and
- allow you to control the options that are available at certain times of the day

Visual supports also work in the community



Examples of visual supports. The top picture is an example of a visual support that may be used in any environment. This is just one example and these tools should be modified and individualized based on the needs of the individual and the environment. The bottom picture is an example of a visual support that is used within the community. After a restaurant is chosen, then visual food choices within that restaurant can be presented to the individual with ASD. There are so many pictures available on the web the options are endless!

What Can Visual Supports Do?

Help individuals with ASD:

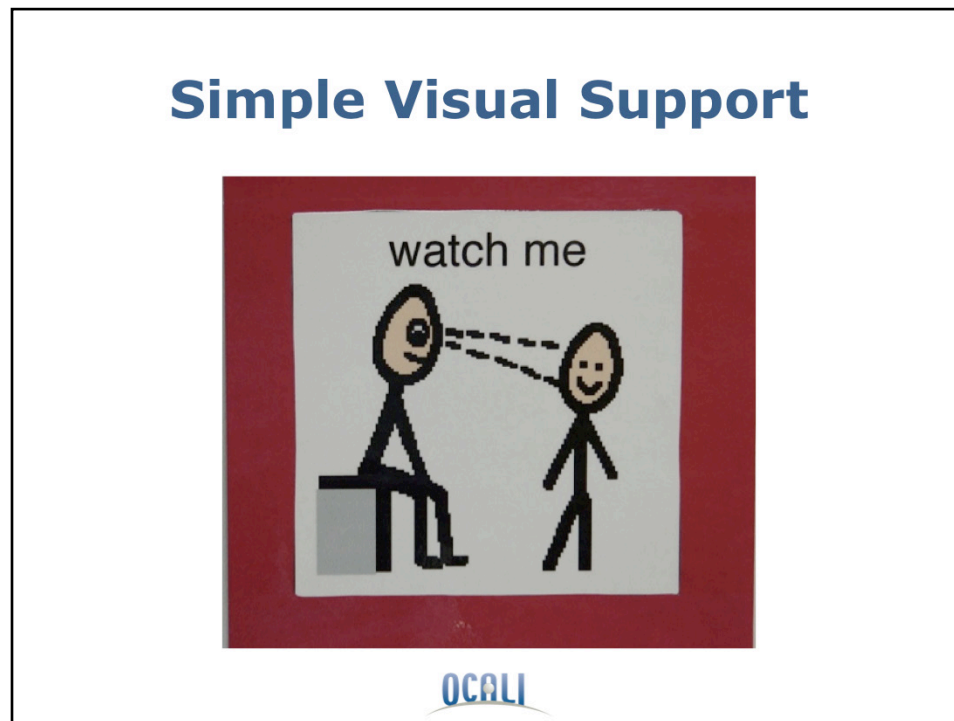
- Complete more tasks by themselves therefore increasing independence
- Learn more rapidly
- Demonstrate decreased levels of frustration, anxiety and aggression
- Adjust more readily to changes in their environments

