Using Science to Bridge Achievement Gaps Simpson Street Free Press Proceedings Paper 2012

Project Summary

Across the country, communities search for innovative and effective ways to promote academic achievement and engage young people in civic life. We use writing and core subject curriculum to accomplish these goals. Coverage of space science in *Simpson Street Free Press* (SSFP) is an important and popular element in what we do, and central to our mission. The strategy works. SSFP students enjoy producing and publishing this content. Our young audience enjoys reading it. Comments from young readers, parents, and from classroom teachers often reference our Space Science section.

SSFP Science lesson plans are designed to draw connections between and among important concepts. We encourage students to research and write about topics they encounter in school (http://www.simpsonstreetfreepress.org/AAA-Briggs-Rauscher-Reaction). Science content is our trademark. In 2011-12, with help from the Wisconsin Space Grant Consortium, we launched a significant expansion in this content



area. Science and space coverage are major components in publications produced online and in hard copy. For instance, we currently run a feature series that encourages young women, girls, and students of color to explore science-related career choices

(http://www.simpsonstreetfreepress.org/editorial/women-in-science). This new section



complements perfectly our popular, and now expanding, Space Science section. This content helps fuel our growing circulation. New publications and additional column inches allow us to include more student writers in our programs and reach more readers.

SSFP continues to expand its emphasis on science. Recent circulation and distribution data demonstrates success. Our in-school distribution numbers continue to increase. Letters and emails from school-age readers (in particular middle school readers), refer often to our "cool" space science section. Through compelling space science content, thousands of young readers are drawn to our pages. During the past two years overall circulation has

expanded by about 17%.

SSFP science content is perfect fodder for the classroom. Teachers use our publications and related curriculum guides in classrooms. Well-researched articles on topics ranging from "Saturn's mysterious rings" (http://www.simpsonstreetfreepress.org/space-science/saturns-rings) to the discovery of possible life-sustaining planets (http://www.simpsonstreetfreepress.org/spacescience/first-goldilocks-planet); from "Runaway Stars" (http://www.simpsonstreetfreepress.org /space-science/runaway-stars) to climate change (http://www.simpsonstreetfreepress.org/science/ ice-research) add spice to our pages. Space science works for our publications. It fascinates our student reporters and encourages them to think critically. As they conduct research, SSFP student writers gain academic confidence. This intricate writing across the curriculum process complements classroom goals common in Wisconsin school districts. SSFP student reporters are required to cite their sources when their story is published. The stories our writers produce and publish draw young readers to the range of academic topics available in SSFP publications. In this way our popular Space Science section acts as a portal. SSFP student reporters explore, write, and polish important skills that easily transfer to any school setting. In turn, they influence their peers. Our writers are effective role models because they are real and because they are local.

Methods and Approach

During the past 20 years Simpson Street Free Press, Inc. has honed an approach to community-based academics that really works. SSFP curriculum is rigorous. But lesson plans are designed to make learning fun, cool, and doable. Kids buy in. They buy in because it's a job, because it's a newsroom, and because they see quickly that our methods work for them at school. SSFP programs help students acquire practical, real-world skills. Our teaching methods and across-the-curriculum approach help students build academic confidence. Seventy-five writers, ages 8-18, produce our publications. They work under the tutelage of college-age editors. SSFP editors are program graduates who now attend UW-Madison. Our methods include solid role modeling, sound academic approach, and collaborative effort across age groups. These methods produce successful, college-bound students, no matter their ethnicity or economic background.



Simpson Street Free Press, Inc. is committed to providing outstanding academic support programs delivered in cost-efficient ways. Our innovative science lesson plans are based on proven strategies. SSFP science sections continue to expand. New online versions allow us to publish more articles and columns than ever before

(http://www.simpsonstreetfreepress.org/science) and space coverage (http://www.simpsonstreetfreepress.org/science) and space coverage (http://www.simpsonstreetfreepress.org/space-science) are major components in these new publications. Using online technology enhances our award-winning approach to out-of-school time academics. No longer constrained by print deadlines and publishing schedules, our students have more time to research science content. We now conveniently post new stories as they are completed. The voices of Wisconsin's most influential role models are thus amplified. Young readers freely access science topics that interest them by browsing SSFP archives. Students enrolled in our programs gain experience in conducting research and in website development. Our organization has the credentials, the kids, the audience and track record to sustain and expand this successful project.

