

Innovative Programs/Magnet Schools Request for Proposals Phase I: Concept Development, Basic Information, and General Overview

The Master Plan (adopted by the Board of Education on February 23, 2010) provided for the establishment of “attractive school options to provide desirable choices and deepen student, family and community engagement in the youths’ lives and education.” To meet this goal, any group of teachers and administrators may form a program leadership team in an effort to create an innovative or magnet program.

Directions: Please complete the following proposal and return to the AUSD Coordinator of State and Federal Compliance and School Innovation by Friday June 6, 2014 in order to be considered as a candidate for Phase II: Program Planning and Development. The Board shall make a determination as to which proposals will go forward to Phase II no later than the first regularly scheduled board meeting in August. You will be notified no later than five working days following the decision of the board.

1. Leadership Team

a. Name of Team Leader – Lisa Rosenthal

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- District Email Address – lrosenthal@alameda.k12.ca.us
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b. Other Leadership Team Participants

- Names of teachers on the leadership team (required)
 1. School Leadership Team: Kristy Carling, Connie Chapman, Brooke Sussman, Heidi Huhn, Barbara Little, Danielle Ullendorf, Lisa Rosenthal, James Brandle
 - a. ISP Subcommittee Team: Lisa Rosenthal, James Brandle, Gwen Bass, Connie Chapman
- Names of administrators on the leadership team (optional)
 1. Richard Aguirre
- Names of any other participants on leadership team (optional)
 1. Kathleen Collins – ILT member

2. Draft of Innovative Program Theme/Name:

Describe the proposed **Mission and Vision:**

Our mission is to create a dynamic educational experience for the myriad of cultures that comprise our school population, through specific literacy programs, scientific inquiry, positive behavior strategies and experiential learning.

Our vision is to fully prepare all our students with 21st century skills by creating one of the state's most effective Title One K-5 schools, serving all students of diverse backgrounds and experiences and providing access and equity for our students to become college ready.

Our program name is SPEAK, an acronym for Science Practice through English Arts, and Knowledge. This is in reference to idea that Science will drive our English instruction (as well as the rest of our curricula).

3. Describe the critical educational needs within AUSD that the program will address:

Across the district, rigorous science curriculum is not being implemented consistently K-5. It is a goal of Alameda Unified School District (AUSD) to encourage and increase science education K-5. Having a strong science and literacy based curriculum supports the district's adoption of Common Core State Standards (CCSS) and Next Generation Science Standards (NGSS) to all learners, thereby preparing students for 21st century learning. AUSD's Learning Expectations are that, "AUSD's curriculum is designed to help each child meet the academic standards for their grade level and become an active, engaged learner." In order to do so, we need to provide opportunities and experiences that all students can participate actively with all aspects of the lesson, not sit back and absorb and repeat the information. Also, one of the three stated Strategic Goals for 2013/2014 for the Board of Directors is #2 – "Implement the Common Core State Standards district-wide through collaboration with teachers in AUSD and educate PTA groups, district staff, and community members about the State standards." We see that this proposal is the perfect way to guide us through this change in approach, while having a tangible common thread for all of us to relate to.

Henry Haight Elementary looks to promote a rich educational experience to our diverse population. Integrating Science and Language Arts will allow us to implement our mission and vision. This integration will be our path to develop learners who can solve problems, critically and creatively. Our program will capitalize on the natural connections between science and literacy. Science and literacy are highly complementary in terms of learning goals, cognitive processes, and discourse practices. We envision these combined opportunities through vocabulary before and after labs, notebook recordings of data, using the notebooks for papers or reflections, lab reflections in circle talks (in lower grades) or class discussions (in upper grades), and application of mathematical skills.

4. Rationale

- a. Briefly describe the rationale the leadership team has used to determine the viability of the innovative/magnet program for AUSD:

Previously, faculty evaluated ways to implement CCSS and NGSS, enhance learning opportunities, and create problem solving projects as a way to make learning opportunities more rigorous, frequent, and consistent.

As a leadership team, we decided that we need full staff input. We began looking at what would be a part of our dream school in terms of supporting our students' population. Our staff took a survey and mentioned many parts that we are putting into this proposal. The largest idea is that we feel that we need to have an emphasis on both English Language Arts (ELA) and Science. We took that information and developed an anonymous survey that asked the staff their feelings and thoughts on aspects of innovative school ideas. Next, the leadership team helped develop the staff's review of various innovative or magnet schools with similar populations' programs. In a staff meeting, we took research programs and some of what they are doing in their program that we would like to see. We found that we liked the ideas of science labs, lower student class sizes, professional development for combining science and ELA, more supported technology, and a science lab instructor to help transition our classes. Then we conducted a second anonymous survey that was more specific for matching programs to our student's needs. We determined that most teachers are supportive of the continued research and development of an Innovative School Program (ISP). Based on the second survey, the leadership team determined that Science and ELA are our greatest areas of need for support. We took that information to the staff for a final vote. Staff voted 25-3 in favor of an ISP that will focus on integrating Science and ELA with various supports that we hope to research in the upcoming year.