Savner & Myles, 2000

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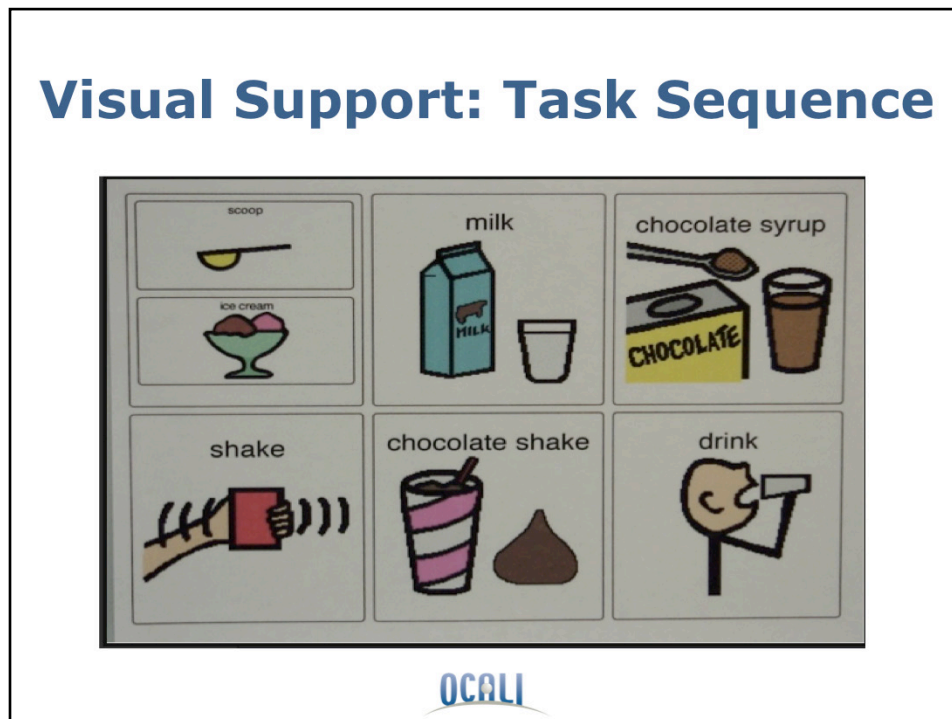
Individuals with autism spectrum disorders (ASD) learn in a variety of different ways, but research has shown that they demonstrate strength in visual learning. To play on this strength parents and professionals have developed visual supports for individuals with ASD. Put simply, visual supports make auditory information visual. Visual supports organize a sequence of events, enhancing the individual's ability to understand, anticipate, and participate in those events. Visual supports supplement verbal instruction, clarifying the information for the individual and increasing comprehension. Visual supports can be used to cue communication, providing reminders of what to do and say in a situation.

Using visual supports can help individuals with ASD be more successful in what is often a confusing world. Visual supports can help individuals with ASD in four specific ways. These include (read bullets on the slide).



Technology has increased our options in developing visual supports. This example was developed using a software program called Boardmaker that is carried by Mayer Johnson. It has both black and white and color representations of many commonly used visual cues. Even a simple support like this one would require some prompting or instruction by the user. The language on the visual support is also important. Adults would need to match the verbal direction they are given to what is written on the visual support and try to keep that language consistent for the maximum benefit for the individual with ASD. This visual support could be used in many different environments. For example, a teacher could use this in her classroom or a parent could use it at home. It could also be used in the work or community setting.

We use this simple visual support example to showcase another important consideration with the use of a visual support. Color is a visual cue too. The color RED usually means STOP or “you can’t do that now”, the color GREEN is usually associated with “GO” or “this is something you can do now”. Carefully consider what colors you use to back your visual supports. The use of RED with this picture is not the best option. BLACK backing is the most neutral when creating a visual support.



Visual supports can be used to help the individual with ASD understand the sequences in any task. This is an example that lays out a task sequence for making a chocolate shake. There are cookbooks on the market that are comprised of these types of visual sequences – many also contain photographs. Again the idea is that the visual is a “support” to level the playing field for the individual with ASD so being as creative as you need to be, and matching the visual support to the need of the individual is essential.

Visual supports are not a miracle cure though. As with anything, to use it effectively, you must learn how. Teaching and practicing using the visual support are part of the process. This is a repetitive process for many individuals with ASD, and something that will need to happen in each of the environments you would like the visual support to be used. If it works at home, try it in the school, work, or community setting to help the individual generalize the use.

The great thing about visual supports is that they help most everyone no matter what their strengths or challenges. Think about how many times you used a visual support today...a road sign, a stop sign, a menu at lunch, etc.

