"I See What You Mean!"
Using Visual Tools to Support Student Learning

by Patti McVay, M.Ed., Heidi Wilson, and Luci Chiotti

Somehow, somewhere, your day spun out of control. You missed a dentist appointment, got lost going to a new area of town, and could not remember the name and phone number of the person you were supposed to meet after school. At the grocery store, you forgot what you had to buy for dinner and took 10 minutes looking for the car in the parking garage because you forgot to look and see what level you were parked on. It was an awful day. It all started when you left your day planner at home.

In this scenario, your day planner contains all your visual tools: calendars, maps, lists, phone numbers, and big red stars drawn next to important meetings all help you through your day. The signs marking the floor and section where you park your car are visual cues to help you find your way back. Without them, all the floors and sections look exactly the same.

There is a myth I often hear claiming visual strategies and tools are used by only the most in need: people with disabilities, people who cannot be left alone, or those who aren’t highly successful. With that in mind, take a moment to look around you and notice all the visual strategies and tools you use each and everyday.

Here are a few of the visual tools I use:

• I can’t get through my morning without referring to my calendar and schedule to make sure I’m on time for that next meeting or activity.
• I’ve tried several times to get a few groceries on my way home without my shopping list and always forget key ingredients.
• I wear a watch and usually have at least 2 more clocks within view to help me know my place in time.
• When I’m learning something new, I take notes and star key points to go back and review.
• I often draw diagrams and pictures so I’ll remember the steps to take.
• I write a list of questions for my doctor to take with me to my appointment. She is now used to my list. Without it, I forget my questions because the visit is stressful for me.
• I have one list of things-to-do I keep on my desk at work and one at home.
It’s All About the Kids

There are few parents of children with disabilities in Oregon who have not heard of the magic of Patti McVay, Heidi Wilson, and Luci Chiotti and the Outreach Center for Inclusive Education in the Multnomah Education Service District (MESD). In fact, I run into parents and professionals who know these women all over the country. Those who are fortunate enough to work with them know what I mean when I say, “they work miracles in any situation, no matter how dire it appears.”

I first met Patti many years ago when my son was a baby. My mother, a vision specialist, took me to Patti’s presentation sharing her experiences at a program in Canada learning to conduct Circles of Friends programs for children. She was an educational assistant then, exploring the dream of inclusion with appropriate support. But it wasn’t until Andy was in the third grade that I experienced the “magic” of child-centered planning and visual tools designed for success. Through a grant from the US Department of Education, Patti, Heidi, and Luci, the authors of this article, crossed district borders to share their years of experience and techniques to support students in general education settings with my son’s team. Tools that once were housed in the trunk of a car had evolved into effective, attractive, easy-to-use materials to differentiate instruction visually for all types of students. Tools my son needs to be successful.

Patti, Heidi, and Luci have been instrumental in encouraging me to see situations the way Andy sees and experiences them. When they observed him at school, they saw his intuitive nature, subtle communication, and dry sense of humor. They illustrated over and over how much he had in common the other kids in the classroom with data from their observations. Working with them, learning from them, and being accepted by them as an equal and pivotal member of the team supporting Andy has changed the way I look at school situations for all children. I am but one of many people—kids, parents, and professionals—changed in this process.

The grant has ended, but we continue to work together both for Andy and on other projects. Among these activities, the most valuable is designing and implementing various visual tools at school and in our home. In the next two issues of Disability Solutions the Supported Education Team will share the nuts and bolts of designing and implementing visual strategies. This issue primarily looks at the process of investigating and designing visual tools for students when there is a problem to solve. Part two of this series will include examples of visual tools designed for curricular adaptations, learning skills, planning the day, sharing information, and much more for both school and home.

The experience, work, and talent of these three women and their team of teachers and educational assistants has changed the quality of my family’s life and countless other families like yours and mine in Oregon and across the country. When I ask them what motivates them, the answer is unanimous: “It’s all about the kids.” You know what? It shows.
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- I have a friend who does not use a day planner or notepad. She uses a palm pilot to keep all her calendar, contact information, and meeting notes, and to-do lists.
- I keep a checklist of the things I need to gather to do my taxes each year in my file drawer.

