Cherry K. Sprague, Ed.D.

Field Supervisor

CAREER PROFILE

Accomplished educator with a proven record of curriculum and instruction K-12 in an extraordinary school district. Teaching experiences varied from elementary classes to graduate level courses and many professional workshops. Administrative roles managed projects, grants, and programs falling under a broad range of educational goals and interests. Committed to students, development of new programs. Demonstrated skills to hire, develop, and retain quality teachers.

PROFESSIONAL ACHIEVEMENTS

CSU Eastbay, Hayward, CA Supervising student teachers and interns in the Department of Education	2016-2018
Princeton Public Schools, Princeton, NJ	1977-2015
Biology teacher of all levels and District Supervisor K-12 Science	

Teaching began with Accelerated Biology I and Advanced Biology (that became AP Biology). Previous research experience at the University of Rochester and Rutgers smoothed the path to institute student research projects as a key part of both of these courses. An eye for science courses beyond the traditional science course led to the development and teaching of the following courses: Genetics, Environmental Studies, Biology Forum, and Mastery Program Biology I (a program committed to minority students achieving success in Biology I and continuing success in upper level science electives and AP courses). Beyond the classroom was a two-year commitment to the district Task Force on Class Size with school board members and a handful of teachers. The research and district data analysis led to the recommendation that all K-2 classes have between 15-18 students. The recommendation to invest resources in early education has remained in effect since 1985.

As a supervisor, one profound initiative was the addition of an elementary science teacher and science lab to each elementary school. This shift accompanied a district building referendum. Grade-level teachers accompany their students in lab science classes once-a-week for an hour-long, inquiry-based science lesson that enriches the understanding of science practices beyond the resources and capacities of most grade-level teachers. Over time, with district support, key strands were added to the "elementary lab science curriculum" for technology, gardening, sustainability, and engineering. Another great program development occurred with a research grant from the Institute for Advanced Study located in Princeton. The grant led to a collaboratively designed and implemented elementary research program called the Students' Investigative Project (SIP). The goal of SIP was for groups of students to pursue their own areas of inquiry in one of the grade-level curricular unit. The grant funded teacher resources, professional development for teachers to understand inquiry practices and a flexible-time research specialist who modeled how to gather student questions, to guide students to valid research questions, designs, and to share publicly the findings.

At the middle school level, the first goal was to shift the mind-set to science practices as well as concepts of importance and go beyond facts and favorite activities. Workshops using the framework of Understanding by Design and the template of Atlas Rubicon provided opportunities for collaborative design by teachers of the curriculum. With time, the vision grew beyond science to include STEM/Robotics

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(LEGO Mindstorm) with embedded engineering practices and computer programming. The last development underway added gardening and the study of food matters to the Exploratory Program. Food matters studies preparing, cooking, serving, and understanding the nutritional and economic value meals. Over the years, another achievement was the hiring of science teachers who were open to Project-Based Learning. Each grade-level has at least one PBL approach anchored to the science curriculum.

At the high school level, a rich array of upper-level electives was created. These were Accelerated Astronomy, Accelerated Oceanography, Physical Anthropology, Forensics, Sustainable Horticulture, and Bioethics). Besides increasing course, the routes and access of students expanded for access of students into the Advanced Placement courses. Equally important was the work to eliminate the low rigor introductory-level courses for English Language Learners and Special Needs students by providing inclass support or inclusion classes for students to be successful in first-year courses. Another achievement was to add more students, and more female students to the physics classes, and to embed an engineering approach in the study of the physics courses. One other achievement was adding a Research course as of September 2015

Overall, the science K-12 goals valued lesson planning, coherent design, expansion of classroom studentcentered strategies to engage learners, and strategies to relate the reading and writing of informational text, including data charts and tables. These goals were addressed through embedded professional development opportunities. Another recent goal of professional development with the 6-12 science teachers has been for the teachers to examine the view of fairness and grading and to consider the role of assessment of learning and the value of standards-based assessment. A recent exploration of Myron Dueck's Grading Smarter, Not Harder seemed to have opened willingness to shift grading practices.

