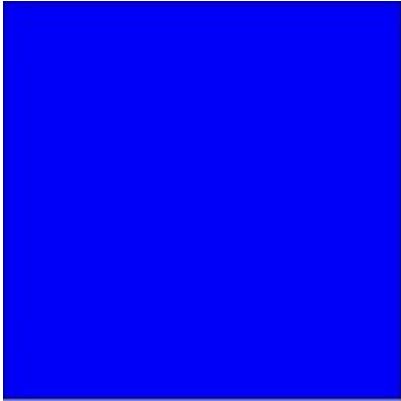


**AGENESIS OF THE CORPUS CALLOSUM**  
**Learning Colors**  
**Compiled by: Sandie L. Davis**  
**March 3, 2010**

**LEARNING COLORS**



**What Color Is It?**

**BLUE**

**Ask some kids who have Agenesis of the Corpus Callosum what color it is and they will know. However, some kids who have ACC have a difficult time learning colors.**

**Many kids who have ACC have difficulty with abstract things.**

**C O L O R S** are abstract.

**My own child, Matthew, who has complete ACC doesn't know his colors yet. He is 16 years old and beyond the typical age that a child would know their colors.**

**He knows the word for an object but trying to help him understand that the object has a color is something I find challenging and I am not alone.**

**Recently, the topic of Learning Colors was brought up in an online discussion by the parent of a child who has ACC. The discussion led to many interesting responses from other parents who also have a child with ACC.**

**I thought the tips, advice and teaching strategies would be worth sharing here.**

**Thanks to all the parents who gave their input in the discussion and also their permission to quote them, I am able to share it with you.**

**Question that started the discussion:**



**Parent of 6-year-old child who has ACC writes:**

"My son, David 6 years old, haven't understood the different colors yet. Is this common for ACC-kids? And does anybody know why this is a difficult thing to learn?"

Hope you understood my english..."

**Parent of 11-year-old who has ACC responds:**

"It is typical with ACC kids. At least once a year someone asks that same question. Colors are actually an abstract concept, which is why they are harder to learn. It took us a LOT of repetition to learn them and Jacob still gets white and yellow mixed up even though he is in regular classes at school. When Jacob was young we got together with the his teacher and came up with a chart of color names and pictures that he picked out that were more concrete. When we would ask what color something was he would say something like "the color of strawberries, red. or the color like the clouds, white." Find something more concrete to name and then associate it with the color name. It is even better if you let him choose the object names.

I hope I explained this ok :). Many ACC kids learned their colors in this fashion. Do not be surprised if it takes several months or a year. It should come. ACC kids just take longer."

The color of a



**RED**

**TIP:**

"Find something more concrete to name and then associate it with the color name. It is even better if you let him choose the object names."

**In the next response by a teacher who is also the parent of a grown child who has partial ACC, some important considerations were brought up:**

- **Can the child really see colors?**
- **Has the child been evaluated for color blindness?**
- **Is the child able to match colors?**
- **Is the child able to sort things by their colors?**

**Teacher/Parent of a grown child with partial ACC + lobar holoprosencephaly responds:**

"Your English is lovely. I wish I knew another language as well as you know ours!"

Lots of kids have this trouble. First of all, can David really see colors? Has he been evaluated for color blindness of any kind? Is he able to match colors, or sort things by their color? If he can do that, he is ready to go on. Sometimes a child can learn

to respond to the name of a color more easily than he can actually name it himself. You might start out saying the names and having him choose the right one. If he can read already, you might give him a chart with the colors and their names, and allow him to use it for matching.



color chart-balloons

[http://www.learningpalacecatalog.com/we\\_know\\_our\\_colors\\_mini\\_bulletin\\_board\\_set-p-175976.html](http://www.learningpalacecatalog.com/we_know_our_colors_mini_bulletin_board_set-p-175976.html)

My friend teaches preschool, and she has her kids use familiar objects to help her students. She made a chart with pictures and they say "yellow like a banana" and "green like the grass" (you need a picture, because the grass isn't green in the winter!) and so on. You might want to work on only a few, maybe three, colors at a time at first."

## YELLOW like a



## GREEN like the



**This same Teacher/Parent goes on to say:**

"This is how my daughter learned her colors. She loved to paint, and we had pots of paint for each color, with a different brush for each one.



**sample idea:**

**No-spill paint cups**

<http://www.lakeshorelearning.com/seo/calsearchResults~~pl2534374302101152~~.jsp>

**Color-coordinated brushes sold separately**

<http://www.lakeshorelearning.com/seo/pl2534374302101363~~.jsp>



sample idea: [Amazon no-spill paint pots & brushes set](#)

<http://www.amazon.com/Non-Spill-Paint-Pots-Brushes-Set/dp/B000CBWVE0>

I let her only have one at a time, and I did not let her point to the one she wanted--she had to say the word. At first she would be frustrated that she was not getting the color she wanted. She'd say, "No! I want the OTHER blue!" But she loved to paint so much that she eventually figured it out. You might find something like this that David is very motivated to play with that works the same way for him."