- b. Briefly describe the need(s) this program fills for AUSD students:

To truly address the access and opportunity gap for our student population, it is essential for our school to provide rich opportunities and experiences that our students may not otherwise have. Science provides a hands-on, constructive experience that students can connect knowledge, regardless of their home language, with their background or experience.

We might see a class where students are learning about motion and gravity. The teacher frontloads the class with vocabulary such as: inertia, gravity, energy, and motion. The class has a circle talk about what they might expect in the lab. Then they perform their experiment with marbles and ramps. During the lab, they write their ideas down in their notebooks (or in worksheets for supporting English Language Learners {ELLs}). Then they have a reading of the text about the experiment. After that they have a writing reflection about the lab. Finally, they have a circle talk about what they learned. These experiences facilitate reading and writing opportunities that enhance each other. Finally, science provides a platform for rich listening and speaking opportunities. This specifically fills ELLs need for authentic experiences to connect English Literacy with their home languages. Title One students need these experiences that they may not otherwise have to enrich their schema.

- c. Briefly describe why parents would be interested in having their student(s) participate in this type of magnet/innovative program:

Families know that literacy and science play an important role in their student's future ability to continue into higher levels of education and be college and career ready. Therefore it is essential that our students' have a rich foundation to support these future goals.

5. Proposed Logistics

Facilities and key resources to be employed by the program:

- a. Briefly describe the type of facility necessary for this innovative/magnet program. For a "school within a school" this can be the amount of space within an existing facility that would be necessary for the program.

Henry Haight's SPEAK School-wide program would require the following facilities:

- Two science labs to facilitate teaching science daily: one downstairs for grades T-K, K,& 1-2 and one upstairs for grades 3-5.
- A dedicated space for a literacy room for science trade books (a grade appropriate book that is not necessarily a text, such as picture books or short stories) and other related literature and informational texts.
- An outdoor science lab for garden and life science investigations.

- b. Describe any key resources known at this time that are necessary for the implementation of this innovative/magnet.

Henry Haight's SPEAK School-wide program would require the following resources:

- To provide rich opportunities and experiences that our students may not otherwise have
 1. We need to develop transportation for field/off-campus trips with key science programs in the Bay Area (Lawrence Hall of Science, Chabot Space and Science Center, Exploratorium, etc) for 4-5 days a year for each class.
 2. We also need to provide on-campus student and teacher workshops from specialized science instructors several times a year.
- To integrate reading, writing, and science effectively, we need to provide professional development and collaboration opportunities to all staff, led by trained specialized science and literacy instructors (examples of professional development models include Lawrence Hall of Science's BaySci program, and the Lawrence Hall of Science's Seeds of Science, Roots of Reading program).
- To develop a sustainable program, we need to provide a dedicated science coach/coordinator for first several years to train and coach teachers weekly on integrating literature, writing, and science content, as well as to help coordinate FOSS science materials. We also need to provide teachers with some additional release time for collaboration with grade level teams and the science coach/coordinator.
- To provide integrated instruction in writing, reading, and science, we need to provide fully updated science lab equipment to supplement FOSS equipment and curriculum to fully meet Next Generation Science Standards (NGSS).

- To effectively integrate reading with science content, we need to provide multiple, grade-appropriate copies of trade books for primary and upper grades, as recommended by the National Teachers of Science Association (NTSA).

c. Approximately how many students do you anticipate will be served by this program each year?

Henry Haight's Innovative program would serve the approximate current population of about 400 students.

d. Please indicate the grade levels that will be served by this innovative program/magnet program?

- Elementary (Kindergarten-Fifth Grade)
- Middle School (sixth grade-eighth grade)
- High School (ninth grade-twelfth grade)
- Other (please specify)

e. What type of leadership structure does this innovative/magnet program anticipate?

Henry Haight would follow the leadership structure currently in place. The current structure includes a nine-member leadership team that meets once a month. The team comprises one general education teacher per grade level, the principal, and two specialized academic instructors. A five person Innovative Program subcommittee has been formed comprising a combination of teachers, including a leadership member, the principal, and specialized academic instructors. The subcommittee would be involved in planning and the implementation of the Innovative program, reporting directly to the leadership team for setting goals, getting approval of next steps, and soliciting other advice and planning.

f. Given the anticipated number of students that will be served...

- How many teachers do you anticipate needing to ensure the success of this program?

