Simpson Street Free Press Proceedings Paper 2014 Using Science to Bridge Achievement Gaps

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Abstract

Simpson Street Free Press (SSFP) delivers high-quality academic instruction in after-school settings. Local students (ages 8-18) publish five separate youth newspapers. New academic standards emphasize writing proficiency and literacy. Productive use of out-of-school time is crucial, particularly for students from lower income backgrounds. Central to SSFP pedagogy is across the curriculum instructional practices. And science writing for publication is a central to our formula. Each of our newspapers includes several science sections, and space science is our most read and most popular content. SSFP lesson plans are expertly designed to support in-school learning. Students encounter predictable connections to the school day. Our young writers conduct research, use technology, write and read extensively. This system accomplishes multiple outcomes. Students participate in civic discourse and influence their peers. Teachers use SSFP materials in local classrooms. Thousands of young readers are inspired by the voices of southern Wisconsin's most effective and best-known local role models.

Organization Mission and Values

Simpson Street Free Press (SSFP) grew up in one of Dane County's most challenged neighborhoods. In those days it was 15 kids and a few sharp pencils in the back room at Broadway-Simpson Neighborhood Center. Years of steady growth demonstrate scalability. Curriculum, methods, and approach are organized within two complementary mission areas:

- Mission #1: Organize challenging academic activities for youth after-school and in summer. Students develop the skills they need to do well in school and prepare for college. They learn in an authentic newsroom. Reporters conduct research, synthesize facts, and apply an organized approach to academic work. We teach across the curriculum. Students revise each assignment many times prior to publication. We use school report cards, school attendance, Common Core Standards, and "7 Traits of a Writer" to evaluate student progress.
- Mission #2: Spark achievement, academic success, and community service among Wisconsin young people. SSFP reporters are influential. They are leaders. Persistent achievement gaps are part of life for young people in Dane County. SSFP writers lead their peers in a different direction: drugs, alcohol, and smoking are bad; science, history, and community service are cool. Academic success is attainable for all kids. SSFP students publish five separate youth newspapers and operate a network of book clubs.

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During the past 22 years, SSFP has honed a rigorous and richly layered after-school curriculum. Students polish their skills in an authentic workplace. The newsroom process: inquiry, close reading and research, planning and drafting, multiple rounds of revision. Students use modern technology. They have business cards, real assignments, and real deadlines. Students research and write about core subject areas (science, geography, books, history). Content area knowledge grows. Academic confidence grows quickly. School grades and attendance improve.

Project Summary

SSFP fields a menu of programs designed to promote literacy, teach writing, and foster core subject knowledge. We publish newspapers. And for 22 years, our most popular section is space science. Our reporters (and our readers) love this stuff. The source material is endless. Every new Tuesday edition of the *New York Times*, and every issue of *Discover* magazine, is full of story ideas. As they write and research, SSFP students encounter predictable connections to the school day. They learn to cite sources and explore core subject areas. They use technology. They apply an organized academic approach to every assignment. Science learning is a portal at SSFP. Students learn to write by reporting on science.

Writing about and researching space science is perfectly suited for our brand of after-school lesson plan. SSFP approach is simple, old fashion writing across the curriculum. We use apprenticeship models. Because students write for publication, this project is particularly dynamic. Once hooked, young space science reporters start to steer their own research. They get curious. They explore and take notes. Always conscious of their readers, students learn to use voice in their writing. They practice word choice and outlining. The result is excellent work. Each semester (including summer) SSFP writers produce dozens of fascinating space science features. Space science is core curriculum. As content area understanding improves, so does academic confidence. School grades and school attendance improve.



Wisconsin Idea/La Prensa

SSFP grows its own after-school instructors. We use the innovative practice of hiring program grads, now in college, as teachers and editors. Thus our organization accomplishes multiple missions. We write, teach and publish, but we are also a training ground for young professionals. Almost all SSFP editors are of color, and many are bilingual. Using a curriculum they've mastered, they work in the same schools and neighborhoods where they grew up.

Our newest publication is *La Prensa Libre de Simpson Street*. Student writers in grades 4-12 produce a bilingual youth newspaper. Again we turn to our space science lesson plans to churn out well-written articles that fascinate our young audience. The La Prensa project seeks to address

persistent achievement gaps by replicating proven after-school methods. SSFP newsroom skills are easily transferred to the classroom. Activities connect to the school day. Languages are 'unmarked' at La Prensa: reporters work and write collaboratively in either language or use hybrid forms (e.g., code-switching across languages). Instruction and training is preparatory. With an eye toward college-readiness, students polish the most practical of academic strategies. They write, read, and work across languages. This approach turns bilingualism into an academic advantage.

The La Prensa project, now in its pilot stage, will eventually place dozens of University of Wisconsin students in teacher/editor roles. This is the "Wisconsin Idea" element of the project. Gloria Gonzales, former SSFP student and recent UW grad, is the project coordinator. Through the La Prensa project college students, retired teachers and journalists, and local young people draw on each others' skills and abilities. Together they create a new and valuable community asset: a bilingual newspaper.

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. Most program participants are students of color, and most come from low-income neighborhoods. About 30% are second language learners. Dozens of academic success stories begin at SSFP, many among our most atrisk students. Thousands of 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 reach more readers. Young readers and writers love science. We engage thousands of kids, and in innovative and cost effective ways.

Like SSFP, La Prensa is an apprenticeship model. It responds to an immediate and urgent community need with award-winning curriculum and an empowering youth leadership model. La Prensa students also reflect the diversity of our home neighborhoods. About 85% of La Prensa students are of color. About 66% qualify for free or reduced lunch. The number of students enrolled in the La Prensa program will increase (25-60) by summer of 2015.