The College Board, New York, NY/Educational Testing Service (ETS), Princeton 1983-2001 Worked in varying capacities. One capacity was a member of the Biology Achievement Test Committee. The interactions honed skills to build multiple-choice questions at first- and secondorder cognitive learning. Being an AP Biology Reader, gave rise to an informal network of experts who share their successes in the classroom and the reading/scoring developed a strong sense the power of fair grading rubrics and value of writing essays to demonstrate mastery. As a regional AP Workshop Trainer for AP Biology the preparation and presentations promoted a serious look at the organization of important ideas and to design learning experiences that preview, review and consolidate concepts. Being a Chief Reader of Biology Praxis related to certification for High School Biology. In the past three years, all the roles, led to success at guiding teachers to develop rubrics for assessment and to design fro mastery learning with the need for teachers to have SMART goals and Student-Growth Objectives related to teacher evaluation.

Seton Hall University, South Orange, NJ

2010-2017

Adjunct Professor, Catholic Leadership, Management, and Policy, Graduate School of Education Working within the cohort model of the program and as a co-teacher in four different courses in a Master degree program in Educational Administration. The courses were Supervision, Curriculum and Instruction (first-year), Curriculum and Instruction (second year), and Leadership Dynamics. Student evaluation and sustained contact with graduates attest to the success of the courses.

Project Director of Grants

Mercer County Science Consortium, NJ

Led administrators and science teachers of four school district in the development of inquiry-based science practices in the elementary schools and oversaw the distribution of \$300,000 grant from Bristol-Myers Squibb for teacher professional development for inquiry-based kits developed by the National Science Resource Council.

US Department of Education, Washington, D.C.

Served as co-director for \$50,000 planning grant and \$ 250,000 implementation grant for Small Learning Communities (SLC) at Princeton High School. The project organized lead teachers among the four content areas, established an advisory period, expanded articulation and transitional events to develop a sense of belonging with ninth grade students, provided professional developed related to SLC practices, and provided more times for students to celebrate successes.

Institute for Advanced Study, Princeton, NJ 2007-2012 Directed the IAS two-year grant of \$50,000 that embedded the Student Investigative Project (SI) in the elementary science curriculum and established research residency for the schools. The district picked up backing this program after the grant funding ended.

Director of PALS-ANJEE Grant for Green Schools K-5, Central New Jersey 2011-2012 A one-year grant \$14,000 grant that organized school-wide teams for learning about the energy use of the elementary schools, the use tools to detect differences among different electrical usage, and to inspire ways to achieve a reduction of energy usage by each student, each classroom, and each school. The grant provided a set of energy tools, a vetted set of curriculum-based units, and an outside evaluator of energy usage by the schools. Our organization partnered with Dr. Cynthia Radnitz of Fairleigh Dickinson University to evaluate in students' changes in sustainable behaviors and measure the impact of student understanding of environmental science and sustainability. The following year, the project design and its assessment and evaluation were presented at the Annual ANJEE Conference (Alliance for NJ Environmental Education).

SOCIETIES/MEMBERSHIPS

NJ Science Teachers

Served on the Conference Planning Board that organized NJ presenters at the annual conference. My task was to find five presenters or give five presentations.

National Biology Teachers Association

Presentation at the national conference in 1996, *Using Humor to Teach Biology* with dialogues by two wolf spiders who resided in a biology classroom. Through their dialogues, students engaged in active performance that targeted concepts. The students' actions provided for ongoing assessment of learning.

1994-2014

1994-1999

2004-2009

1980

1983

3

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National Science Teachers Association

Presentation of SIP (1.0) at the 1996 national conference and in 2014, SIP 2.0 at the 2014 national conference.

Association of Supervision and Curriculum Development 1996-2018 Attend regularly national conferences. No presentation proposal has been accepted yet.

Phi Delta Kappa

Presentation at the 2001 conference of a three-year induction program that was co-developed and co-taught with the district supervision of language arts. The emphasis was on retention and development of new teachers.