Environmental Visual Supports

- Providing visual boundaries can be important
- Visual boundaries can be created by:
 - Furniture arrangement
 - Labels
 - Color coding
 - Using carpets or rugs to define a space
 - Using colored tape to define an area



Visual supports can structure the environment for individuals with ASD. Places where we live and work are clearly defined with visual boundaries. Homes have walls, yards have fences and sidewalks, parking lots are usually paved in black. Cubicles are used within businesses, cashiers have their own stations in grocery stores and booths are used in restaurants; boundaries are well defined. These allow many of us to have increased structure in our daily lives. This increased environmental structure can really help an individual with ASD move through their environment.

Areas within the classroom, home, or work environment that may need visual boundaries include play areas, group areas, break areas, and work areas. Within the home, boundaries may be needed for areas where toys can be used, designating spaces where food is and is not allowed (e.g., the workshop or office), places to get dressed, and areas that are accessible only with adult supervision.

Establishing a visual boundary will help individuals understand (a) where things begin and end, and (b) areas that are accessible without supervision.

Setting Up Visual Boundaries

- Define the need
- Define the boundary
- Teach the boundary



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When setting up visual boundaries it is important to define the need, define the boundary and then teach the boundary.

Here's a case study about setting up visual boundaries, both in the classroom and on the playground, to help a 5 year old with autism understand where he needed to be.

Case Study: Sam

Sam is a 5-year-old boy with autism who attends a special education classroom. Sam frequently leaves an area without permission or supervision. Staff members felt that **Sam did not understand where he was required to be**, and thought that defining boundaries might help Sam learn. **They used colored tape on the classroom floor to visually define areas of the room for Sam.** This worked within the classroom.

One day when recess was ending, **Sam did not line up with the other children and ran away from the playground.** When the staff tried to redirect Sam to line up, he ignored them and ran towards a nearby parking lot. The staff felt that some of the visual boundary strategies that had proven successful in the classroom might be effective on the playground as well. **There were already railroad ties around all the playground equipment, forming a natural boundary. Sam was taught that once he was inside the railroad ties, he had to remain there until the bell rang.** He was also instructed to wait for a staff member or a classmate to walk with him to the door of the building-never to take off on his own.

Note that once the boundaries have been put in place, an important step is **directly teaching the individual** what the boundaries mean.

Visual Labels



Visual supports can range from simple to complex based on the needs of the individual with ASD. Among the simplest visual supports are labels and locators. Labels are another type of visual support. Labels are used in many aspects of daily life. Think about the last time you had to use a public restroom. Were the restrooms clearly labeled to identify them by gender? Probably. Did you even think twice about which one you had to go into? Probably not.

In the first picture Josh's next task, a puzzle, is labeled with his name. In the picture below it, Grace's picture is used instead of her name in print. Her picture could be used in the same way as Josh's name, to label a task or it could be used to mark her locker, bin, or desk. A person's name or face is often one of the easiest labels for the individual with ASD to recognize.

Labels are used in this kitchen to mark what can be found where. Labels are used to identify important features in the environment. For an individual with ASD, labels assist in organizing environments.

Most of us use labels in our day-to-day lives without a second thought or any effort on our part. Much of our world is already full of visual supports - like signs and labels - to help make the right choices and to interact appropriately in the world around us.

Labeling can...

- Increase independence
- Increase individual responsibility for belongings
- Help the individual easily locate needed items
- Give the individual have a sense of security increasing predictability and organization in the environment



Labels and labeling serve many important functions. For example, labeling can help teach matching or help the child function more independently.

Visual supports, including labels, can be made from Boardmaker™ or Picture It™ and Snag It™, software programs of pictures. They can also be made by hand, from photographs or from magazine pictures.

Remember the labels are for the individual with ASD so it is important to think of them when designing the appropriate label. Placement of the labels is very important as well.

