

News and features about ModuMath and the people who use it.

# ModuMath Connections

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## Friendly Competitions Deliver Math Success

“Mathematics is a state of mind,” says Anthony Smith, developmental math instructor at Grambling State University (GSU) in Grambling, La. To nurture a confident state of mind among his developmental math students, Smith embraces ModuMath software, which he blends with a hefty dose of friendly competition. His instructional recipe for success breeds interest, self-esteem and success in students who have historically struggled with math.

ModuMath is easy-to-use tutorial software that combines narration and video to guide learners through math concepts. Highly interactive, the software builds confidence and comprehension through lessons and integrated study guides and tests. Students benefit from ModuMath for a number of reasons, according to Smith, including the ability to progress at their own pace, review lessons multiple times and receive immediate feedback. Students even get hints for incorrect answers. The beautiful thing about ModuMath is its simplicity, according to Smith. Students don’t get tangled up trying to learn a new software application. Rather, their focus is on learning math.

Similarly, teachers benefit from ModuMath, attests Smith. A records management system allows instructors to: enroll and track student progress; customize learning plans for each class or learner; tailor ModuMath to specific needs of learners by assigning selected lessons or setting passing scores; and generate a host of student reports to pinpoint learner difficulties and progress. “I like the records management aspect of the software,” says Smith. “Once you set it up, it can run your whole class. It grades tests, keeps accurate records and students can see their progress.” In turn, Smith

gains time to focus on instruction.

What makes his approach to math instruction unique is Smith’s use of games, contests and prizes to engage learners. “Because of my experience coaching, I understand that competition is healthy,” he says. “When you get students to compete against themselves it gives them bragging rights. Soon, the idea of winning takes over the content.”

Smith, who’s taught for 17 years and coached for 14 years, began using ModuMath in his developmental



ANTHONY SMITH AND STUDENT MATH LEADER AT GSU ENJOY THE MODUMATH COMPETITION

math programs in 2002, upon his arrival at GSU. “I’ve taught middle school and high school students, and learners in developmental and special education,” says Smith. In doing so, he has worked with students at many levels of education. He feels strongly that attitudes, resources and opportunities are critical to grasping math. “ModuMath allows anyone to improve math skills at their own pace and have fun doing it,” he maintains.

In four years, he has taught 4,000 GSU developmental math students using his combination competition/ModuMath approach. “Our motto at Grambling is that ‘it is the place where everybody is somebody,’” he says. “That motto attracted me to Grambling and ModuMath relates to that motto.” At GSU, the entire

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developmental education department rallies around the ModuMath/competition program. “We all embrace the vision and make it a reality,” says Smith. “Not one of my students has ever made a negative comment to me about ModuMath or the competition.”

Susan Hashway, associate professor and coordinator of developmental mathematics at GSU, agrees. “Since ModuMath is an audio system, as well as video, students who are poor readers can succeed with it,” she says. Hashway, who served as president of the National Association of Developmental Education from 2003-’04, maintains students benefit anytime “you can generate positive energy in a program.” She feels the ModuMath/challenge combination breeds such energy.

Unfortunately, many students are categorized as being “bad at math” during middle and high school, according to Smith and Hashway, which injures self-esteem. “ModuMath helps students develop self-esteem and regain confidence,” says Smith. In his view, math learners in elementary and high school would greatly benefit from ModuMath. “It would enhance so many students at a young age,” Smith says.

During his developmental math courses, Smith executes four phases of instruction: pre-testing, computer lab, study session and competition. During the pre-testing phase, students take assessment tests to determine skill level and areas of weakness. “The pre-testing materials come directly from our course content test manual and workbook,” says Smith. “This is done to assure that the correct material and skills are being taught for preparation for the next college math course. I then design individual programs for each student.”

Second, students hit the computer lab, where they use ModuMath lessons and tests – working at their own pace. “Students go to the computer lab and view the lessons for each skill that we pre-tested on to gain tips and instruction directly from the computer software,” says Smith. “They read, listen to audio and learn the recommended procedures to solve problems and comprehend the skill. They write down questions and even begin to help each other with different concepts and procedures. I like the fellowship and the group learning that takes place. It helps begin the process for developing better attitudes and positive self-esteem.”

During the study session phase, student tutors and

Smith help learners review exam mistakes. “In this session, we cover vocabulary words, directions, procedures, review the pre-test and other math questions,” says Smith.

In the last phase, competition, students retake assessment tests to show their mastery of particular concepts. Their scores are compared against one another. “We post results and watch the smiles and high fives,” adds Smith.

Awards go to a variety of performers, including leaders in each class, overall leaders in all classes, female class leaders, and male class leaders. To encourage excitement, Smith posts a leader board in Brown Hall where the developmental math classes are held. “Students can see where they fall, rise and stand compared to others,” says Smith. And, at the end of the semester, 20 students are selected to participate in a final competition. “We have a banquet and honor number one, two and three,” says Smith.

By mastering developmental math, Smith’s students gain opportunity: the chance to take further college courses and pursue a college degree. “This is a course they very much need,” he says. And, thanks to Smith’s creative competition/ModuMath approach, more students “get” math, and as a result, gain access to college. “You see the growth in the students,” he says. “That’s why I teach.”