College Board

Presentation at the 2014 Middle States Forum stressed the collaborative work of the four content areas supervisors related to the Common Core State Standards.

1980-1990 Princeton Regional Educators Association Service began as a building liaison at the high school. With time, the associated position became head of grievance at the district level. Also, served as the vice-president and worked on the district negotiation team for three teachers' contracts. Roles with grievance and negotiations added greater perspective and respect for the challenges of administrators and a greater respect for the board members who served on the school board. The work developed a legal and ethical consciousness became a strong presences at negotiations and to find paths of compromise.

Princeton Regional Administrators Association

This route traced the steps of immersion in the administrators' association and with time led to the realization that administrators have a lesser ability to sway how differences are resolved. With many less members and with not all roles based in buildings the successes were remarkable in our meetings and at negotiations. Work within the administrators professional association created stronger bonds with all the administrators and helped in many ways to build collaborative programs at the varied levels.

BOARD MEMBERSHIPS

Lafayette Library and Learning Center Friends	2017-18
Board Member, Technology Coordinator	
Volunteer at John Muir Historic House	2016-18
Princeton Schools Garden Cooperation (PSGC), Princeton, NJ	2010-2015

Presence on the board had to forward the mission of the PSCS and to shield the district's mission and resources from being diverted projects beyond existing program and curriculum. As a board member, there was advice shared other members of the PSGC board about strategies to gently expand and create inroads to curriculum and to extracurricular activities. PSGC began the elementary gardens and funded a part-time garden educator at each of the schools and this organization was instrumental to explore the

1994-2018

2002

1996-2015

2002

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many afterschool cooking clubs for the past three years. Influence within PSGC and with the central office of PPS administration was another form of negotiations with balanced compromises that each time led to more gardening and cooking education existing in the curriculum.

Organizing Actions for Sustainability in Schools (OASIS), Mercer County, NJ 2009-2015

OASIS is an organization of 17 independent schools and 7 public schools of Mercer County whose mission is to share and support sustainable learning and practices of the schools, including Boards, administrators, teachers, students, parents, and other community members. Each school has formal or informal sustainability coordinators to organize actions. My initial role was to boost science teachers at each level to enter the Green Schools Competition. Our schools showed some progress to reduce the energy needs. Through the organization came an EPA-grant to conduct a waste-audit of the high school. For a year, using the set Wednesday community service afternoons required of sophomores, the recruitment of interested staff, and advisors who directed the grant, our small group conducted an audit that led to a Board presentation, meeting with the principal, and huge newspaper coverage of the study. The effect led to distinct receptacles for landfill or recycling and less plastic water bottles. Beyond the school system as a Board member I worked on a committee to host community presentations at the public library and in the past two years to physically host the Annual Solar Jam each May.

STEM-Civics Charter School, Trenton NJ

Board work to provided an environmental science-based curriculum and directed the school toward Project Lead the Way decisions to advance the mission related to STEM. Being an expert with experience in 9-12 education related to special education, technology, and math, I joined with other founding members to present the design of the charter school to the NJ State Board of Education. While the Director could address the overall mission and goals, my perspective provided meaningful expansion of the curriculum design to implementation and related how professional development would support teaching and learning.

LICENCES/CERTIFICATIONS State of New Jersey

K-12 Comprehensive Science Teacher	1977
State of New Jersey Supervisor	1983
State of New Jersey Certificate of Eligibility for Principal and Chief School Administrator	2003

1077

2012-2014

EDUCATION and OTHER SEMINAL EXPERIENCES

West Virginia University, Morgantown, WV BA Biology, 1972

Rutgers The State University, New Brunswick NJ MA Science Education, 1977

Rider University, Lawrence, NJ 2001-2003 MA Educational Administration, 2003

Seton Hall University, South Orange, NJ Ed. D Educational Leadership, Management, and Policy, 2007

Woodrow Wilson Fellow, Princeton University, Princeton, NJ Summer 1994

Genentech Fellow, San Francisco, CA Summer 1996