



SAMPLE MATERIAL: Communication With School Staff About Magnet Program and Evaluation

Purpose:

These materials show two different ways that the an evaluation team communicated with magnet school staff about the program's intended outcomes, and the focus of the evaluation.

- First sample: two-page overview about the magnet program and evaluation plan at two schools
- Second sample: excerpt from a comprehensive online guide; offers information similar to overview but in greater depth and detail

These examples can help you think about how you might share information with your magnet school staff to ensure a common understanding of magnet program goals, activities, and evaluation needs.

Source:

Staff at the St. Paul Public Schools (SPPS) in St. Paul, MN, developed these materials in collaboration with Mid-continent Research for Education and Learning (McREL), their external evaluator.

DRAFT – revised (McREL) 8/14/08

BioSMART Evaluation Overview for Staff – 2008-09

What Arlington, Washington, SPPS and the U.S. Department of Education hope BioSMART will achieve:

- Increased proportions of Caucasian students, and eventually increased enrollment overall
- Business and university partnerships and career pathways; standards alignment and instructional capacity in biosciences
- Increased number of bioscience courses, curricular units, and student work-based experiences
- Increased student achievement in science and mathematics, as measured by the MCA-II and SAT10, as well as increased perceptions of engagement and preparation
- Aligned professional development with the district strategic plan, “critical components” of the National Consortium on Health Science and Technology Education (NCHSTE), small learning communities, Principles of Learning and Disciplinary Literacy, and community partner plans

In order to achieve this, at BOTH schools:

- All students will experience the following benefits from BioSMART: business partnerships, mentoring, field experience, rigorous math and science courses, cutting-edge educational technology, and Project Lead the Way.

At Arlington:

- There are three BioScience pathways: Bio Medical and Health Sciences, Bio Engineering and Technology, and Bio Business and Marketing. Teachers and students work within these pathways.
- Each ninth grade student will be “matched” with another student in SPPS based on prior achievement, ethnicity, free and reduced-price meal status, home language, prior middle school, and neighborhood census tract. Both student groups will participate in evaluation data collection.

At Washington:

- Consistent with the Washington Professional Development Plan, all teachers will participate in either the departmental learning community or the interdisciplinary learning community. Members of the departmental learning community will have an academic professional learning community (PLC) within their department (science, math, English, social studies) and will also participate in a task force PLC (attendance, marketing, parent involvement, etc.). Members of the interdisciplinary team will have an academic PLC within their department (science, math, English, social studies) and will participate in an interdisciplinary PLC. These teacher teams will remain distinct throughout the 08-09 school year and most lesson plans, units and other teaching material developed by the interdisciplinary team will be different and/or used differently as compared to those developed by teachers not participating in an interdisciplinary team.
- Aside from Developmental Cognitive Delay and ELL Level 1 and 2 students, all 7th grade students will be assigned at random to either the interdisciplinary team or the departmental team, under the direction of the BioSMART evaluation team.

Which Surveys and Assessments Will Students, Staff and Parents Participate in?

These surveys and assessments are **in addition to** those required by the district and by other grants.

Instruments	Time Required	Fall 2008	Spring 2009	Fall 2009	Spring 2010
7 th Graders at Washington and 9 th Graders and Arlington (and matched students in SPPS) take Science portion of Stanford Achievement Test – (SAT10)	30 - 45 min	Sept (Wash)	May (Both)	Sept (Wash)	May (Both)
Teacher Background Survey - Demographics	10 – 15 min	X		X New Teachers	X New Teachers
Teacher Surveys - PD activities - Instructional practices / Perceived competence	25 min	X	X	X	X
Administrator Interviews	60 min	Sept	June		June
Student Surveys - Attitudes Toward Science - Identification with School Questionnaire	20 – 25 min	Sept	May	Sept	May
Parent Survey (or Focus Group – Arlington only)[adb1][SA2]	30 - 60 min	Sept	May	????	May
Bio-Lead Surveys/Interviews - PD activities - Planning activities - Leadership activities / Perceived competence	60 min	X	X	X	X

The **BioSMART Evaluation Handbook** is available in the “Black Book” on the staff section of the school website. The **Handbook** provides lots of important information about what the evaluation means for you as a staff member at either Arlington or Washington. There are drafts of emails that McREL will send to you requesting that you complete one of the surveys associated with this study, a draft of the teacher demographic survey that will allow us to know who you are and what teaching experiences you have had, a draft of teacher professional development activities, a draft of the student outcome measures, and consent forms for participants (including consent forms that will be sent home to parents to ensure that they know that McREL will be collecting data from their child/children).

