

# Quality Review Report 2009-2010

**Salk School of Science**

**Middle School 255**

**320 East 20<sup>th</sup> Street**

**New York**

**NY 10003**

**Principal: Jennifer Goodwin**

**Dates of review: February 3 – 4, 2010**

**Lead Reviewer: Daria Rigney**

## Part 1: The school context

### Information about the school

The Salk School of Science is a middle school with 408 students from grade 6 through grade 8. The school population comprises 19% Black, 13% Hispanic, 51% White, and 26% Asian students. The student body includes 10% special education students, but no English language learners. Boys account for 47% of the students enrolled and girls account for 53%. The average attendance rate for the school year 2008 - 2009 was 96.7%.

### Overall Evaluation

#### **This school is well developed.**

This high-energy, collaborative community, led by a scholarly and thoughtful principal, places a high value on the continuous development, implementation, evaluation, and revision of a robust and rigorous curriculum in all content areas. Projects, assignments, and quizzes align to the school's philosophy of teaching the habits of deep thinking, critical questioning, and personal inquiry. Toward that end, teachers in all subject areas place heavy emphasis on students' notebooks as assessment tools that are reflective of students' thinking processes and concept knowledge. However, teachers do not use this data to generate interim goals for students.

The principal and her cabinet analyze a wide array of both summative and formative data in order to prioritize the most significant strengths and needs of students as well as the setting of school-wide goals. Lead teachers support staff in understanding trends and patterns providing a foundation for creating student groupings for additional support, both in the classrooms and after school.

Teachers actively seek opportunities, in both formal and informal settings, to discuss student work and collaborate on improving lessons as well as developing content-rich and complex projects that challenge and engage students. Department and grade level meetings are the settings for the development of detailed rubrics for each project providing students with next steps in enhancing their skills and improving their grades. These collaborations provide a successful framework for ongoing leadership opportunities for staff members as well as forums for sharing successful teaching practices.

The principal and her team collect data from both formal and informal classroom observations as well as teachers' goals in planning professional development. Teachers are active participants in initiating and planning their own next steps in improving classroom practice. While teacher teams use an inquiry approach for analyzing and categorizing student work, they do not yet adjust their instructional approaches based on this information.

In addition to the school's longtime partnerships with academic and cultural institutions, the principal has used the school's resources to provide state-of-the-art technology classes for all students as well as a wide variety of extra-curricular offerings, including robotics, Greek, and forensics. Students enthusiastically cite the school's success in providing a safe and intellectually stimulating environment for developing independent thinking and personalizing projects to reflect the students' own learning goals.

## Part 2: Overview

### What the school does well

- The school provides a coherent and demanding curriculum that is rich in content and rooted in developing critical thinking and writing skills for all students.
  - o Student projects are manifestations of applying learning to authentic tasks. A science project, for example, asked students to create a family scrapbook for a chemical element including a family tree and birth certificate, requiring a demonstrated knowledge of compounds, symbols, weight, and characteristics.
  - o Curricular maps align across subject areas with a common format that uses backward design as a template. The result of this school-wide template is a multi-faceted and complex map of essential questions, enduring understandings, knowledge, skills, and assessments providing a research-based and user-friendly format for building and refining curricular goals.
- The principal and her cabinet mobilize and deploy instructional resources that enhance teacher accountability and lead to improved student outcomes.
  - o Learning specialists, designated in all subject areas, collaborate with classroom teachers to provide enhanced learning opportunities for all learners, especially students in collaborative team teaching situations and those in self-contained classrooms.
  - o Multiple opportunities for teacher collaboration have been created by innovative programming, including block scheduling, common planning periods, half-days of professional development for specific grades and resource planning, including a revamping of classroom libraries to reflect school goals of increased reading in non-fiction genres.
- The entire school community is vested in generating and sustaining wholesome values that support students in reaching academic and personal goals.
  - o Students can clearly articulate the school's philosophy of learning and give examples of how it has affected their lives as students and community members. This philosophy encourages students to have a passion for and dedication to learning, to be open-minded, open-hearted, true to their values, to respect their community, and to take action to improve the world.
  - o The active student council conducts its own surveys in order to assess the efficacy of particular programs as well as gauging student attitudes about particular issues and concerns. This data forms the basis for committee work aimed at improving the quality of both academic and emotional supports for students in addition to addressing safety and building issues effectively.
- The school collects and analyzes data from a wide variety of sources that lead to strategic curricular, instructional, and organizational decisions.
  - o The principal and her cabinet assemble and organize data, including summative and formative assessments, student work products, and formal and informal classroom observations, by grade level and sub-group in order to identify trends and patterns in students' assessments across all content areas. They compare students' results in a variety of assessments, look for critical

links, and extrapolate from this information in order to chart clear school goals. In literacy, this investigation of data revealed students' weaknesses in analyzing non-fiction texts in a variety of genres. In math, students' difficulty with expressing their thinking in the process strand of standards led to the widespread practice of keeping detailed mathematics notebooks.