Is Pluto considered a planet? It's just one of many fascinating questions about our solar system. Scientists don't know all the answers, nor do our student reporters. But we're learning more with each new mission.

Learn more about Planet Earth, our solar system, and the universe at www.simpsonstreetfreepress.org

STEM and Literacy

Common Core or otherwise, new academic standards are coming to Wisconsin. Whatever new standards are eventually installed, they will be more rigorous. And will certainly emphasize writing proficiency and literacy. Writing about and researching science is the SSFP brand. Students learn the basics: hard work, curiosity, academic confidence, and core subject curriculum. We teach productive use of out-of-school time. SSFP methods produce solid results, particularly for students from lower income backgrounds.

At SSFP the term 'literacy' does not mean exclusively reading and writing. In the 21st century literacy connotes an intense knowledge of any particular field of interest. Students who learn financial literacy manage savings and plan for college. Young people who study science and math are STEM literate. SSFP develops and deploys literacy-based curriculum. Our approach is integrated, core subject curriculum deftly applied in OST settings. The National Partnership for Quality After-school Learning says, "Writing and literacy are areas where out-of-school programs can have the most impact." The President's Committee for the Arts and Humanities says SSFP "is pioneering new and innovative ways to apply integrated curriculum in after-school settings." SSFP methods are based on evidence. We closely follow UW-Madison and other national research. Our students use science writing and modern media to inspire peers and thus spark achievement. SSFP science lesson plans are project-based learning that kids enjoy.

Instruction is specifically provided for science writing. Students work one-on-one with editors to read and analyze sources. Before writing, students are evaluated in their understanding of source material through comprehensive questioning. If a student fails to understand a source, additional one-on-one support is provided. Students then work with editors to plan, draft, fact-check, and finalize articles that cover science-related material. Starting with a pencil-written first draft, each student goes through multiple rounds of revision with various editors to bring every article to completion.

"The new global, high-tech marketplace demands intense creativity and thinking that goes beyond basic learning skills. With the growing importance of 21st century skills such as critical thinking and global awareness, the ability to comprehend written text is an essential building block. At its core, literacy is the use of written information to function in society, attain goals and develop knowledge. Without this tool, a student will almost inevitably struggle with other forms of learning. Literacy is an absolute necessity to further learning and development."

-MetLife Foundation and Afterschool Alliance

Outcomes and Measurement Tools

SSFP always measures the same things. We carefully measure school grades, school attendance, research and writing assignments published, book reviews and science assignments completed. We measure hours of extra instruction time in core curriculum and literacy.

Objective #1: Students improve academic performance. Students acquire practical academic skills. Students learn to transfer these skills. **Measurement tools:** School report cards and school

attendance. Performance evaluations conducted by teachers and parents. **Outcomes**: SSFP students submit school report cards each academic quarter. We monitor school attendance. More than 80% of students improve overall core subject GPA within two semesters.

Objective #2: Students complete predetermined requirements for research/writing assignments. **Measurement Tools:** Students keep assignment logs. Editors monitor assignments. Assignments are complete once published. Slug sheets track published assignments. **Outcomes:** All (100%) students complete four research/writing assignments per semester. All (100%) complete a science writing assignment each semester, including the summer semester.

Objective #3: Students receive extra instruction in reading/language arts. Instruction is across the curriculum. **Measurement Tools:** Student timesheets and assignment logs. Slug sheets. **Outcomes:** Rough drafts, and each subsequent draft, are reviewed one-on-one with an editor. All (100%) students complete assignments in at least two of our four lesson plan categories. At least 60% of students complete assignments in three/four lesson plan categories. All (100%) students complete one science assignment, one history assignment, and one book review per semester. Students receive, on average, 4.25 hours of extra instruction time per week.

SSFP methods create obvious multipliers. We facilitate and observe things like youth leadership and civic engagement, but produce only empirical or 'soft' data.

Objective #4: SSFP students are engaged in the community. They acquire leadership qualities and workplace skills. **Measurement Tools:** Participation in lesson plans, interviews, and events. **Outcomes:** All (100%) students host at least two newsroom events or discussion forums. At least 75% of students participate in the Features Lesson Plan, and/or conduct interviews, speak in public, or plan and execute a Museum Series field trip. All (100%) high school students, and at least 60% of middle school students complete at least one research/writing assignment related to financial literacy and college planning.

NOTE: Student evaluations are conducted on a trimester schedule (1st, 2nd, and summer semesters). Evaluations focus on assignment completion, writing proficiency (7-Traits of a Writer) and organizational and work skills. At least 85% of program participants will achieve a 3.75 grade (on 5.0 scale) during each semester (including summer). All students will complete assignments in core subject areas (science, history, books) during each semester (including summer).

Conclusions

Based on Madison's south side, SSFP now operates satellite newsrooms at Capital Newspapers and two local schools. Current students represent seven high schools, nine middle schools, and five elementary schools. Actively engaged local kids are valuable assets in any achievement gap fight. SSFP students engage in civic discourse and influence their peers. Publishing space science content is a natural strategy for us. Every new story about a fiery comet or space probe builds our readership. We know our niche and we know young readers. Our publications encourage interest in space science. We challenge achievement gaps through science reporting and publishing. SSFP further addresses achievement gaps by helping 200 local students do well in school. Everything we do is connected to the school day. Students write across the curriculum. They focus on practical academic strategies. They learn invention strategies, drafting methods, and vocabulary. Assignments and activities grow in complexity with age and ability. We believe learning happens, in large measure, during the revision process. Multiple rounds of editing are required during each assignment. Science research assignments fit our pedagogy perfectly. Our kids buy in and work hard. SSFP students build their core subject knowledge and acquire the practical skills that result in good grades.