Consider this example:

Ms. Jones was a first year teacher working in a class for kindergarten and first grade students with ASD. She was extremely enthusiastic and wanted to ensure that she was using all the best practices for interventions with her student. Within the first few weeks of school she called in her mentor teacher to get feedback on her classroom set up. Ms. Jones had many visual supports in place around the classroom. Individual visual schedules were on the wall for the students, she used visual boundaries around the room to designate areas, and she was using stop signs and go signs for indicating when materials were or were not available to the students. One visual support that was not quite working was the stop signs she had placed on her cupboards. Aaron, one of her students, continually went into the cupboards even when the "stop" sign was on the cupboard. Ms. Jones' mentor observed the class and immediately figured out the issue.

When Ms. Jones placed the "stop" sign on the cupboard, she had placed it at HER eye level. Her mentor moved the "stop" signs down to the eye level of the kindergarteners in her classroom, and Aaron instantly became upset – because he finally understood that the "stop" sign was meant for him.

Remember to consider who you are making the label for when using it as a visual support!

Strategies for Teaching Labels

- Develop items within the home, school, community or work environment
- Point out signs or labels when walking through school or community settings
- Teach the meaning of the label across a variety of settings.
- Be sure to use the same label on the individual's visual schedule as used to label the object, center, or activity.



There are several strategies for teaching labels. For example, when pointing out signs or labels, pair your pointing with a verbal cue; that sign says “exit”. Exit is where you go to leave the building.

When using labels for activities, be sure that the label on the activity is the same as the label on the individual's visual schedule.

Setting Up and Reviewing Labeling Systems: Important Questions

- Can the individual match objects or be taught to match objects so he can find what he needs?
- Does the individual understand the labeling system?
- Is the system consistent and appropriate for the individual's functioning level?
- Is the system "user friendly" for the individual?



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Labeling systems need to be reviewed periodically to determine their effectiveness. In order to review the system is it important to ask labeling questions such as does the individual understand the label system or can the individual match objects or be taught to match objects so he/she can find what they need?

Teaching the individual with ASD to use visual labels to help organize and control his environment can reduce his frustration and stress levels and increase his success in the future.

Locators

A visual locator can help individuals with ASD process where a favorite person is more readily than if just told.



A visual locator makes the information more concrete and memorable. It can help with abstract concepts like TIME. The visual format of a locator also allows the individual with ASD to refer back to the visual support as often as needed to reassure themselves and reduce anxiety.

Case Study: Johnny

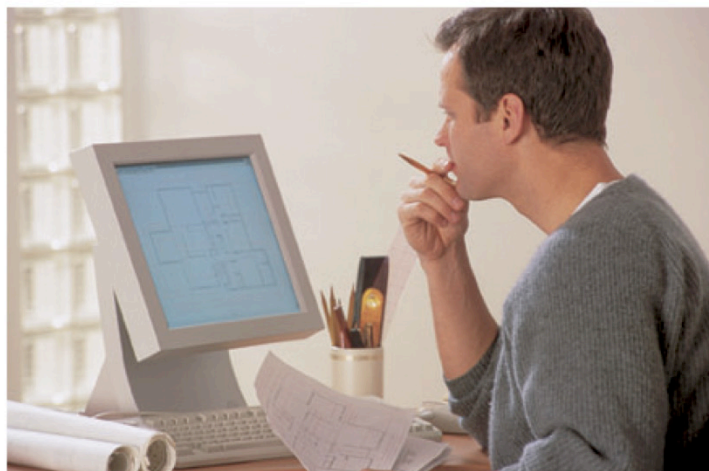
Johnny is always asking "Where's Daddy?" He asks over and over repeating the same question. His mother has tried to verbally tell him that Daddy is at work, but because Johnny has not been to work with his father, this answer does not satisfy him.

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Case Study: Johnny

Johnny is always asking "Where's Daddy?" He asks over and over repeating the same question. His mother has tried to verbally tell him that Daddy is at work, but because Johnny has not been to work with his father, this answer does not satisfy him.

“Where’s Daddy?”