- o The school developed DYO assessments that targeted weaknesses identified on State tests enabling a deeper analysis of students' understanding. In literacy, four questions seek to explore students' understanding of authors' purpose. In math, a skeleton tower pattern problem required students to use several methods to represent ideas and explain their thinking.
- The school's goals are closely linked to its mission to create independent thinkers which, through the implementation of a coherent curriculum, results in students who are creative, independent, and responsible citizens.
  - o Staff members create authentic student projects and offer a link for students between classroom learning and applied learning. The school's Exploratorium project is a challenging example of this theory calling on students to select their own topics through a formal proposal process, to engage in field research, to design both secondary and experimental research, to collect and analyze data, and finally to write up their results in a lab report.
  - o Teachers in all subjects explicitly make cross-curricular connections. In 7<sup>th</sup> grade humanities, students engaged in a visual literacy exercise by analyzing the iconography of a Grant Wood painting and building theories about the artist's political intent. This idea was then compared with the parallel process of reading a text and inferring the author's intent making an explicit connection between two disciplines with one complex and useful idea.
- Teachers actively involve the entire staff in continuous learning with multiple leadership opportunities, frequent professional learning opportunities, and professional development targeted to specific teacher needs.
  - o The principal has created positions of lead teacher and learning specialist. This has resulted in a rich, ongoing cross-pollination of teacher expertise in content and pedagogy. For example, a literacy lead teacher works with small groups of students within the context of the classroom, providing an explicit, ongoing model of data-driven differentiated instruction for her colleagues.
  - o Frequent grade level and subject meetings lead to teachers sharing successful practices. For instance, a math teacher who uses a teaching strategy, called "quiz correction" when students review their weekly quiz results with partners has migrated to other subjects. All math teachers now use this practice, cited by students and parents as a particularly effective way of addressing points of confusion.
- The school regularly evaluates and revises its curricular and instructional practices and realizes its aim of improving student outcomes, enhancing curricular depth, and building on its instructional practices.
  - o Teachers' abundant common planning time creates optimal conditions for monitoring the effectiveness of curricular decisions and revising for next steps. In 6<sup>th</sup> grade humanities, teachers revised their work on Ancient Greece by adding new texts to the curriculum as well as increasing the rigor of the

performance assessment to include a debate between opposing sides in the Trojan War.

- o This year, teachers decided to focus their staff inquiry and professional development on the use of student notebooks as artifacts of student learning in order to assess the effectiveness of their teaching.

### **What the school needs to improve**

- Organize classroom assessment data in order to consistently and precisely identify students' strengths and areas of need.
  - o While teachers collect a variety of data from State tests, notebooks, projects, and quizzes, they do not systematically organize this information into a cohesive system for the analysis of strengths and challenges for all students, particularly the many high performing students.
  - o Teachers have been studying notebooks in order to measure students' understanding of skills and concepts. However, there is no cohesive, structured system for capturing and classifying essential information from this data source in order to assess the effectiveness of instruction.
- Formulate interim goals for students with similar academic needs in order to provide optimal instruction for all students, including those who need additional supports or enrichment projects.
  - o Teachers confer regularly with students, but do not consistently link their conference teaching to specific content or skills-based goals. As a result, not all teachers have systems in place for evaluating the effectiveness of instruction based on the evidence of student progress. While some teachers confer with a checklist of skills to gauge student progress, other teachers meet with students without a clear sense of students' next learning steps.
  - o While students find the curriculum engaging, not all teachers understand the importance of particular learning goals for all student groups. For example, in a self-contained special education class on classifying organisms, there was little evidence of students grouped according to their learning targets.
- Refine and expand teachers' understanding of the potential of a collaborative inquiry approach to transform teaching practices.
  - o Teachers analyze student work during their inquiry meetings and categorize student needs, but do not use this information to make adjustments in their teaching. For example, in one teacher team meeting that focused on analyzing notebook entries, it was suggested that teaching might need to be more explicit in order to support students in improving their work. The team did not respond to this suggestion and there was no plan to revisit the lesson.
  - o In a 6<sup>th</sup> grade teacher team meeting, the progress of a small group of students who were not making adequate progress was discussed. While the team made collaborative decisions to provide additional academic and social/emotional supports for these students, the inquiry did not include strategies for improving classroom teaching.

