

Research moves Carolina Day School to separate genders

By Doug Gibson

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ASHEVILLE — Last year, Elizabeth Dismukes was a quiet student. But this year, the Carolina Day School sixth grader said she feels more confident, and her teacher agrees. She even surprised her mother by giving a talk to a group of students and parents.

Last year, math was her least favorite subject. Now, it's her favorite.

Why the change of heart? A lot of it, she says, has to do with a big change at Carolina Day.

This year sixth grade girls and boys are studying core subjects — math, science, language arts and social studies — in separate classrooms.

"I do feel more comfortable," Dismukes said. "It's a lot more fun to be in an all-girls group."

Researchers have discovered there is a big difference between female and male brains during adolescence, said Peggy Daniels, principal of Carolina Day's middle school.

The part of the brain used to speak and write is physically larger in girls, and as a result, girls tend to do better in subjects such as language arts and social studies.

Boys "shift more to the action-oriented part of the brain," said Kathy Stevens, a consultant with the Michael Gurian Institute, which helps schools make use of the new research. "They want to respond to emotion rather than talk about it."

Boys tend to act out more, and

What the research says

According to the latest research, boys and girls exhibit the following differences in the classroom:

■ Girls have much more sensitive hearing than boys, and can be distracted by noises one tenth as loud.

■ The brain centers that process language are physically smaller in boys and develop more slowly, giving adolescent girls an edge in language and social studies classes.

■ The area of the brain that deals with emotions is closer to girls' language centers, giving them an edge in being able to talk about feelings.

■ Boys have a natural advantage in spatial perception and tend to deal better with abstract concepts, giving them an edge in science and math.

■ Girls' fine motor skills tend to develop earlier, making it easier for them to perfect handwriting and other skills.

■ Boys tend to develop large muscles earlier, making physical activity an essential part of their learning environment.

have difficulty talking about their emotional responses to reading and writing assignments.

But Daniels admits, "we had some controversy originally." So the school held forums, sent materials home and — most importantly — arranged to train teachers. In the end, Daniels said, "we realized there was a huge amount of support for it."

Teachers said they can see a difference in classroom dynamics. Students are more likely to speak up if they have questions in single-gender classrooms.

"That's not typical in a mixed-gender classroom," said Sandy Pyeatt, a sixth-grade social studies teacher. "If they're struggling,

they tend to want to hide it."

Pyeatt also feels the change has allowed her to target her teaching. Recently, one of her girls' classes gave presentations, and nearly every student started with an apology. Pyeatt pointed this out, and she hears much less apologizing now.

It's also easier to come to the defense of a boy who's getting teased in a single-gender class, she said, because her intervention is less likely to embarrass him.

"It would be totally uncool to say 'I love single-gender classes,'" one mother wrote to Daniels. "But I can tell you my son really likes the opportunity."