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To help him understand what "Daddy is at work" means, Mrs. Frank took a picture of "Daddy at work". When Johnny asked "Where's Daddy?" she showed the picture to Johnny. She talked with Johnny about Daddy sitting at his desk and working on the computer. Johnny now says, "Daddy is at work at his desk on the computer". His anxiety about where Daddy is appears to be reduced.

Other similar pictures can be easily incorporated in order to help the individual gain the necessary understanding of things that they cannot necessarily see or experience.

Calendar Locator

This type of calendar can help individuals anticipate where they will be on each day. You can imagine a home calendar with additions like “church” or “birthday party” or “Grandma visits.”

February 2004						
1	2	3	4	5	6	7
home	school	school	school	school	sick	home
8	9	10	11	12	13	14
home	school	snow day	school	school	school	home
15	16	17	18	19	20	21
home	school	school	field trip	vacation	vacation	home
22	23	24	25	26	27	28
home	school	school	school	school	school	home
29						
home						

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Calendars can serve as visual locators for individuals with ASD. They can help with questions such as “When will it be Friday?” It can help individuals understand how many days are left before they can have a break like a weekend. When using the calendar as a locator, it is important to limit the information on that particular calendar. Presenting too many different types of information that serve diverse purposes can make it overwhelming and less effective as a visual support.

Visual Schedules

- Visual schedules display planned activities in the order in which they will occur using symbols, words, pictures, photographs, icons, or actual objects
- The mode of the schedule is determined by the needs of the individual with ASD

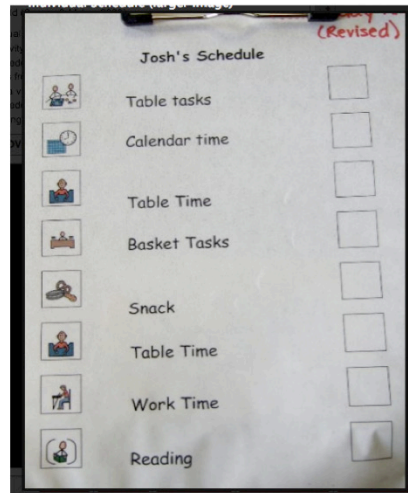


Visual schedules clarify expectations during a specific time period or activity, particularly if the activities are familiar. In addition, visual schedules help the individual move from one activity to the next with less frustration.

Visual schedules helps individuals shift their attention from one activity to another and the exact mode of the schedule is determined by the needs of the individual. Using the term “visual” doesn’t mean that the schedule has to have pictures on it.

How many of you use a planner or the planning function on your phone? That is a visual schedule. Think about matching the needs of the individual to the type of schedule they might need.

Visual Schedule

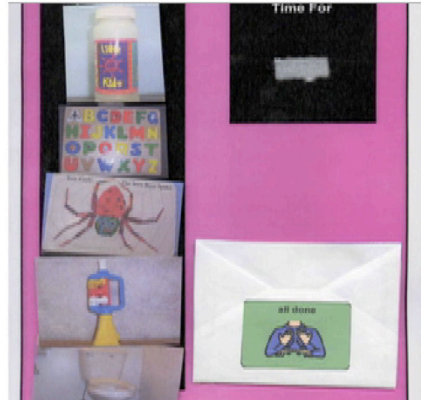


The most common type of visual schedule is one that is designed for an individual. This is Josh's schedule.

Note the blank squares on the schedule. These squares provide a place for the individual with ASD to check when the item is complete, thus providing increased structure and helping with transition to the next activity.

Individual Schedules

- This individual schedule has a list of activities in order of their occurrence
- Notice that the schedule cards are simple pictures with a plain background



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Individual schedules are as unique as each individual with ASD. We are going to show you some examples of individual schedules and how they might be used with an individual with ASD. This is an example of a visual schedule using pictures. There is a box for “time for” included on the schedule. So when it is time for puzzles, the puzzle picture would be moved to that black square. When the activity is finished, it would go in the envelope labeled “all done”. This is just one example of an individual visual schedule.