**Motivation is a huge factor in helping a child learn something. Equally important is finding what learning style works for a child.**

My own child, Matthew, is nonverbal with only a handful of words. He is a visual + auditory learner. He is also developmentally delayed.

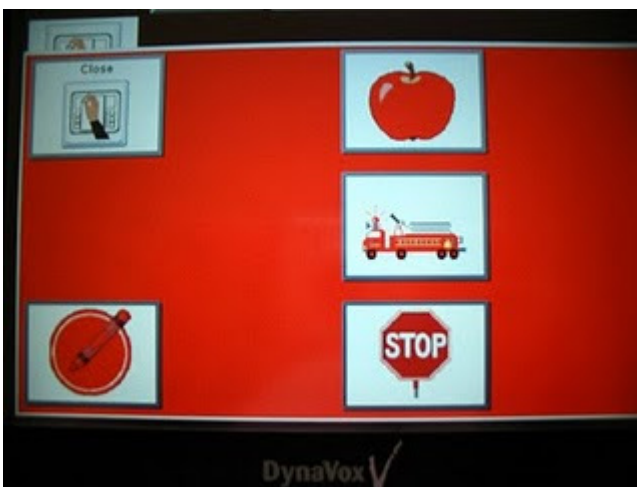
He is able to express what he knows and understands best through the use of a computer or an augmentative communication device. This allows him the ability to see and hear something over and over that he is working on learning and gives him freedom to use as much repetition as he needs.

Matthew needs to see a picture, push a button and hear the word. He uses a **DynaVox V** communication device. Below is a colors page I made on his communication device to help him learn colors.

DynaVox V: <http://www.dynavotech.com/products/v/>



When he pushes the RED button, it SAYS "Red". The screen then automatically changes to another page with pictures of things that are RED.



I can add more pictures, change the pictures to different red things, use less pictures, put in real photographs of red things, type any message I want the button to say when pushed and so much more.

Even though at 16 years old, my son, Matthew, is nonverbal (with only a handful of words) I still encourage and help him to make a sound and try to SAY words whenever possible.



Matthew is not able to match or sort using a typical method. If I hand him an object and ask him to match it to the right color he does not understand.

However, I discovered that he IS able to match and sort using other methods that fit his learning style and abilities.

The matching method Matthew uses to express his ability to match is through the use of books by Roger Priddy. The books have a large, color picture of an object on one side of the page and a talking button with the matching picture on the other side. When he pushes the matching picture button, he hears the word being said out loud.

I wrote an earlier ACC blog post titled **Matching & Motivation** where I explain Matthew's matching and sorting abilities and methods in more detail.

<http://agenesiscorpuscallosum.blogspot.com/2009/06/matching-motivation.html>

"Let's say our colors" is a new book that I will be using for Matthew to help him learn to match colors.



**Amazon-Let's say our colors book**

[http://www.amazon.com/Simple-First-Words-LetsColors/dp/0312506430/ref=cm\\_cr\\_pr\\_product\\_top](http://www.amazon.com/Simple-First-Words-LetsColors/dp/0312506430/ref=cm_cr_pr_product_top)



**Parent of 7-year-old child with ACC and autism responds:**

"I agree with (names the parent),,,this topic has come up several times before and it seems to be an issue with alot of our kids. However, to add a twist to this topic,,,Michael could identify his colors,,, ( as well as shapes,letters and numbers) by about the time he was 2 years old. He does not speak,,so he points to identify,,but he definitely took an interest in these areas and learned them without a doubt very early on. Cognitively, Michael is at about a 2 or 3 year old level. I don't understand how/why Michael could learn his colors so much more quickly than some of the older, higher functioning kids.? I'm thinking it comes down to rote memorization,,, that the abstractness of it all doesn't affect Michael...? Michael has been diagnosed as being mildly autistic,,,so does this somehow enter the picture as well ??? I don't know ??"



**Parent of 21-year-old child with ACC + chromosome microdeletion 1q44 responds:**

"I agree with everything that has been said about learning colors. When my daughter Becky was very young, she could match colors or hand you "the yellow bears" or "the red cup" when asked. But to this day, if you ask her what color something is, she says, "blue." I think it's a word-retrieval issue with Becky, and it may be that with other kids who have ACC. She seems to have a pathway in her brain that says "the answer to 'what color is it' is BLUE."

It is the first thing that pops into her head so she says it. After that she'll start saying other color names, but she doesn't consistently get them right -- even though we know she has known them for years and years.