When you look around now, do you see more “visual tools” that you use? What would you do if you did not have these tools, but instead had to rely on hearing your schedule once each day or listening to complex instructions? Think about your child and all the information he receives each day at school and at home. Without visual tools, information and instruction your child receives is provided verbally. It is easy to forget how many tools we have in place to help us move throughout our day. As a result, we expect children to somehow know what to do and remember what is happening each day without concrete, tangible information.

Defining Visual Tools & Supports

Visual tools, strategies, and supports are things we see that enhance our organization, comprehension, and communication. Visual tools are signs, objects, printed words, post-it notes, symbols, drawings, or colors. Anything that gives a message and often simplifies it for easier access is a visual tool.

Research about communication shows communication is:

- 55% visual (gestures, body movement and posture, handouts, calendars, or environmental cues).
- 37% vocal (intensity and tone of your voice, or rate and volume of your speech).
- 7% the actual message.

From: Visual Strategies for Improving Communication by Linda Hodgdon

Using visual strategies, tools, and supports is simply taking advantage of the 55% of communication that is visual to augment the other 45% that is not.

The Purpose of Visual Tools & Supports

There are many reasons to consider using visual tools or supports for children at school and at home. One of the most compelling reasons is that visual tools do not disappear. Information provided verbally can begin and end before your child has a chance to understand it, let alone begin to act on it. The information a visual tool provides is available to your child until he has had a chance to process its message and is able to take action.

Every week my team receives phone calls asking for help with children whose behavior is challenging to their teacher and classroom. In fact, concerns about a student’s inappropriate behavior is the primary reason people call to ask for our help. The concern might be that the student is making “inappropriate noises,” not participating, or is acting inappropriately with fellow students. Often the goal of the person making the call is to find a way to make the child stop doing something. Often by the time the teacher calls, the situation is urgent and everyone is out of patience, ideas, and hope.

The comments we hear about a student who is having trouble have common themes. When we hear some of the following comments, we know the student may need some visual tools.

“Using visual strategies, tools, and supports is taking advantage of the 55% of communication that is visual to augment the other 45% that is not.”
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for support. Do any of these statements sound familiar to you?

- He can’t understand.
- He is too “low functioning” and can’t keep up.
- He is unorganized.
- He never pays attention.
- He can’t find his stuff on his own.
- He doesn’t have the needed (pre-requisite) skills.
- He knows how to do it, he just doesn’t want to or won’t.
- He never finishes work.
- He loses work, permission slips, and money.
- He refuses to do anything we tell him.
- He has a hard time with transitions.
- He only hears what he wants to hear.
- He has that stubborn streak.
- He chooses to be uncooperative.
- He gets frustrated easily.
- He becomes anxious.
- He becomes agitated.
- He is distracted in the hallway and drifts away from the group.
- He “acts out” by hitting people or going through other people’s things.
- He avoids his work.
- He doesn’t need the tools anymore.
- He doesn’t use the tools anyway.

If you have heard or said some of these things about your child, he may benefit from well-planned visual tools.

Often these statements show that a student does not understand what he can do or is expected to do. Therefore, not doing something because he cannot remember what is happening is interpreted as being stubborn, uncooperative, or not listening. Being confused about what is happening may be seen as being too anxious, easily frustrated, or having trouble with transitions. Not understanding how to organize tools or assignments is seen as being unorganized or off-task. Visual tools help students remember what is happening, where to keep things, when to do specific tasks, and what to do.

Using Visual Tools to Support Student Learning

Visual tools are an effective method of providing support for your child. Use and design of visual tools for your child at school should be listed among the modifications and accommodations for your child on his IEP. It’s also important to be sure that teachers know where they can find training and technical assistance for implementing these kinds of tools. This training and assistance should also be listed in the IEP under supports to staff. Here’s an example of how this support can be worded in the modifications and accommodations (or supplementary aids and services) section of the IEP:

- “Access to checklists to manage coursework throughout the day.”
- “Training for teacher and educational assistant in use and design of checklists and visual tools by Supported Education Team.”
- “Access for staff to computer programs to design visual tools including Picture This Professional, Boardmaker™, and clip art.”

Through our experiences, my team and I have learned that well-designed and implemented visual tools have many benefits. The outcomes of visual tools we often see include:

- Increased independence. When a child learns how to use a visual tool on their own, they are less depen-
student on someone else to tell them what to do.