Project Participants

All students enrolled in SSFP programs produce written work for our science sections. SSFP student writers reflect the diversity of our South Madison location. About 75% of program participants are of color. Many come from low-income neighborhoods. About 30% are second language learners. Dozens of academic success stories begin at SSFP, many among most at-risk students. Of course, thousands Wisconsin kids read the positive messages delivered through our publications. We continue to expand the SSFP menu of programs. And we continue to dramatically expand our emphasis on science. Publishing online allows us to include more students and more readers. Kids, readers and writers love science. We engage thousands of young people, and in innovative and cost effective ways.



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Program Evaluation: Outcomes and Measurement Tools

We use the following outcomes and measures to evaluate the success of this project:

• Improve academic, vocational, and leadership skills for members of our teen writing staff: We evaluate success in achieving this goal using student self-evaluations and performance reviews conducted by adult staff members, parents, and teachers. Evaluations focus on attendance, research skills, and articles completed. We also grade organizational and work skills. We require all our students to submit school report cards.

More than 90% of program participants improve overall core subject GPA within six months.

- Expand print circulation and launch an expanded Space Science section. Reach more young people with messages of academic success. Promote interest in science learning: We track circulation numbers, distribution points, and pages printed per issue. During the past 12 months overall column inches devoted to science content increased by approximately 15%, and space science content increased almost 25%. Our writers are extremely effective local role models. They seem "just like us" to kids who read our various publications. We track reader response by documenting web hits, letters and emails received, and through our growing network of middle and high school teachers. About one-third of SSFP distribution is to schools in southern Wisconsin. Overall and inschool circulation reached 23,400 with our latest issue.
- Increase the number of students who are directly involved in producing the various science sections of Simpson Street Free Press. Increase the number of student writers who work in the Free Press newsroom: Increasing content and column inches has allowed us to include more students. And more students than ever are contributing to our Space Science sections. The Simpson Street Free Press has a history of producing college-bound program graduates. During the past ten years, all (100%) of our high school seniors have gone on to college, many with academic scholarships. Admission counselors from several local colleges now make regular visits to our newsroom. Our success rate is high because our core curriculum approach teaches kids how to develop academic self-confidence. We teach the practical skills that really work. Nothing builds academic self-confidence faster than learning to write well, and then seeing your work published. Twenty-three students completed and published space science articles during the past 11 months. All (100%) Free Press writers completed and published at least two science-related stories during the past year.

STEM and Literacy

At SSFP, instruction and training is preparatory. We prepare students for the more complex subject matter they will encounter later. We help them master practical academic strategies. Our students conduct research, check facts, and carefully cite their sources. They quickly learn to apply these strategies at school. Confidence builds as students are immersed in a fun and challenging learning atmosphere. SSFP curriculum is based on latest research and established best practices. Our core strategy is writing across the curriculum. Our approach connects literacy and STEM. A MetLife Education Foundation and After School Alliance study says programs that connect STEM content and writing/literacy can be important in bridging achievement gaps. Simpson Street Free Press science writing lesson plans are excellent examples of out-of-school time activities that support in-school achievement.

Content matters. Methods and approach matter. Across the country communities are turning to after-school programs in search of methods that work. New research tells us that, while extended school days are good, students benefit most when they participate in activities that support inschool learning -- but do not replicate the classroom. This is true whether the activity takes place in the school, or in a community-based setting. This is also a time when school districts across the country are searching for partnerships that work. *Simpson Street Free Press* works with local school districts concerning achievement gaps and best use of out-of-school time.

Conclusions

Proven, evidence-based, core curriculum teaching methods makes *Simpson Street Free Press* programs effective. Our multi-mission service-delivery model makes *Simpson Street Free Press* efficient. Our efforts to expand Space Science coverage and science learning lesson plans are excellent examples of proven and successful non-profit strategies at work.

A recent Harvard Family Research Project study demonstrates that "learning supports outside of school hours should work towards consistent development outcomes for children. In particular, programs that help students acquire practical and transferable academic strategies are considered important." This is exactly what we do. *Simpson Street Free Press* programs and lesson plans are carefully designed to complement local school curriculum. Support through Wisconsin Space Grant Consortium is allowing *Simpson Street Free Press* to expand our innovative curriculum and award-winning approach to after-school learning. We now reach more kids, more often, than ever before. Science learning is cool and fun. And with WSGC's help, the dynamic peer-to-peer messages of *Simpson Street Free Press* are reaching even more young people.