ModuMath was developed by instructors within the Wisconsin Technical College System (WTCS) for use at community colleges, alternative high schools, and for adult basic education and workplace training. “We initially envisioned ModuMath as either an alternative to the classroom, or a learning resource which would supplement the classroom,” says Annette Czarnecki, ModuMath project manager at the WTCS Foundation. “Over the years, creative educators like Mr. Smith have found ways to incorporate ModuMath’s lessons and tests into very innovative hybrid forms of instruction. It really fills a need for learners who have struggled – often for years – with math.”

If you’re using ModuMath in an innovative way, let us know! Contact Bob Khouri, instructional video specialist, at 800-821-6313 or [video@modumath.org](mailto:video@modumath.org)

## Adult Basic Education Math Scores Soar

The last issue of ModuMath Connections highlighted the use of ModuMath in Adult Basic Education (ABE) programs around the country. The feature story detailed various implementation strategies and reasons why ModuMath's instructional design accommodates the needs of ABE students. Since then, we've heard about another success story from a program in Bridgeport, Connecticut, at Bullard Havens RVTS.

Bullard Havens instructor Sherry Harris teaches a World of Work (WOW) class, which includes ModuMath, along with keyboarding skills, English reinforcement and computer instruction in Microsoft Windows and Office Suite. According to Harris, "During the '04-'05 and '05-'06 school years, we increased the number of hours that the students had access to the ModuMath stations. Instead of using ModuMath just two afternoons a week, students had access to the software four mornings and one afternoon each week. The results were dramatic."

From 2000 through 2004, WOW students on average saw annual CASAS score increases of between 5.26 and 5.60. The class averages during the last two years were 7.83 and 7.89. Harris explained that, "Their math progress was extraordinary. Their work was more concentrated, focused and better supervised due to the access to the ModuMath stations."

By increasing access to and use of ModuMath, Harris saw students' interest increase as their progress accelerated. Bullard Havens could more easily assign needed remedial work in a timely and effective fashion and was better able to accommodate student requests for extra time using ModuMath.

If you have a success story you'd like to share with other instructors, let us know!

## ABE gets a boost for National Reporting

Wisconsin's technical colleges and community-based adult education programs have revised their Adult Basic Education (ABE) to comply with new National Reporting System for Adult Education (NRS) guidelines. Curriculum designers from the Worldwide Instructional Design System (WIDS) facilitated the yearlong process. A competency-based curriculum founded on best practices was created by a collaboration of instructors and administrators, according to Leah Osborn, WIDS project facilitator.

The NRS spurred revisions by establishing additional levels of ABE learning outcomes in reading, writing and math. The revised ABE curriculum helps colleges and community organizations meet the reporting guidelines, as well as meeting the needs of students. Now learners move through the new levels to more accurately reflect growth. See Wisconsin's revised ABE curriculum at [www.curriculumbank.org](http://www.curriculumbank.org).

WIDS, a division of the Wisconsin Technical College System Foundation, Inc., provides curriculum design services and software to educators, business and industry, and government agencies wanting to:

- Encourage exchange of best practices
- Eliminate content overlap
- Address external standards
- Increase the likelihood of accreditation
- Better prepare students
- Save money

For more information on WIDS curriculum design and facilitation services, contact Robin Nickel at 800-677-9437 or [nickelr@wids.org](mailto:nickelr@wids.org).

## ModuMath Tips

If you spot an error in a lesson or test, press the F11 key. This will display information to help Technical Support quickly locate the error. The F11 information displays in the upper left corner in lessons and in the upper right corner in tests. Write down this information along with the lesson or test number before contacting Technical Support. Or print the screen and fax it to us with your explanation or suggestion.

Test 2 Question 1 of 12

question 8

## ModuMath: For students who struggle with

ModuMath

800.821.6313

[www.modumath.org](http://www.modumath.org)

### ModuMath CourseBuilder -- As You Like It!

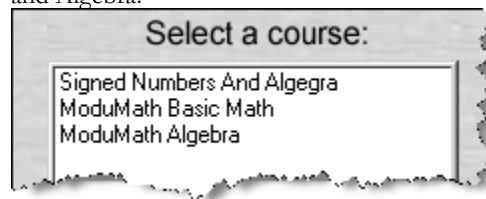
Over 80% of ModuMath users have purchased both the Basic Math and Algebra courses. Most of them use all of the lessons available -- in the recommended order. Some, however, have created custom courses using the ModuMath CourseBuilder software.

ModuMath CourseBuilder lets you customize the lesson sequence in a single course or combine pertinent lessons from both Basic Math and Algebra courses.

For example, some ABE programs create custom courses that include only the Basic Math and Algebra lessons students need to pass the GED. Milwaukee Area Technical College eliminated some lessons from ModuMath Algebra to better match the competencies for one specific course. North Carolina and Ohio colleges included signed numbers lessons from Basic Math in an expanded ModuMath Algebra custom course.

Offering custom courses doesn't prevent you from using ModuMath's standard courses and lesson sequences. When you go to create a class, you'll simply see your custom course listed along with Basic Math

and Algebra.



Creating a custom course is as simple as editing a few text files. Best of all, ModuMath CourseBuilder is currently free to users who have already purchased Basic Math or Algebra. Contact us for a free CourseBuilder installation CD if you want to:

- Create a streamlined course with only the lessons you need
- Combine selected basic math and algebra lessons in a single custom course
- Change the sequence of lessons

If you currently have just one ModuMath course and are interested in expanding the topics and students served, see [www.modumath.org/videolessons.htm](http://www.modumath.org/videolessons.htm) for a list of available titles.