To truly meet our mission to create dynamic educational experiences for a student population experiencing access and opportunity gaps and/or comprising a myriad of cultures and home languages, we need to maintain our current staff of 17 FTE and 7 prep/categorical support/spec. ed. staff for a total of 24 teachers, while also being able to:

- Reduce the class sizes for each of our grades. We want to explore the best way to impact our students through lower class size that we can make sustainable. This will allow us to provide exemplary integrated literacy programs with scientific inquiry, positive behavior strategies and experiential learning at more intensive levels at each grade.
 - We will look at a slow implementation of lowering student to teacher ratios. This will take lots of discussion and discourse to implement what will have the greatest impact for our students. We envision some grades lowering their ratios the first year and continuing the process over the next few years.

- Maintain our Title 1 teacher, and our English Language Development teacher. Both should continue to provide our student population with the much needed specialized instruction for students in significant academic, social, or emotional need, and for significant and targeted English Language development need.
 - Maintain our media center/library teacher, PE teacher, and music teacher for students to continue to develop a variety of educational experiences, and to provide general education teachers with preparation time.
- How many and what type of other AUSD staff (teachers, paraprofessionals, etc...) do you anticipate needing for this innovative/magnet program to be successful?

To truly meet our mission to create dynamic educational experiences for a student population experiencing access and opportunity gaps and/or comprising a myriad of cultures and home languages, we need to add two strategic and short-term (2 – 3 year) temporary positions that will provide teachers with opportunities to learn and develop their practice on providing integrated, constructive, experiential science/language arts lessons to our students:

- One full time position of a science coordinator/coach. This teacher would be responsible for: providing staff development on how to effectively integrate reading, writing, speaking and listening with science instruction; coaching individual teachers to develop weekly, monthly, and yearly science instructional goals; co-teaching with teachers and site specialists to model hands-on science investigations and lessons that integrate language arts; collaborating with teachers on how to effectively extend science investigations into Language Arts time; and working with teachers to coordinate and efficiently distribute science materials to meet Next Generation Science Standards.
- One part-time literacy coach. This person would be responsible for: providing support to the science coordinator/coach and other teachers on developing reading, writing, speaking and listening investigations that integrate Next Generation Science Standards using science tradebooks and other related literacy materials; providing strategic small group instruction to students and trainings to teachers on close reading of informational text about science.

6. Background and Research

a. Is the leadership team aware of any examples of this type of innovative program in any other district(s)?

Yes No

- If yes, please indicate which district(s) and give a brief synopsis of the benefits that each individual district realized through the implementation of this type of innovative/magnet program.
- If no, please describe the theory behind and/or any data that supports this type of program.

We at Henry Haight believe that in the idea of constructivist education. “Constructivism, as a perspective in education, is based on experiential learning through real life experience to construct and conditionalize knowledge. It is problem-based, adaptive learning that challenges faulty schema, integrates new knowledge with existing knowledge,

and allows for creation of original work or innovative procedures. Constructivism influences Instructional theory by encouraging discovery learning, hands-on learning, experiential learning, collaborative learning, project-based learning, and task-based learning,” (medlibrary.org, 5/2/14, “constructivism (learning theory)”). These ideas were put together by John Dewey in the early 1900s and have been repeatedly shown to be successful over the next 100 years. Other educational theorists such as Elizabeth Murphy, Len Vygotsky, Ernst von Glasersfeld, and Maria Montessori have applied constructivism to tremendous effects. Now we look to apply these ideas to our classrooms and the CCSS/NGSS.

We believe that the program focused around these instructional methods will best be aligned to effectively to address California’s Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects (CCSS-ELA). As the Next Generation Science Standards’ Appendix M notes, “As the CCSS affirms, reading in science requires an appreciation of the norms and conventions of the discipline of science, including understanding the nature of evidence used...Likewise, writing and presenting information orally are key means for students to assert and defend claims in science, demonstrate what they know about a concept, and convey what they have experienced, imagined, thought, and learned. “(NGSS, Appendix M, page 1).” We see that the instructional methods of Constructivist theory support integrated CCSS and NGSS learning.

Integrating CCSS ELA instruction with NGSS instruction also provides much needed interventions and support for our school’s Title 1 community of students. Appendix D (Case Study) of the NGSS states, “Based on the research literature, effective teaching strategies for economically disadvantaged students include (1) connecting science education to students’ sense of “place” as physical, historical, and socio-cultural dimensions in their community; (2) applying students’ “funds of knowledge” and cultural practices; and (3) using project-based science learning centered on authentic questions and activities that matter to students.” (NGSS, Appendix D, Case Study 1, page 1).