- **Empowerment.** Students feel the power of their new-found independence and success and then reach out and try new things.
- **Increased self-esteem and self-confidence.**
- **Increased access to the rest of the world:** friends, school activities, the general education curriculum.
- **Increased knowledge and method of expressing what they know.**
- **Increased understanding of information and directions.**
- **Meaningful class participation and contribution.** When students know what to do and how to do things, it is easier to participate meaningfully in classroom activities.
- **Decreased separation from peers and classroom activities.**
- **True relationships and friendships develop.**
- **Meaningful class membership.** When students have a way to participate meaningfully, their classmates see them as a member rather than a visitor.
- **Increased success throughout the day.**
- **Increased understanding of peer expectations resulting in increased interactions.**
- **Assistance to adults to provide consistent, organized, non-intrusive support.** The support of a visual tool may go unnoticed and may decrease the need for an adult to be present once in place (though should be monitored and reinforced).
- **Demonstrations of meaningful outcome in educational, social, and skill-related activities.**

The benefits of well-planned and implemented visual tools are often dramatic. Something as simple as a checklist and individualized classroom schedule sometimes eliminates the problem behaviors that were once challenging the student’s placement in a classroom. We would like to share a few stories to illustrate how visual tools can make the difference for a student.

**Shaun**

Shaun began the school year using picture schedules to help him understand what activities were coming up in the day and where the class would be going. He was managing his schedule well and had few problems with transitions or instructions, so everyone sort of “forgot” to use the visuals and they began to disappear. We began receiving reports that Shaun was refusing to do his math or go to lunch with the class. The number of incidents continued to increase, and before we knew it, he was having trouble in almost every part of his day. Understandably everyone, including Shaun, just wanted the trouble to stop.

We visited his classroom to observe and see what was happening first-hand. Watching the daily routine of everyone in the class, it was clear there was a written schedule on the board and the teacher shared the schedule verbally at the beginning of the day. Yet Shaun was still not sure what to expect throughout the day. He wasn’t getting the information he needed to complete activities and assignments from the information on the board. We also saw several other students who were having trouble knowing the schedule during our observations.

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We looked at the day and put the picture schedules back into place. Then we took another step and created picture routines for the daily activities (see Figure 1).

For example, on the page for his math class, the checklist shows getting out math materials, papers to be completed, and options for when his work is finished. One important factor for Shaun is providing choices so he can select within the routine which papers to work on first and which calculator to use.

At first, Shaun didn’t want to use the visuals. He wouldn’t look at them and staff considered not using them. We brainstormed with his teachers and assistants to create a list of ways to introduce the schedules and routines that provide Shaun with the information he needs without getting into power struggles or forcing the issue. Then we included his classmates in the discussion. Some asked to look at the routines and wanted copies of their own.

Some of Shaun’s teachers decided to share the routines and schedules with the whole class to see what would happen. To their surprise, students were less confused and asked fewer questions at the start of each class period. Along the way, Shaun saw the benefit of using his schedules when he saw his classmates use them.

One day Shaun arrived early for math and the schedule was not yet on his desk. He went looking for it and used the tool to get ready for class. I wish I had a picture of his face showing his pride and confidence when he understood he was able to do it all himself even though it was not set out when he arrived. This was the beginning of his awareness of the power in using the tool.

After 2-3 months of learning to use his schedule, he carries it in the notebook he takes from class-to-class, following the routine for each one. He enjoys his independence greatly. When he uses his checklists and schedules to manage his day, he is empowered to make his own decisions and choices and rarely feels pushed into a power struggle with an adult.

**Visual Tools Provide Directions and Information**

Usually people think of visual strategies and tools as picture schedules for the classroom, but they can be used in many other ways. Visual tools provide information, clarify information, organize the environment, provide directions, and share information between places such as home, school, or grandma’s house.