## Part 3: School Quality Criteria 2009-2010

School name: Salk School of Science	Δ	➤	✓	+
Overall QR Score				X
<b>Quality Statement 1 – Instructional and Organizational Coherence: The school has a coherent strategy to support student learning that aligns curriculum, instruction and organizational decisions.</b>				
<i>To what extent does the school regularly...</i>	Δ	➤	✓	+
1.1 Design engaging, rigorous and coherent curricula, including the Arts, for a variety of learners and aligned to key State standards?				X
1.2 Develop teacher pedagogy from a coherent set of beliefs about how students learn best, and ensure that it is: aligned to the curriculum, engaging, and differentiated to enable all students to produce meaningful work products?			X	
1.3 Make strategic organizational decisions to support the school's instructional goals and meet student learning needs?				X
1.4 Maintain a culture of mutual trust and positive attitudes toward learning that support the academic and personal growth of students and adults?				X
Overall score for Quality Statement 1				X
<b>Quality Statement 2 – Gather and Analyze Data: School leaders and faculty consistently gather, analyze and share information on student learning outcomes to understand school and student progress over time.</b>				
<i>To what extent does the school ...</i>	Δ	➤	✓	+
2.1 Gather and analyze information on student learning outcomes to identify trends, strengths, and areas of need at the school level?				X
2.2 Gather and analyze information on student learning outcomes to identify trends, strengths, and areas of need at the team and classroom level?			X	
2.3 Use or develop tools to enable school leaders and teachers to organize and analyze student performance trends?				X
2.4 Engage in an open exchange of information with students and families regarding students' learning needs and outcomes?				X
Overall score for Quality Statement 2				X

**Quality Statement 3 – Plan and Set Goals: School leaders and faculty consistently engage the school community and use data to set and track suitably high goals for accelerating student learning.**

<i>To what extent does the school ...</i>	Δ	➤	✓	+
3.1 Establish a coherent vision of future development that is reflected in a short list of focused, data-based goals that are understood and supported by the entire school community?				X
3.2 Use collaborative and data informed processes to set measurable and differentiated learning goals for student subgroups, and students in need of additional support?			X	
3.3 Ensure the achievement of learning goals by tracking progress at the school, teacher team and classroom level?			X	
3.4 Communicate high expectations to students and families, engage them in decision-making, and promote active involvement in the school community?				X
<b>Overall score for Quality Statement 3</b>			X	

**Quality Statement 4 – Align Capacity Building: The school aligns its leadership development and structured professional collaboration around meeting the school’s goals and student learning and emotional needs.**

<i>To what extent does the school...</i>	Δ	➤	✓	+
4.1 Use the observation of classroom teaching and the analysis of learning outcomes to elevate school-wide instructional practices and implement strategies that promote professional growth and reflection, with a special focus on new teachers?				X
4.2 Engage in structured professional collaborations on teams using an inquiry approach that promotes shared leadership and focuses on improved student learning?			X	
4.3 Provide professional development that promotes independent and shared reflection, opportunities for leadership growth, and enables teachers to continuously evaluate and revise their classroom practices to improve learning outcomes?				X
4.4 Integrate child/youth development, support services and partnerships with families and outside organizations with the school-wide goals to accelerate the academic and personal growth of students?				X
<b>Overall score for Quality Statement 4</b>				X

**Quality Statement 5 – Monitor and Revise: The school has structures for monitoring and evaluating progress throughout the year and for flexibly adapting plans and practices to meet its goals for accelerating learning.**

<i>To what extent does the school...</i>	Δ	➤	✓	+
5.1 Evaluate the quality of curricular, instructional and organizational decisions, making adjustments as needed to increase the coherence of policies and practices across the school?				X
5.2 Evaluate systems for assessing students, organizing data, and sharing information with student and families, making adjustments as needed to increase the coherence of policies and practices across the school?				X
5.3 Establish and sustain a transparent, collaborative system for measuring progress towards interim and long term goals and making adjustments during the year and over time?			X	
5.4 Use data to regularly evaluate the effectiveness of structured professional collaboration, capacity building and leadership development strategies?				X
<b>Overall score for Quality Statement 5</b>				X

**Quality Review Scoring Key**

Δ	<b>Underdeveloped</b>	➤	<b>Underdeveloped with Proficient Features</b>	✓	<b>Proficient</b>	+	<b>Well Developed</b>
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