



## Paul Morgan, M.S.

Department of Mathematics, Engineering and Computer Science

— College of Southern Idaho

## WebAssign® Helps Students Connect with Algebra

Paul Morgan believes in self-discipline — and in taking responsibility for achieving one’s objectives, including being successful in mathematics. A retired U.S. Army officer, Paul is in his second career as a mathematics teacher, and already has 14 years of experience under his belt. He teaches at College of Southern Idaho (CSI), a public community college in Twin Falls, where he is also chair of the mathematics department. Paul uses the WebAssign® interactive online homework tool in his college and intermediate algebra courses, and has seen improved engagement, preparation for class, and performance. “Students have to be willing to do the work to make their own education successful,” says Paul. “I emphasize that WebAssign gives them, at their command, the ability to gain mastery of mathematics.”

### COURSES AND PARTICIPANTS

CSI offers courses in various formats — face-to-face, online, and via televised lectures transmitted to various satellite campuses. As many as half of Paul’s students are non-traditional, balancing the number of faces fresh out of high school. A majority of them take algebra to fulfill a general education requirement.

WebAssign is required in Paul’s face-to-face college and intermediate algebra classes. Students attend three 50-minute lectures per week, with the applicable WebAssign homework assignment becoming available after a lecture. Students have until the evening after the subsequent lecture to complete the assignment, allowing them the opportunity to review it and ask questions in class before submission. Students have three chances to get a problem right. Paul also frequently assigns quizzes in WebAssign, with only one submission allowed.

### THE CHALLENGES

Before WebAssign, homework was completed with pencil and paper, and graded by hand. Students often didn’t receive feedback on homework until four to six days after they handed it in, even though the class had proceeded to new material. Students who hadn’t understood were at risk of falling behind.

Paul says his biggest challenge is getting his students to engage with the material, and that a significant number of them need remedial work. “We have some excellent students who will use their associate’s degree as a launching pad for further study in science, math, or engineering majors, but oftentimes math is viewed as a necessary evil,” he says. “The step into algebra is one of the larger steps in math matriculation, so if students don’t have the foundation, that jump is going to be difficult.”

### CHALLENGES

- **College algebra students need to learn how to apply abstract**, to solve problems, a leap in skill level from earlier math courses requiring more concrete calculations.
- **Unmotivated students are difficult to engage**, and disengaged students don’t learn.
- **Time required to hand-grade homework** can mean that students who are having trouble may not get feedback soon enough to remediate before new concepts are introduced, placing them at risk of falling behind.

### SOLUTIONS

- WebAssign®
- Aufmann, Richard N., Vernon C. Barker, & Richard D. Nation, *College Algebra*
- Aufmann, Richard N. & Joanne S. Lockwood, *Intermediate Algebra*

### RESULTS

- **WebAssign® promotes concept mastery** with interactive tutorial support that guides students through the problem-solving process, and offers abundant skill-building practice.
- **WebAssign® promotes students’ involvement in their own learning (and better performance)** with interactive resources, videos, links to eBook pages, and feedback that encourages further study.
- **Automatic grading** provides students with immediate feedback on their assignments. Students come to class better prepared and ask more focused questions, making lecture sessions more productive.

---

“WebAssign guides students in learning how to critically analyze a problem, put it in a mathematical model, and then do the work to solve and interpret.”

**Paul Morgan**

Chair, Department of Mathematics, Engineering and Computer Science,  
College of Southern Idaho

---

To learn more about this and other digital solutions provided by Cengage, visit:

[cengage.com/  
LearningSolutions](http://cengage.com/LearningSolutions)

“College algebra can be like climbing a cliff for some students, so I am always on the lookout for whether they appear to be slipping, or whether they are connecting with the concepts,” he continues. “I want to know that what I’m saying is actually entering the gray matter.”

A related challenge is the transition to a new mathematics skill — abstract thinking. “A good portion of our math experience in public education deals with concrete tools and operations, but college algebra emphasizes problem solving, which requires a more abstract approach.”

### THE RESULTS

WebAssign enhances problems from Paul’s textbooks with interactive tutorial support that assists students as they complete their homework. “I’ve received positive comments about how WebAssign video lectures and tutorials helped some students interact with the math concepts and work through problems that they didn’t understand,” he says. In addition to “Watch It” videos and “Master It” mini-tutorials, students can click “Read It” buttons to link to relevant eBook pages from the text.

“The immediate feedback to the students is the best thing about WebAssign. They can master concepts online, and I can use that understanding as a springboard in class to help them become better problem solvers. That pleases me,” says Paul. “WebAssign guides students in learning how to critically analyze a problem, put it in a mathematical model, and then do the work to solve and interpret.”

Creating assignments with WebAssign can be accomplished in a few minutes. “I like the size of the question database, which gives me plenty of variety, and the tools for creating assignments are simple to use.”

Paul says that WebAssign helps him connect better with his students by helping his students connect with mathematics. “I think students are better prepared, so I can engage with them more effectively, and our class sessions are more productive,” he says. “Students’ questions are more focused because they have interacted with the concepts in WebAssign. ‘I don’t get it’ isn’t a focused question, and I don’t hear it as often as I used to. I also think there has been an improvement in performance, and my impression is that WebAssign boosts students’ willingness to stay in the course because it’s easier for them to do their homework at their convenience.”

Paul also attended a training session to learn about how to take full advantage of WebAssign. “Training showed me how WebAssign is applicable to what I am trying to accomplish in my course. I appreciate the support we’ve had,” he says.

Says Paul, “I have been a cheerleader for WebAssign. I am convinced that an engaged student can master concepts more easily with WebAssign. That’s significant.”

Source Code: 13L-AG0641 | ISBN: 978-1-133-36772-7



Cengage is a leading provider of innovative teaching, learning, and research solutions for academic, professional, and library markets worldwide. The company’s products and services are designed to foster academic excellence and professional development, increase engagement, improve learning outcomes, and deliver authoritative information to people whenever and wherever they need it. Through the company’s unique position within both the library and academic markets, Cengage is providing integrated learning solutions that bridge from the library to the classroom. [cengage.com](http://cengage.com)

Copyright ©2014 Cengage. All Rights Reserved.