**Chris**

An example of a way to use a visual tool to provide directions is teaching and reinforcing personal rules or social skills. Chris was having trouble remembering the best way to get other people’s attention. He was bouncing balls off people’s heads, pushing, hitting and saying silly things. When he tried to get someone’s attention, people responded by telling him what he was doing wrong. He was constantly reminded of all the things he needed to stop doing that bother other people. He wanted to talk to people, but felt as though he could do nothing right.
First, Chris knew he was always in trouble or being corrected. What he did not know was what he was doing that was right or other acceptable methods to get attention, communicate, and interact with others. When we sat down with his team, I asked his classroom teacher, not the specialists, what bothered her the most? What was creating the most obstacles for Chris? The teacher had three areas she wanted Chris to learn that would greatly improve the atmosphere of the classroom:

- To recognize when he needs help and how to go about getting it;
- How to get someone’s attention to say “hello”; and
- What to do when he is becoming frustrated or upset.

We talked about how difficult it often is for children to recognize when they need help. We also discussed the fact that often what a child experiences is frustration and anger when they need help. They don’t always translate those feelings into a recognized need they can communicate. We need to give students the tools for asking for help as a way to teach the recognition of needing help as well. These lessons go hand-in-hand.

We made cards that showed Chris his choices of words and actions he could use. At first we put the 3” by 5” cards on a ring. Chris flipped through them to find the card he needed (see Figure 2). As he used them, he felt they were too big and cumbersome. He told us he wanted them to be smaller and in a book format he could put in his pocket. We agreed this was a great idea. Chris helped design the cards by choosing colors, fonts, and the pictures he felt looked like how he felt (see Figure 3).

**Kim**

Visual tools are also a great way to teach students skills. One of the most stressful times for students who are new to middle school is learning to open their locker. Even if your child has the fine motor skills to operate the dial and the latch, she must remember how many turns in which direction to make before stopping at a particular place. It’s a very complicated task.

When Kim started middle school, opening her locker was always a challenge. She felt as though it ruined her entire day. We designed a small book she keeps in her backpack or pocket to help her with the combination (see Figure 4).

I shared this story and showed the tool we created with a group of counselors at a training in another school district. They wanted several hundred for new 6th graders. We created a master with a blank area for the specific numbers of the locker and combination. The counselors clearly saw the value of the visual tool for all students, not solely those in special education.

Kim uses other visual tools throughout the day, too. She uses a school-to-home communication book with pictures she checks off in each
class period to share about her day with her family and friends. Her classmates liked her communication sheet so much they helped her choose the pictures for each class. Soon they wanted to add to the information going home. We revised the book to include space for her friends to write a note to Kim’s family about the day. Now Kim shares more about her day from her own perspective and from her peers, rather than just the adult perspective. Her mother enjoys hearing from Kim’s friends and knowing they are an active, meaningful part of her day.

Visual Tools Promote Self-Confidence & Independence

It is rare for children with disabilities to be peer mentors for others or to tutor another student. Yet one of the best learning tools for all students is to teach something to someone else. Helping someone else reinforces a student’s skill or knowledge and increases his self-esteem.

Remember Shaun from the earlier example? He is doing very well with his schedule and feels confident that he knows what to do to be a successful student in each class. When he is not sure, he knows all he has to do is check his schedule and work routines. If he gets anxious or stressed, the visuals give him a concrete way to calm down and adjust his own actions and feelings because the tool is always visible and available.

As a result of his success and confidence, he is now a tutor for other students who are beginning to use visual tools.

Bonnie

We received a call from a teacher in Shaun’s school regarding Bonnie. Bonnie was having lots of trouble and everyone was at their wits end.

Whenever we observe a classroom, we look to see how directions and information is offered to students. In addition, we watch to see if the student we are concerned about understands the directions. Then we look to see who else in the class does not understand the expectations or is fidgeting a lot. Understanding directions and expectations is one of the first areas for accommodations and modifications so students can participate with the class.

As we observed Bonnie in her class, we looked to see when Bonnie participated in the curriculum with her classmates and where she was struggling the most. We looked for interactions she initiated and those initiated by peers and adults with her.

After our observations and information gathering, we met with the team and determined that visuals would be really helpful for Bonnie as well as some other students in her class. Although the teacher was seeking help, she was hesitant at first to implement new things that might take a lot of time or set any student apart from the others. We discussed how important it is for all students to not only recognize and value what they have in common, but also to value and respect their different learning styles. This gave us a chance to remind the team members about the variety of learn-
ing styles for all children and the fact we all learn and retain information better when we have a visual way to represent it.