(On a side note, I always think I could impress people by asking some abstract question to Becky, like, "Becky, what color is the sky after a storm passes by," or "Becky, what color is the background of the stars in the American Flag." She would definitely say, "blue." She will always answer "blue" as long as the question has "what color" in it. If you asked Becky what color Santa's suit was she'd still say blue, or what color grass is, or the sun...)

Colors really are an abstract concept so I would first see if your child can match or point to colors. If he has that correct, then you will know that naming the colors is the problem, not understanding them. Repetition, repetition, and repetition are the key to learning the verbal part. I really like (names the parent) idea about the paint pots, since her daughter was so highly motivated to get them right. If there is motivation + repetition, the learning should come quicker. I also think that adding a cue like "blue like the sky, green like the grass" is a huge help because it gives an extra "signpost" on the brain-pathway to getting the color right."

**BLUE** like the



### **Interesting Observation:**

"She seems to have a pathway in her brain that says the answer to 'what color is it' is BLUE."

### **TIPS:**

"Colors really are an abstract concept so I would first see if your child can match or point to colors. If he has that correct, then you will know that naming the colors is the problem, not understanding them."

"If there is motivation + repetition, the learning should come quicker."

"I also think that adding a cue like "blue like the sky, green like the grass" is a huge help because it gives an extra "signpost" on the brain-pathway to getting the color right."

### **Parent of 4-year-old child with partial ACC writes:**

"I was having the same issues with my son Steve. I even thought he may be color blind. Anytime someone asked him what color something was he always answered "RED". Now, after months of working really hard on colors, he is starting to be able to understand them. He still does not always have the right word, but he can match colors accurately. We ended up starting with a lot of matching and sorting games. I would put out 3 different colored buckets, and have objects that were those colors. Steve would then sort the objects into the right color bucket. After a few weeks, he could do this, so then we moved on to matching: I took different colored objects and I would hold up a red piece of paper and have him grab the red object.

With everything, I am finding persistence and patience are the best tools to have."

**TIP:**

"We ended up starting with a lot of matching and sorting games. I would put out 3 different colored buckets, and have objects that were those colors. Steve would then sort the objects into the right color bucket."



**Interesting Observation: Word Retrieval Issue...?**

"When my daughter Becky was very young, she could match colors or hand you "the yellow bears" or "the red cup" when asked. But to this day, if you ask her what color something is, she says, "blue." I think it's a word-retrieval issue with Becky, and it may be that with other kids who have ACC."

"Anytime someone asked him what color something was he always answered "RED". Now, after months of working really hard on colors, he is starting to be able to understand them. He still does not always have the right word, but he can match colors accurately."

"She could point to the correct color but couldn't tell me the color."

**TIP:**

"With everything, I am finding persistence and patience are the best tools to have."

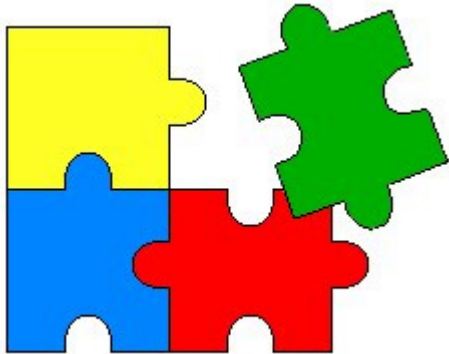
**Parent of 13-year-old child with ACC writes:**

"Yes there seems to be a problem with colors.

My son Jacob took 2 years to learn colors. I had every book, story, game or toy that teaches colors. I knew he was not color blind because he could sort the little colored teddy bears in the little colored baskets. We tried every method and game to learn colors and then one day when he was 4 or 5 he knew his colors and never made a mistake again.



My theory on this is that it may be due to a visual processing problem or delay. He does have a visual processing delay. As with many ACC related issues repetition is the key and "eureka" one day they have it ! The brain is amazing."



**Parent of 5-year-old with ACC + colpocephaly, chiari 1, sensory integration disorder, strabismus and hydrocephalus responds:**

"It definitely seems common for ACC kids to have trouble with colors. Lisa had the same problem. She could point to the correct color but couldn't tell me the color. We used lots of repetition with Lisa, of course we use lots of repetition in just about anything with Lisa but once she has it, she usually doesn't forget it. Lisa has a very big sweet tooth, so we used M&M's, skittles, Reeces pieces, blocks, crayons, pointed to stuff when we were out and about. I would say look at the red stop sign, the yellow shirt. With the candy, I would show her the colors, tell her and have her repeat it. Then when I would show her one if she got the color correct, she would get to eat it. I always said the color to an object to help her as well. Lisa has always ordered her blocks/ toys by color and shape. I would always comment on her color scheme, i.e. I love how you put the reds first, then the yellows, and blues.



She does have her colors now but it did take lots of practices and impromptu lessons. Make everyday a learning time with whatever you are working on at the time. Also, if he is working on another specific skill right now, he may have trouble with learning colors. Lisa can only work on one skill at a time and the others are on the sideline."