BioSMART Evaluation Team

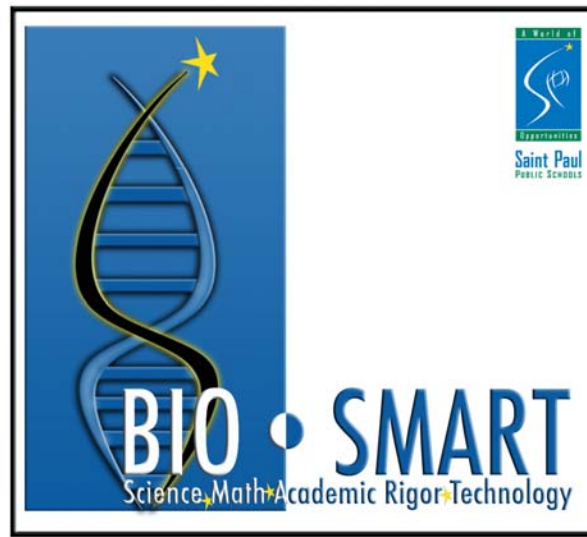
If you have an evaluation question or comment, please contact Tom Watkins first. McREL will contact you directly for surveys. Geoffrey Borman will focus on the experimental design.

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SAT10, survey and other data collection, management, analysis, reporting and presenting.	Responsible for entire BioSMART evaluation, planning, instrument selection and development	Responsible for the BioSMART experimental design, assisting with instrument selection and/or development.

EVALUATION OF ST. PAUL PUBLIC SCHOOLS BIO-SMART MAGNET GRANT:

EVALUATION ORIENTATION MANUAL

JUNE 2008 DRAFT VERSION



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WELCOME TO THE STUDY

Dear Colleague,

On behalf of St. Paul Public Schools and Mid-continent Research for Education and Learning (McREL), we would like to thank you for participating in the federally funded BIO-SMART magnet program. We hope you find teaching in this program to be an exciting process. By participating in the study of the BIO-SMART program, you can help us and other teachers like you know whether this program is effective.

The BIO•SMART Project is based on a national best practice framework and curriculum linking rigorous coursework with defined career pathways and post-secondary coursework. Key components of the BIO•SMART Project are highly trained teachers in the STEM disciplines (including post-secondary staff), post-secondary articulation, and concurrent enrollment, high-quality professional development, and strong partnerships with post-secondary institutions and healthcare industries and hospitals.

Research and evaluation are considered an integral part of the federal magnet grants. We are pleased that the SPPS BIO•SMART program was selected as one of the nationally recognized rigorous magnet programs to be funded. This recognition underscores the importance of the work that each of you will be undertaking as part of the BIO•SMART program and the important role each of you will play in evaluating the efficacy of the program. As part of the research and evaluation for the BIO•SMART program, we will be collecting information from you, as a teacher in these schools. That said, please keep in mind that we are interested in evaluating the program, not you as an individual.

Our data collection activities for this study span two full years, starting in fall, 2008 and continuing through spring, 2010. We want you to know that you play a valuable role in informing the evaluation process. We are eager to work with you as you provide feedback from staff classroom experiences, including successes and challenges. For this purpose, we request that you carefully review the enclosed study materials and contact us should you have any questions about the evaluation study.

Again, many thanks for your participation in the study of the SPPS BIO-SMART magnet grant. We look forward to learning about your experiences with this program. If you have any questions regarding the study, please contact us (our contact information appears below).

Sincerely,

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STUDY BACKGROUND AND INFORMATION

Purpose of the Study

The purpose of this study is to evaluate the effectiveness of the BIO•SMART project for St. Paul students. As you are aware, SPPS is in the process of creating and implementing BIO•SMART, a coordinated 7-16 magnet pathway that focuses on science, technology, engineering, and math (STEM) and emphasizes bioscience pathways. The BIO•SMART Project provides a rigorous education in the STEM fields, and provides entry for traditionally underrepresented communities, including women and students of color into STEM-focused studies and career paths. In addition, the BIO•SMART Project is intended to serve as a model demonstration site for the district, region, and nation.