Learning how to use a new tool takes time. It helps to start in an area of need and an area of proven success. Bonnie was really good at the arrival routine. She knew where to put her coat and lunch and that she could choose a book to look at as the morning got started, so we put together a picture checklist of those steps. Bonnie felt great success as she reviewed the pictures and checked off each task. She received praise both from the teacher and her peers.

However, when we implemented a new checklist in another area, she was frustrated and didn’t want to use it. Shaun’s teacher asked him if he would share how he was using the picture routines and he was very happy to oblige. Shaun shared with Bonnie how he didn’t like the checklists at first. But once he started using them every day, he felt smarter and has many more good days at school and with his friends. He also shared when he uses his checklists, the teachers and other adults don’t bother him the way they had before. They leave him alone because he knows what he’s supposed to be doing. Bonnie is beginning to use her checklists and routines more. In addition, her teacher is starting to use checklists for the entire class and seeing benefits for all students.

**Designing & Implementing Visual Tools**

Deciding what tools to use and how to implement them is a very important part of the process. In a classroom situation, the best way to begin is to have someone observe your child at school. When we observe students, we use a variety methods to determine the key points:

- The primary concerns of the classroom teacher: what’s bothering the teacher the most? What are her perceptions of the situation? Why does she think the behavior is happening?
- The flow of the classroom: what are the other students doing? How are the other students getting information? How is the student getting information and directions? Where is the student in the classroom: within the mix or on the edge? How is the student accessing the curriculum and participating in instruction, learning, and class projects?
- The type and frequency of interactions between the student, his peers and adults. How many times does he try to interact (appropriately and inappropriately)? How do others respond (adults and peers)? How are other adults initiating interactions with him? How are his peers initiating interactions with him? If they are not, why not?
- A descriptive observation of what we see and what areas we can coach the adults and peers in to improve participation.

The information we glean during these observations guides what we do next. As an impartial observer we can see when a student needs information, how he best uses information, and the communicative intent of behavior that is troublesome. In addition, we often are able to identify ways for the adults involved to adapt how they are interacting with the student to reduce power struggles and enhance independence. This does not mean the adults or the students are doing any-
thing intentionally “wrong.” Bringing in an impartial observer provides a new view of the situation from someone who is not intimately involved in the day-to-day routine. This different perspective is an opportunity to discover new ways to support students and their success. It helps to think of adult supporters as facilitators rather than helpers. This changes the perception of each person’s duties and responsibilities. Adults can facilitate student access to learning, participation, interactions, and much more through visual tools. Then the adults can step back and take great pride in the student’s success and independence.

Once we have an idea of where to start small. There may be many opportunities to use visual tools in a student’s day. Start with one or two rather than trying to use tools in every part of the day. Set the situation up to be successful with easy-to-reach first steps.

Make it easy to use, fun to look at, and meaningful to the student. Introducing it in a positive, fun way can also make a big difference.

Make sure it is easy to locate, and easy for the student to use. Keeping visual tools in difficult to access places (in a pocket if he has trouble with fine motor skills) or difficult for the student to use (making check marks when using a pencil or pen is an emerging skill) is the quickest way for a visual tool to fail.

Make sure adults and peers are supportive and enthusiastic. Every child knows when the people around them think something is silly. Teachers and support staff must present the tool in a positive, encouraging manner.

Involve peers in developing, using and supporting the student in using the tool. It’s always more fun to do something when your friends are the ones who support you.

Keys for Successful Implementation of Visual Tools

- **Student participation.** Involve the student in the design of the tool. Have him choose colors, pictures (especially to describe emotions), the style, size, and so on. The more involved he is in the design, the more apt he is to enjoy using it.

- **Format selection.** There is no standard template for visual tools. Every student has a unique learning style that must be considered in the design. Some students want only words or pictures that don’t look too young and some students need photos or concrete items instead of drawings. It’s important to consider the size and how easy it is to use in all settings (ie. recess, PE, lunch room, chemistry lab).

- **Imbedding choices in the tool.** Take into account the student’s interests and preferences such as what things he wants to do when he’s angry or what order he would like to get things ready for a class or activity. Ask yourself, “how am I empowering him to use the tool?”