Further, integrating CCSS ELA instruction with science instruction provides language support in several ways for English language learners. The authors of NGSS note, “the literature indicates five areas where teachers can support science and language for English language learners: (1) literacy strategies for all students, (2) language support strategies with English language learners, (3) discourse strategies with English language learners, (4) home language support, and (5) home culture connections. ...These strategies promote English language learners’ understanding of disciplinary core ideas, scientific and engineering practices, and crosscutting concepts as described by the Next Generation Science Standards.” (NGSS, Appendix D, Case Study 4, page 1).

Science content is ideally suited as a vehicle to provide high-quality, engaging instruction using informational text. It is critical for our students to have access to engaging informational text as they authentically investigate, problem solve, and determine meaning through science. According to the CCSS-ELA, “the expected instructional distribution of reading, writing, speaking, and listening of informational text is expected to be at a 50% of ELA time by 4th grade and 70% of ELA by 12th grade” (pg V). Integrating science practice with English Language Arts provides a focus for instructional practice and learning strategies that can meet that expectation.

Finally, this will also carry over into our other standards. We see our teachers applying these techniques to Math, History, Art, PE, and Music. We believe that supported discussions, readings, and writing opportunities will support all of our students’ learning goals. We see ELA as the vector in which we learn all of our subjects.

7. Curriculum

- a. Describe the unique curriculum that this program will offer students.

As a school-wide curriculum, we are looking to create a dynamic program that has opportunities for students to learn through hands-on experiences and scaffolded activities that impacts all learners. We feel that this can be accomplished with smaller class size, an integrated science and language arts program, flexible student groupings, and many out-of-class opportunities. What these might look like, we look forward to investigating over the next year.

We are currently taking inventory of our materials to determine gaps in our curricula for additional resources. We look forward to being efficient with all available resources as we develop our program.

b. Briefly describe the anticipated progression of your program through all grade levels that will be served.

In primary grades, (K-2), the progress of our SPEAK program will use science investigations to support the foundational development of English Language Arts in reading, writing, speaking, and listening. Students will:

- Use age appropriate informational texts to investigate science content to link ELA development with hands-on science investigations.
- Closely read texts in teacher-facilitated small group and whole class discussion.
- Develop writing skills through shared anchor charts, and structured writing.
- Continue to focus on building phonics and phonemic awareness to develop skills for reading through science related activities.
- Build comprehension through informational text and themed literature through read-alouds, shared reading, and shared charting of understandings.

In upper grades, (3-5), the progress of our SPEAK program will use the integration of science investigation and ELA as a means to develop increased depth of knowledge in both content areas. Students will also continue to build on ELA foundational skills expected for their grade level. Students will:

- Support deeper comprehension of informational text through close reading of science related content.
- Relate science content to a student's place in history and the social, political, and economic world through themed inquiries.
- Develop class and school-wide science "museums" as a means to speak, listen, and demonstrate depth of knowledge in both reading, writing, and in science content.
- Encourage deeper understandings through collaborative labs and teamwork.
- Apply out-of-classroom experiences to enrich students' schema for developing richer educational connections.

8. Outcomes

a. What unique outcome(s) is/are expected for each student and his/her family as a result of participation in this program?

We at Henry Haight believe that we will see the following outcomes for students and families at our school as a result of our SPEAK program:

- Students will be engaged in science/ELA integrated instruction on a regular basis. During Phase 2, we will determine exact measurable outcomes of expected weekly instruction.
- Students will be working in indoor or outdoor science labs to develop investigations several times a week.
- Students will have more opportunities for out-of-classroom experiences to support classroom knowledge.
- Physical Education, Library and Media/Technology Education, and Music Education will integrate science/ELA integrated learning where as possible.
- Literacy rates, as measured with appropriate assessments, will improve.

- Science competencies, as measured with appropriate assessments, will improve.
- Attendance to parent workshops on how to support students at home will increase.
- Attendance at parent-teacher meetings will increase. Besides the already established PTA, Back To School Night, Open House, SSC, ELAC, and Multicultural Potluck Night, other possible parent-teacher meetings may be added to help build home-school academic connections. These nights may include a Science Night, Math Night, and Literacy Night.

9. Needs Assessment for Phase II Assistance

- a. **Describe** any support and/or resources that you anticipate you will need from the district should this proposal move from Phase I to Phase II.

To move from Phase I to II, Henry Haight will need the following support and/or resources:

- Substitute teachers for release time for the Program subcommittee to observe other similar programs, and to meet with the developers of those programs to discuss successes and challenges.
- Time-carded collaboration time to develop a more comprehensive proposal through discussion and writing sessions.
- Optional program representatives brought onsite to showcase additional opportunities with regard to maximizing teacher time.
- Professional development days for subcommittee and key staff during the summer to collaborate, discuss, and prepare whole staff professional development activities to move as a staff into Phase II.