

GALAXY Classroom includes online teacher professional development, implementation tools and support as well as student portfolios, and online laboratories. New features and processes provide GALAXY participants with a highly flexible program, multiple ways to highlight student work, and a variety of opportunities for communication, all the while enabling a cost effective development and operations model. Given GALAXY success at gains in Science and indirect gains in other areas, Best Practice Networks has committed to using the lessons learned, and the learning and professional development model constructed, to focus directly on literacy and math student learning challenges facing our schools.

GALAXY's largest installation received 10 years of funding by the state legislature in Georgia, growing from 225 classrooms in 1996 to over 2500 classrooms, 700 schools and 120 counties. Georgia kids and Georgia teachers love GALAXY science. Transmitted by Peachstar to all Georgia schools, video-based stories spark inquiry, hands-on experiments in class, faxes, emails, and drawings to video characters and students in other schools. Parents share kid's excitement of discovery logging on to see faxes and emails and by working the online labs with their kids.

GALAXY Classroom Benefits for Teachers:

- Teachers have more effective teaching tools
- Hands-on Professional Development
- Participate in GALAXY community of educators
- Full GALAXY support via phone/fax/email/web
- Preparedness for science teaching
- Ease of teaching with provided materials
- Joy in the engagement of students in science
- Parental involvement and appreciation
- Outstanding science and literacy gains
- Teacher community of support and interest

GALAXY Benefits for Administrators:

- Student achievement gains
- Parental involvement and support
- Student enthusiasm
- Enhance teacher skills with support
- Support of teacher collaboration within school
- Re-energized teachers

GALAXY Benefits for Students:

- Learning that is very exciting and empowering
- Relevancy in learning
- Improved performance
- Constructing knowledge
- Motivation to learn and enjoy school
- A learning adventure that lasts a lifetime!

External Evaluation of GALAXY Classroom

WestEd (formerly Far West Laboratory), the largest of the Education Research Labs associated with the Department of Education, studied GALAXY Classroom issuing reports in 1993, 1995 and 2001 evaluating the effectiveness in teacher professional development and in student engagement and achievement gains. Below are excerpts from the studies. The executive summaries of the studies are available in the Media Stream to the right-- click on the title to read the study.

GALAXY Classroom Language Arts Evaluation for Grades 3-5

"The first implementation of GALAXY's Language Arts Program was enthusiastically received by teachers and

students throughout the nation, and it began to demonstrate a powerful ability to change the character of language arts instruction, and to raise test scores. GALAXY appears to be successful in infusing new curricula and bringing meaning centered instruction to varied settings urban, rural) and to diverse populations (African-American, Spanish-speaking, Chapter 1). The vast majority of teachers, regardless of teaching style or philosophy, was able to use the curriculum in the way it was intended."

GALAXY Classroom Science Evaluation for Grades K-2

"The evaluation by Far West Laboratory found that GALAXY science for grades K-2 is a highly successful initiative: Teacher reports and evaluation results Confirm that most students understood the concepts of the two GALAXY themes. GALAXY first and second graders exhibited a striking and statistically significant growth in curiosity when compared to their non-GALAXY peers. GALAXY teachers made statistically significant positive changes on a remarkable 14 out of 29 attitude items (48%). The median amount of time that GALAXY teachers taught science increased from 2 hours per week the year before to 5 hours per week with GALAXY science."

GALAXY Classroom Science Evaluation for Grades 3-5

"The evaluation found that GALAXY science for grades 3-5 is a highly successful initiative: On measures of classification processes, GALAXY students had a statistically significant gain that was more than double the gain of non-GALAXY comparison students. Scores on curriculum-based performance assessments indicate that the majority of GALAXY students across all three grades were able to demonstrate that they understood the "big ideas" or core science concepts of the GALAXY curriculum. In general, when comparison non-GALAXY students were evaluated on some of the same measures, GALAXY students outperformed them in almost every case. In addition, GALAXY teachers displayed significantly more positive attitudes than they had initially regarding their own comfort with and preparation for teaching science and the adequacy of their science materials. Participating in GALAXY led to statistically significant positive changes in attitudes among GALAXY students, when compared to their non-GALAXY peers, toward participating in science class and engaging in activities to which they did not know the right answer."

The Effectiveness of GALAXY for Teaching Standards-based Science in Grades 3-4

The results for both third and fourth grades are impressive by any standard, and they demonstrate that the GALAXY Movers and Shakers curriculum provided students in this study with rigorous, content-rich, science teaching that addressed national standards and helped them understand the concepts considered central to a solid, third- and fourth grade, science education. Given GALAXY's outreach to students from at-risk environments and the preponderance of low income, rural and urban, minority students participating in the study, GALAXY's success is all the more noteworthy.

The Continuing Impact of GALAXY on Early-Adopting Teachers

The interviews revealed that participation in GALAXY Classroom did, indeed, have a profound impact on the practice, students, schools, and careers of the 20 pilot teachers. The teachers reported that they considered the GALAXY science and language arts curricula and materials to be of extremely high quality, and they judged the professional development they received to be exceptional. Teachers felt that the follow-up and on-going support offered by GALAXY during its pilot years was unparalleled, and were particularly impressed by how professionally they were treated by GALAXY staff. Every teacher interviewed reported that GALAXY had a major influence on his or her teaching practice. For several of them, their experience with GALAXY was directly linked to positive career changes and a feeling of empowerment that led to their

working in education reform. The survey results mirror the findings from the interviews and from the original GALAXY evaluation. It is worth noting that retaining such high ratings over an almost 10-year period is most unusual. Generally, people's evaluations of a program or intervention tend to drop or level off over time, particularly if the intervention is no longer being implemented. The fact that these teachers continue to have such high praise for GALAXY is really quite remarkable and speaks very well about the program and its impact.

The Impact of GALAXY Classroom on Pilot Students

The students who participated in this study were very positively affected by their experiences with GALAXY Classroom – in some cases, quite profoundly so. All of them related warm memories of their time in GALAXY classrooms, offering stories and anecdotes about activities they had done, videos and storylines they recalled, and relationships they had built with other GALAXY students, especially with their pen pals. They further claimed that GALAXY increased their interest, knowledge, and skills in science and language arts, and many gave GALAXY credit for instilling in them a desire to take more advanced science or language arts courses in school or to pursue careers in science or writing. Students also felt that what they learned in GALAXY, particularly with regard to working in groups, problem-solving, and communicating with others, benefited them in all subject areas, not just in science and language arts. Given their high appraisal of the quality and impact of GALAXY, it was not surprising that these students gave both the science and language arts programs very high marks in comparison to other curricula and programs they had experienced.

See Alignments to State and Common Core standards for this story online at:

<http://www.awesomestories.com/asset/AcademicAlignment/GALAXY-Classroom-Getting-Started>

See Learning Tasks for this story online at:

<http://www.awesomestories.com/asset/AcademicActivities/GALAXY-Classroom-Getting-Started>



[GALAXY Classroom Science Video Overview](http://www.awesomestories.com/asset/view/GALAXY-Classroom-Science-Video-Overview)

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<http://www.awesomestories.com/asset/view/GALAXY-Classroom-Science-Video-Overview>