- **The routine for using the tool.** Consider where the tool will be kept, when the tool will be used (in the hallway or at a desk), and what other activities the student will be doing at the time.

- **Start small.** There may be many opportunities to use visual tools in a student’s day. Start with one or two rather than trying to use tools in every part of the day. Set the situation up to be successful with easy-to-reach first steps.

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begin and what tools may be helpful, we meet with the staff, the student, and sometimes the entire class to begin designing visual tools. Involvement of classmates makes all the difference and always benefits the peers as well.

**Charlie**

Even with the best plans, it is sometimes difficult for people to see how visual tools will be successful with a student. For example, Charlie is a high school student. He was feeling constantly badgered by the verbal cues provided by the adults who support him. He told us he felt this way through his behavior rather than his words. Whenever someone came near to remind him what he should be doing—often before he had a chance to get started himself—he would refuse or respond with frustration. We also learned from our observation that he was receiving cues from multiple people. There was very little processing time or praise for what he was doing well.

We created a visual tool, a checklist, for him to use in his tutor time in the library during study hall. Before we put the tool into place, Charlie would go to the library, followed by an assistant. When he arrived, the assistant would begin to tell him what things to get out to get ready for the tutor. If Charlie did not immediately respond, the assistant would remind him again. While she helped another student, another assistant would remind him yet again. Eventually, Charlie went to the library at tutoring time, and waited. He waited for an adult to tell him what to do. If no one told him what to do, he did nothing. He did not try to gather the things he needed for the tutor, nor did he go look at books while he waited. He just sat until someone told him what to do. This is called, “learned helplessness” and “learned dependency.”

All of the adults in the situation have the best of intentions, but frequently in our attempts to get students to be successful, we end up promoting their dependency on cues and directions we provide. This is another vital reason visual tools are critical for all students, especially those with disabilities.

We created a checklist for Charlie to follow when he arrived at the library. The assistant was worried that Charlie would not know what to do if someone did not tell him. We reminded her that the list tells Charlie what to do. She was skeptical until we instructed her how to slowly implement the checklist. Here’s how the instruction was designed:

**Step 1:** The librarian keeps copies of the checklist. She tapes the checklist to the table where Charlie and his tutor work just before Charlie’s tutor time. The checklist does not have Charlie’s name on it.

**Step 2:** Charlie arrives at the library.

**Step 3:** The assistant approaches a minute or two after Charlie arrives. She says, “Hi Charlie. How are you?” and waits for a response.

**Step 4:** The assistant scans the situation to see if Charlie has accomplished anything on the list yet. Then she says something like, “Hey, here’s your checklist. Look, you’ve already done this and this. Why don’t you mark those off? Good. Which ones will you do next?” When she hears the answer, she provides specific praise and gives Charlie a chance to continue on his own. As
she leaves, she says, “I’ll come back in a few minutes to see how you’re doing. I need to get something from the librarian.”

**Step 5:** The assistant checks back in with Charlie to see how he’s doing by praising specifically what he has completed on his checklist again.

These are early steps in the process. We knew as Charlie became familiar with the tool, he would accomplish more on the list without her gentle prompting. In a short period of time, Charlie was arriving at the library, checking his list, and gathering what he needed independently. The assistant was no longer needed for that transition. The librarian agreed to take on the responsibility of placing Charlie’s checklist on the desk each day, and stopping by his desk each day to say hello. On occasion, Charlie had a question or needed to be reminded this was a work time, just like most students. He was so independent during this transition he looked no different than the other students in the library during that period. He enjoyed his independence and was proud of being able to organize himself without an adult hovering nearby.

Another important component to developing visual tools is involving the entire class. Although this take some planning, the results are beneficial for all students in the class. Often there are other students who are struggling with similar issues in the classroom. In the following example, the entire class felt a lot of pride in the way they worked together. As a result, everyone’s behavior improved significantly.

**Brad**

In an elementary school, Brad was having a very difficult time following the rules. He was often out of his seat and disturbing other students. He would interrupt the teacher and then get really frustrated when the teachers would get mad and not attend to him.

We began by having a discussion with the entire class about classroom rules. They decided what the rules should be, chose pictures to illustrate them, and then shared ideas about what to do when someone needed a break from the classroom. The students made posters using the pictures they chose (see Figure 5).