**TIP:** Parent of child with ACC & hydrocephalus in 2003 wrote:

"Concerning colors, add the color of whatever you are doing, seeing, to the conversation - today do you want to wear your red or green shirt?  
Let's make salad - we'll use orange carrots,  
green lettuce,..."

**TIP:**

"Lisa has a very big sweet tooth, so we used M&M's,...



I would show her the colors,  
tell her  
and have her repeat it.  
Then when I would show her one  
if she got the color correct,  
she would get to eat it."

**TIP:**

"As with many ACC related issues repetition is the  
key and "eureka" one day they have it!  
The brain is amazing."

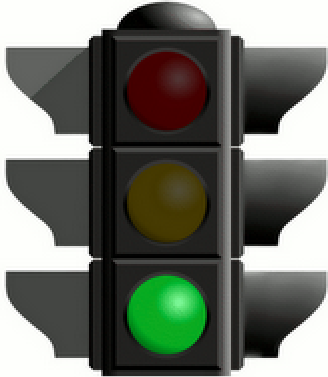


**Rainbow Purple**  
**Rainbow blue**  
**Rainbow green**  
**And yellow too**  
**Rainbow orange**  
**Rainbow red**  
**Rainbow shining over head.**



**Hopefully you will gain insight, discover a teaching strategy to try or possibly be inspired to explore other creative ways to help your child who has ACC learn colors.**

**GREEN** light means GO!



**It's time for me to go now. I can't wait to help my child, Matthew, learn his colors.**

**The discussion doesn't have to end here. Won't you go ahead and add your own comment?**

<http://agenesiscorpusscallosum.blogspot.com/2010/03/learning-colors.html#comments>

**E-Mail:** [hope@aracnet.com](mailto:hope@aracnet.com)

Note: Agenesis of the Corpus Callosum is a congenital defect.

A child who has ACC (or a corpus callosum disorder) is born with it. Agenesis = missing or absent. Therefore, a child who has ACC is completely missing their corpus callosum. The corpus callosum is the largest commissural pathway in the brain consisting of over 200 million nerve fibers and allows for communication between the two hemispheres of the brain. Agenesis of the Corpus Callosum has a very broad range of how it can affect a person.

A very special Thank You to each one of you who gave permission for me to quote you and for your willingness to share information in this document about your child who has ACC.

For privacy the names of all kids in this article, except my own child, have been changed.

I do not endorse or receive any compensation from the companies mentioned in the product links on this "Learning Colors" document. I found the products through my own personal search while creating this document and I decided to share them here for those of you who might have an interest.

**Agenesis Corpus Callosum  
Learning Colors  
March 3, 2010**

**CONTACT INFORMATION:**

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E-Mail: [hope@aracnet.com](mailto:hope@aracnet.com)

I welcome any and all comments.

My child, Matthew, has complete Agenesis of the Corpus Callosum. He is 16 years old and he was diagnosed with ACC when he was four months old.

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**ACC EDUCATIONAL INFO:**

**Educational Suggestions For Children With ACC: A Beginning**

[https://www.nodcc.org/pdfs/Conference\\_Handouts/educational\\_suggestions\\_for\\_children\\_with\\_acc.pdf](https://www.nodcc.org/pdfs/Conference_Handouts/educational_suggestions_for_children_with_acc.pdf)

**“Considerations For Educators Of Students With ACC”:**

Mr. McCallum wrote this document. He is a teacher who taught a child with ACC in his classroom. He offers detailed and valuable information. If you would like to receive a copy of “Considerations For Educators Of Students With ACC” please **E-Mail me**. In your e-mail it is helpful to know if you are a parent or a teacher requesting the information.

**The ABC’s of ACC:**

[http://scenicbeauty.tripod.com/ABCs\\_of\\_ACC.pdf](http://scenicbeauty.tripod.com/ABCs_of_ACC.pdf)

**Teaching Resources:**

<http://agenesiscorpuscallosum.blogspot.com/2009/06/teaching-resources.html>

**ACC: Social Skills & Challenges:**

<http://agenesiscorpuscallosum.blogspot.com/2009/08/agenesis-of-corpus-callosum-social.html>

**ACC & Me Children’s Book:**

<http://agenesiscorpuscallosum.blogspot.com/2009/05/acc-and-me-book.html>

**Marvelous Music: A Musical Pathway To Learning For Kids Who Have ACC**

<http://agenesiscorpuscallosum.blogspot.com/2010/01/marvelous-music.html>

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**Websites about ACC:**

ACC-Angels Around The World:

<http://scenicbeauty.tripod.com/AngelsAroundTheWorld.html>

ACC Blog:

<http://www.agenesiscorpuscallosum.blogspot.com/>

