



John D. Taylor -- The Journal

Teacher Frank Luke, had students Elyse Pendlay and Madison Olson help 7th grade students figure out their math problems.



John D. Taylor -- The Journal

Madison Olson helps Bjorn Oppegard figure out a math problem.



John D. Taylor -- The Journal

Elyse Pendlay helps a fellow student figure out a math problem.



## Math class turns the tables on student learning

**By John D. Taylor**

Turning the tables on the usual classroom experience, 7th graders Elyse Pendlay and Madison Olson, stood in front of teacher Frank Luke's fourth period math class, explaining to their classmates how they figured out the area of a trapezoid.

You take the sum of the two parallel sides, the girls said, divide this by two, then multiply that by the height.

Across the classroom, heads nodded and observers – including two parents – could almost see the light bulbs coming on above the students' heads. They were really “getting” it, they were learning, the lessons hitting home.

Luke stood by listening to Olson and Pendlay's explanation with approval, and smiling as those light bulbs came on. A teaching method he learned at the school where he taught in Florida, before coming to Divide County earlier this school year, had once again bore fruit.

Before class began, Luke explained his methodology.

“At the school in Florida,

there was a sense of lassitude about the students,” he said, “an idea that their success was someone else's responsibility.”

When Luke learned of a technique to turn the tables on this idea – asking students to teach other students – it worked like magic.

Students began taking more responsibility for their own work and their own achievements. They began dressing up, and really enjoying class, he said.

Even the parents came to see what the class was doing.

For many of his students, this was the motivational spark that lit a thirst for knowledge and learning.

“They developed a hunger for excellence,” Luke said, and became “desperate to teach, open to learning.”

Bringing the same methodology to Divide County when he was hired this fall, Luke lit up some of his students here.

For example, three questions were on the blackboard: One was a mathematical formula that appeared quite complicat-

ed; another asked what three consecutive numbers tally 66; and the third asked for 5 consecutive numbers whose sum is 124.

Just five minutes into these tough questions, with the help of calculators, several students already had the answers. (The answer to the last two questions are 21, 22, 23, and 19,20,21, 22, 23.)

While Olson and Pendlay went around the room to help students who were struggling, Luke also explained how to simplify each question by dropping things out, or dividing numbers in, etc.

Before too long, most of the other students got the answers, too.

When the class moved on to calculating the area of various shapes, Olson and Madison were there again, helping those having trouble move forward.

Overall, the students were engaged in their work, eager to learn. And when the class was over, Luke was smiling again, happy to see his students accomplish so much.