The rules everyone agreed on focused on staying in their seats, raising their hands when they needed something, and using an appropriate voice.

Next the class created “break cards” that work like the pass to the restroom. When anyone is having difficulty attending, is frustrated, or maybe just missed breakfast and is feeling mad about that, they can use a break card to go get a drink, take a walk, do a few quick de-stressors, or talk to a designated person (see Figure 6).

Once these were developed, the staff worried students, especially Brad, would take advantage of the breaks. Surprisingly, when the break cards were given to the class, Brad didn’t use them. He had a visual tool that helped him remember the rules, a visual tool...
to remind him he had choices, and one to tell him if he needed a break he could take it. This was a good lesson for everyone regarding how powerful and essential it is to have appropriate information. We kept thinking he needed a way out of class, when actually he just needed the information about what to do if he did need a break.

Conclusion
It may not be obvious, but all of the students in this article receive special education services. Some have significant disabilities including Down syndrome, autism, and OCD (Obsessive Compulsive Disorder). Many of these students are nonverbal with limited communication skills and still learning to use Augmentative and Alternative Communication systems effectively. All of them are included in general education classrooms throughout the day. Typically when my team discusses students, we do not include labels or use other descriptive comments about their abilities. Instead we focus on educating students the way they learn best, whether or not they have an IEP.

Visual tools are an essential part of providing support to students. These tools must be thought of in the same way we consider our planners, schedules, and shopping lists. Where would we be if we didn’t have them? This week I asked a room full of teachers at a staff meeting what they would do if I gathered all their planners and walked out of the room. The responses varied from I’d never be invited back to I wouldn’t be able to run fast enough to get away.

Visual strategies and tools make a difference in all our lives. They make our lives more meaningful, more manageable, and more enjoyable. They work even better for children. When children know what to expect, and are empowered with visual tools, they understand more, and are able to communicate their desires, personalities and potential. Students using visuals also participate more with their families, friends, in their neighborhoods and schools, becoming true contributing and valued members of their community.

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Luci Chiotti, B.A., is the graphic artist for the Supported Education Team. She assists the team in producing all supporting materials for students, inservices, and conferences. Luci works closely with consultants and paraprofessionals designing curricula, modifications, and visual tools used for students with disabilities to participate fully in general education.


The tools to create visual supports are as simple as a piece of paper, scissors, and a pen, or as complex as using a scanner, digital camera, and imaging software. The only essential tool is to have an eye for what your child understands and will enjoy using. The following list combines “high tech” and “low tech” tools that will help you as you think about creating visual tools for your child.

### Pictures
- **Magazines.**
- **Packages.** Cut logos and pictures from the boxes of toys, foods, and other items.
- **Digital camera.** You don’t need top-of-the-line to make personalized photos.
- **I-zone camera.** A pocket-sized polaroid camera that takes one-inch photos or stickers. Great fun for kids as well. $24.99.
- **Polaroid camera.** The Polaroid One and 600 series are the most recent versions of this type of camera. $35.99-49.99.
- **Disposable camera or 35mm camera.**

### Computer Equipment & Photo Software
- **Scanner.**
- **Color inkjet printer.**
- **Photo and drawing programs.** Look for software that allows you to change the size and resolution of the photo as well as remove the background. Simple drawing programs are also helpful for making your own symbols. Many computers come with elementary drawing or painting programs already installed.
- **Picture This and Picture This Professional.** This program, created by a mother of a boy who has autism, has a comprehensive collection of background-free images available. She also has other reasonably priced programs with images available such as: Places You Go and Things You Do, Functional Living Skills and Behavioral Rules, and The Great Action Adventure. Silver Lining Multimedia, Inc., P.O. Box 2201, Poughkeepsie, NY 12601, 888-777-0876. www.silverliningmm.com.

### Photos & Clipart
- **ClipArt.com.** www.clipart.com. This website collection has both clipart and photos. You must be selective in what you choose, as not all the photos are appropriate. Some are free, though you can subscribe for access to the complete library.
- **The Autism Children’s Activity Program.** www.autism.com/acap/visual_table.htm & www.autism.com/acap/visual_table_2.htm. These pages are specific to the Portland Metro area in Oregon, but some can be edited in photo software to show the needed photo.

