





ITEST NEWS

Friday, July 6, 2012 Volume 1, Issue 1

Computer Gaming for Math Success



First week group photo

Two Co-Horts = Two Cool Games!

Students from Grant Union and McClatchy High Schools are at Sac State this summer learning computer science and designing math based computer games for elementary students at Fairbanks and Jed Smith Elementary Schools.

Grant High School is completing the 2nd year of the National Science Foundation (NSF) Grant Program and McClatchy students are in the first year program.

Joining the Grant High school students this summer will be

middle school students from Norwood and Dr. Martin Luther King, Jr. in the Twin Rivers Unified School District. These students will be on campus for two days to field test the games developed by the Grant ITEST students and provide the "seal of approval" as to if the games are both exciting and educational, especially for elementary level students.

Both the Grant and McClatchy High School students will receive \$500.00 and other incentives for their participation in the summer program. The incentives include ACT and SAT college entrance exams preparation, field trips, mentoring with college engineering students and participating in a computer science professional industry seminar where the students will meet and talk with computer scientists currently in the real world of work.

Parents are also involved in the project and an opportunity to view the student's

"demo" games, as well as participate in workshops on college and financial aide and engineering career fields and college majors. Parents that attend the ITEST Parent Workshop on Friday, July 6, 2012 will also receive incentive gifts for their participation.

The ITEST program also provides a unique mentoring program that connects the high school students with college engineering students throughout both the summer and school year. This program provides the high school students with a realistic perspective of what college life is really like as well as information on completing a STEM degree.



Trip to Schillings Robotics

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In this issue: College Students as STEM Mentors

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Industry meets ITEST
Students from Grant and
McClatchy High Schools

ITEST Instructors Talks About Computer Gaming and Curriculum Rigor

ITEST 2012 Summer Program 2 Calendar.



Trip to Schillings Robotics

Photos Courtesy of Schillings Robotics



Instructor John Johnson



Daily Classwork

ITEST Website - Check it Out at $\underline{www.ecs.csus.edu/}$ \underline{itest} for:

- ITEST student photos
- Calendar of Events, Activities and Special Programs
- National Science Foundation (NSF) Links to ITEST Programming Resources

Instructor's Corner

Dear ITEST Parents,

As I'm sure your students have already told you, this summer's class is like no other that they've ever taken. Time is devoted to instruction and actually working on our course project, a computer math game for 1st and 2nd graders. The rigor of the course demands longer and deeper concentration than what many of the students were used to, however, as a parent you'll be pleased to know that each and every student has risen to the challenge. Sure, there are times when any particular student is having a "bad day" when faced with college level computer science applications, but there are just too many exciting milestones flying by that keep students motivated and fully engaged. These milestones include demonstrating their completed mini-games to each other, competing for the best game component, starting new projects, and adding Spanish translations to their projects.

One of the most exciting things for me to watch is how the students interact when working together in teams. For each new sub-project that they work on, the teams are shuffled around. This process mirrors the teamwork they'll be doing in college and eventually in the workforce. I am happy to see how quickly they're learning that differences between team members is actually an advantage. Everybody thinks a little differently and has different strengths. Some excel at programming. Others have organization skills that keep their teams on schedule. Some have an eye for visual design. And still others are willing to just knuckle down and do the hard, tedious work that has to get done in order for the team to be successful. Everybody has something that they can contribute. It's exciting for me to watch, because I can see that we're making far more than just a math game for 1st and 2nd graders. We're making stronger students with better work habits that they'll carry with them for the rest of their lives. But, sssshhh! Don't tell them that. Most of them think they're just having fun!

John Johnson ITEST Instructor Grant High School Co-Hort

ITEST Program Updates and Reminders:

- ~ Daily Attendance—A reminder that attendance is taken daily and students are expected to attend class everyday as a component of the stipend funding.
- Absences- All absences must be excused by a written note from a parent/ guardian. Please contact the ITEST staff prior to any known or planned absences of a student.
- ~ Attire—All ITEST students must be properly dressed for class. No "short' shorts, mid tops, pants that do not fit the torso and hang, or other inappropriate dress.
- ~ Parent Informal "Drop-In" Please feel free to "informally" drop-in on the final day of class for the Grant High School Co-hort to view your student's final math based computer game.
- ~ Stipends—The \$500.00 student stipends will be presented to all eligible ITEST students on the final day of class.
- ~ Incentives—Grant HS ITEST students will also receive other incentives/awards.
- ~ College Seminar-Every Wednesday at lunch.
- ~ ACT/SAT Math Prep-Every Tuesday and Thursday at lunch.