Object Schedule

An object schedule
uses an object of
the environment to
represent each
activity.



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This is an example of a miniature object schedule. An object schedule uses an object of the environment to represent each activity. After the child demonstrates that they understand the object schedule, you can move to a more sophisticated form using pictures.

Case Study: Andrew and Jack

- Andrew has Asperger Syndrome
- His mother and Jack's mother decide that Jack will carpool with them two days a week
- Andrew is upset when Jack gets in the car and tells him to get out

The OCALI logo is located at the bottom center of the case study box. It consists of the word "OCALI" in a blue, sans-serif font, with a small graphic element below it that resembles a stylized wave or a bridge.

Andrew is a 4 year old with Asperger syndrome. He attends a community preschool class 5 days a week. His mother wants to encourage social skill development and has gotten to know some of the parents who have children in the preschool. She has become good friends with Jack's mom. They live around the corner. Jack only attends the preschool 2 days a week. The mothers decide that a carpool arrangement might encourage some socialization with the boys. Andrew's mom picks up Jack the first day, and Andrew proceeds to cry and scream from the time Jack gets into the car to the time she drops both boys off at the preschool.

Case Study Continued

- Hoping to solve the problem and lessen Andrew's anxiety and/or anger, his mother makes an individual car schedule for Andrew
- Pictures show the days when Jack will be in the car
- The schedule hangs right in front of Andrew's seat in the car

The OCALI logo, featuring the word "OCALI" in a stylized blue font with a small graphic element below it.

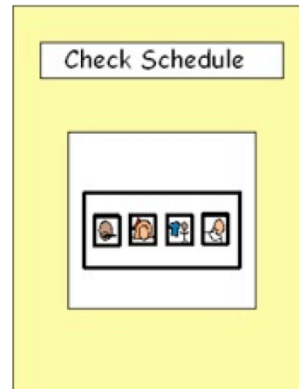
But Andrew's mom is not one to give up!! She knows that visual supports have worked with Andrew in the past, so she decides to try a visual schedule for Andrew. It includes pictures of when Jack will be in the car. She also puts a label with Jack's picture on Jack's seat in the car on the days that she will be carpooling with Jack. It works!! The schedule and the label deescalate the behavior. Andrew knows when to expect Jack and where he is supposed to sit in the car.

More examples of individual schedule use...

The following example is divided into 3 steps or parts.

Part 1

A “check schedule” card is kept right next to the schedule. When it is time for the student to transition to the next activity the card is handed to the student with the request to “check your schedule.” The student will bring the card back to the place where it belongs, thus bringing him to his schedule.

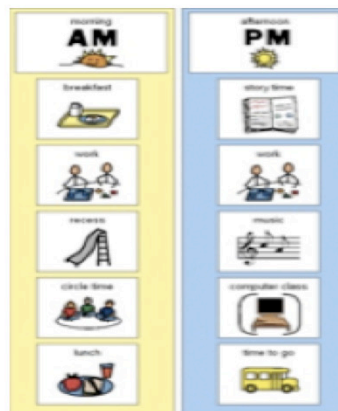


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Sometimes individual schedules are kept in a central area in a classroom, home, or work setting. The individual with ASD will check the schedule periodically throughout the day to transition from one activity to the next. A “check schedule” card provides a prompt to alert the individual as to when he or she should be checking the schedule. This allows the adult to provide individualized schedules within a group environment, for everyone in the group.

Example #1 –Part 2

Once the student is at their schedule they can be cued or physically assisted to take the next card on the schedule.



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Note that this particular schedule is divided into AM and PM activities that are color coded for the time of the day. A visual cue built into a visual schedule!!!

Example #1 – Part 3

The picture in their hand tells them where they are going. A “receiver envelope” is kept at the site where the activity will occur. The student puts the picture in the envelope and then he is right there where the activity takes place – transition complete!