The BIO•SMART Project will be implemented in two SPPS schools: Washington Middle School and Arlington High School. At Washington Technology Middle, the BIO•SMART Project will operate as a “school-within-a-school” magnet program to which students admitted to the program will be assigned using a lottery. Students applying through the on-time application process who reside in the district will be eligible for the lottery. The school district has attempted to generate interest in the Arlington BIO•SMART program; however, the school is not oversubscribed and makes a lottery for admission to the program implausible. Consequently, the BIO•SMART program at Arlington will not operate as a school-within-a-school program, but will be implemented school-wide program.

The BIO•SMART Project is based on a national best practice framework and curriculum linking rigorous secondary coursework with defined career pathways and post-secondary coursework. The BIO•SMART Project includes rigorous coursework in the STEM disciplines and applied career pathways anchored around national bioscience models. STEM disciplines include:

- Health and science: doctors, forensics, nursing, biomedical technologies, pharmacy, and allied health
- Engineering and technology: engineering, drafting, and computer-aided design
- Business and marketing: web design, graphic design, computer repair, and technical writing

Key components of the BIO•SMART Project are highly trained teachers in the STEM disciplines (including post-secondary staff), post-secondary articulation, and concurrent enrollment, high-quality professional development, and strong partnerships with post-secondary institutions and healthcare industries and hospitals.

Research and evaluation are considered an integral part of the federal magnet grants. We are pleased that the SPPS BIO•SMART Project was selected as one of nationally recognized rigorous magnet evaluations across the country. This recognition underscores the importance of the work that each of you will be undertaking as part of the BIO•SMART Project and the important role each of you will play in evaluating the efficacy of the BIO•SMART Project. As part of the research and evaluation for the BIO•SMART Project, we will be collecting information from you, as a teacher in these schools. That said, please keep in mind that we are interested in evaluating the program, not you as an individual.

Research Questions and Data Sources

The research questions for this evaluation have been aligned with the stated objectives of the BIO•SMART grant. Thus, the evaluation plan addresses primary questions regarding student outcomes (decreasing minority isolation, increasing student achievement, and increasing student preparedness for the future), teacher outcomes (increased instructional capacity) and program implementation (components necessary for realizing student and teacher outcomes such as providing appropriate staff training and focusing efforts on increasing parental and community participation, as well as processes and structures for ensuring sustainability).

To decrease data collection burden, existing sources of survey data will be used as appropriate (SPPS currently surveys students on future preparedness, for instance). Efforts will be made to incorporate and coordinate administration of all new data collection measures into the existing SPPS data collection plans. Data collection for evaluation questions will occur four times during the course of the evaluation: fall 2008, spring 2009, fall 2009, and spring 2010. Table 1 provides an overview of our data collection schedule.

Table 1: DATA COLLECTION SCHEDULE

* B - Both schools; A - Arlington; W - Washington

Instruments	Campus*	Time Required	Fall 2008	Winter 2008	Spring 2009	Fall 2009	Winter 2009	Spring 2010	Fall 2010
Existing District Data (e.g., demographics, enrollment, etc.)	B		X						
Existing Student Test Data (MCA-II)	B		X			Collect in Aug			Collect in Aug
Existing Student Test Data (SAT-10)	W		X						
Student Attendance Data (classroom)	B			Dec	May/June		Dec	May/June	
Existing Student Survey Data - SCOPES Survey - High School Senior Survey	A		Collect in Aug			Collect in Aug			
Teacher Background Survey - Demographics	B		X			X New Teachers		X New Teachers	
Teacher Surveys - PD activities - Instructional Practices / Perc'd competence	B		X		X	X		X	
Administrator Interviews	B		Aug		June			June	
Student Surveys - Attitudes Toward Science - Identification with School Questionnaire	B		Aug		May	Aug		May	
Parent Survey (or Focus Group - Arlington only)	B		Aug		May	????		May	
Bio-Lead Surveys/Interviews - PD activities - Planning activities - Leadership activities / Perc'd competence	B		X		X	X		X	

The appendix section provides additional details on the study materials—we've included drafts of emails that McREL will send to each of you requesting that you complete one of the surveys associated with this study, a draft of the teacher demographic survey that will allow us to know who you are and what teaching experiences you have had, a draft of teacher professional development activities, a draft of the student outcome measures, and consent forms for participants (including consent forms that will be sent home to parents to ensure that they know that McREL will be collecting data from their child/children).