### Symbol resources:
- **Boardmaker™.** A symbol management program available from Mayer-Johnson Inc. The PCS symbols that come with this program are used in many schools. You can also import digital images and clipart into the program to customize it. It is an expensive program. Your school may share with you in their computer lab. www.mayer-johnson.com. Mayer-Johnson, Co., P.O. Box 1579, Solano Beach, CA 92075-7579. 800-588-4548. $299.00.
- **Do 2 Learn.** www.do2learn.com has many different resources, including an online schedule maker, symbols, and blank calendars to make your own daily, weekly, or monthly calendars.
- **Beyond Autism Website, PECS Page.** http://trainland.tripod.com/pecs.htm This page is a cornucopia of information about augmentative communication and visual systems. Scroll down the page to “Resources for Pictures,” a little further down for “standard size pecs pictures that are most commonly used” and a little further yet for “standard size pecs pictures with ‘real’ photographs.” The entire site is a great resource for autism pulled together by a mother who has “been there.”

### Capturing Photos from the Web
Copy images from web pages to your computer. Web images are low resolution, so you may lose some detail when printing the image.
Directions for PC users: In the web browser, put the cursor over the image you want to copy. Right click on the image. A box will appear on your screen. Choose, "save picture as" and select where to save it on your computer.

Directions for Mac users: Place the cursor over the image you want to copy and hold down the mouse button. A menu will pop up giving you options. Choose "copy to" and direct it to the folder where you would like to store the image.

Other Tools

Lamination:
There are a variety of types of laminators available. When using self-adhesive and cool-laminators, make a test card if you want to use Velcro or any other adhesive. Some cool laminate material will not bond with glue, hot glue, or other adhesives, which means the velcro comes right off.

The best option is to purchase a desktop laminator that will do both hot and cool lamination. While not cheap (cost is $50 - $200), they last forever. Available at office supply stores such as Office Depot and Office Max.

Magnets and Stickers
Magnets and stickers are a good match for many visual tools.

- Xyron makes a variety of sticker makers. Models 510 and above make stickers, magnets, and do cool laminating with the change of a cartridge. www.stickermaker.com. Magnets are laminated on top, which is helpful when printing with inkjet printers, but are also thin and may be difficult to manipulate.
- Office supply stores carry photo size and business card size adhesive magnet sheets. Just peel the cover and place your symbol on the gooey surface.
- Avery has magnet sheets for inkjet printers. This is a great way to customize, but the magnets are thin and bendable. Make sure your child will be able to manipulate them.
- www.fridgedoor.com has every type of magnetic possible including magnetic paint. Click on "supplies" at the top of the page.

Miscellaneous Tools to Consider:
- Wallet inserts. The inserts for credit cards and photos made for wallets make great books to hold visual reminders (see locker illustration).
- Goo Gone®. Goo Gone is an adhesive remover that is easy-to-use and very effective. It removes any left over adhesive from a visual tool held in place with adhesive as well as the build-up on scissor blades from cutting self-adhesive Velcro.
- Sharp Scissors & Glue.
- File folders. Some tools are easily organized by making them with file folders.
- Envelopes. If a visual tool has many pieces, it is a good idea to tape or laminate an envelope to the back to hold them. If you laminate the envelope, you can unseal the flap with a sharp knife or razor blade.

Sample Ideas for Visual Tools

- Ideas, Samples, and Designs: Helping All Students Learn Successfully in General Education and On the Spot Ideas by Patti McVay, Heidi Wilson, and Luci Chiotti. Published by Multnomah Education Service District Supported Education Team, 11611 NE Ainsworth Circle, Portland OR 97220. 503.257.1588 or 503.257.1633. Email: luci_chiotti@mesd.k12.or.us or heidi_wilson@mesd.k12.or.us. $24.95 and $8.00 respectively (plus postage).

Both of these publications are chock-full of tested, useful, and effective visual tools and curricular adaptations for students in both general education and special education settings. On the Spot Ideas is a compilation of modifications and accommodations compiled by Educational Assistants working in classrooms for the Supported Education Team. If you learn best by seeing an end-product, there are plenty of examples to get you started.

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Using Visual Tools to Support Student Learning

Visual Toolbox

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