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Notice the pocket or “receiver envelope” for the card taken from the schedule. So a coordinated effort has been made around the room or throughout the building to assist with the transitions on the individual schedule. Matching is a required skill for these types of schedules.

Example #2 – Special Days and Activities



- Don't forget party days, field days, and any other unusual days
- For those unexpected activities which can occur any day it is handy to have a "surprise" card (i.e., a solid pink card) which can be put on the schedule to signal a change
- You will find that a change in schedule is usually OK if the student is prepared

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This schedule includes special events. It is an example of a schedule that combines words and pictures.

Example #3

This schedule clearly communicates what needs to be done. It can be attached to a notebook or clipboard so that it is portable and easy to use.

As each activity is completed the card is moved to the "All Done" column. Be sure to schedule activities the student enjoys, to keep them interested and motivated.

Things to do.	All Done
<input type="checkbox"/>	Warm-Up
Work Task	<input type="checkbox"/>
Break	<input type="checkbox"/>
Community	<input type="checkbox"/>
Lunch	<input type="checkbox"/>

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This is a word based schedule that is portable. It can be attached to a notebook or clipboard.

It is important to remember the age and functioning level of the student(s). Because there are no pictures, this schedule would be better suited individuals who read.

Group Schedules

- Group schedules display the activities of the group
- Group schedules should be in a central location
- Each transition can emphasize the importance of the schedule
- One student can be chosen as group leader to get the schedule card to take to the assigned group location



Group schedules display the activities of the group and should be in a central location. A group can be the whole classroom or groups within the classroom. Group schedules can use symbols, words, pictures, photographs, or actual objects.

A group schedule could even be used in the home, for example there could be an overall family schedule that is displayed.

Even if you don't think the individuals in the group are using the schedule.... They are!!

Mrs. Cahill put a class schedule up in her classroom on the first day of school. She color coded the activities students left the room for like library, lunch, and computer lab with a blue background, and activities held in class with a yellow background. After having the schedule up for a couple weeks she decided to take it down and use the space for other things. She had not noticed the class using it and didn't think it was needed. The next 10 students in her class asked where the schedule was. She noted a more chaotic environment in the classroom around transition time, and the 3 of her students kept asking her all day what was going to happen next. Although she was not aware of the importance of that schedule – it was really important to the students in her class. Needless to say, that schedule was back in place the next day and has been up there ever since.

Pointers for the Group Schedule

- Use color within the schedule: one color for classroom activities, another for activities outside the classroom
- Develop a symbol for unexpected activities
- Use magnets or Velcro to make the schedule flexible

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Remember, the sophistication of the schedule should match the requirements of the group or individual.

Visual Supports Points to Remember

- Individuals need to be taught to use the visual supports in their environment
- It is only by using visual supports that individuals will attach meaning to them
- Results may not be immediate, it can take days, weeks, even months

STICK WITH IT!

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This slide lists some important points to remember when implementing and using visual supports.

Points to Remember

- Visual supports should be age appropriate
- Consider their size and portability
- Help individuals attach meaning to the visual support, pair its use with spoken language—match key words and phrases to the object, picture or action

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More important points to remember.

Points to Remember

- The more stressful the situation, higher the anxiety level, the more need for visual supports—using visuals allows the you and the individual with ASD to communicate without adding to their level of stress
- Visual supports promote independence by providing a means of communication and a sense of order and control for the individual with ASD

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Even more points to remember.

When we present
information verbally, the
words are available for a
brief moment

When we present
information visually it
can be there for as long
as the individual needs it



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In Summary, Visual Supports can..

Help individuals with ASD:

- Complete more tasks by themselves therefore increasing their independence
- Learn more rapidly
- Demonstrate decreased levels of frustration, anxiety, and aggression related to task completion
- Adjust more readily to changes in their environments

(Savner & Myles, 2000)

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Thank you for your participation today. We hope you have enjoyed this presentation on the visual supports.