Research Lab High School

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Version 3, August 2025

This is a proposal for a school to be created as a partnership between Buffalo Public Schools and the University at Buffalo (SUNY). This proposal was developed from spring 2024 through summer 2025 by a team of school and district leaders from BPS and a group of faculty from UB's Department of Learning and Instruction.

Design team

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Former members

- Erin Belile, School Counselor, BPS (Summer 2024)

Introduction

Context & Purpose

In 2025 UB's Graduate School of Education will move from UB's north campus to the south campus, from the suburbs to the city of Buffalo. Recognizing this move as an opportunity to deepen the relationship between Buffalo Public Schools and UB and help both institutions best serve their communities, Suzanne Rosenblith, Dean of UB's Graduate School of Education and Will Keresztes, Chief of Administration, Public Affairs, and Planning at Buffalo Public Schools, convened a committee in summer 2024 to design a University-Assisted Community School (UACS) to be jointly operated by BPS and UB. The UACS model was developed by the University of Pennsylvania's Netter Center for Community Partnership, which provides ongoing support for the design process.

The design committee meets weekly throughout summer 2024, building trust and mutual understanding of our backgrounds, roles, perspectives, and values. Our first project was to share each of our own visions for what could be possible. We identified common themes and discussed points of divergence, ultimately reaching the shared vision below. Our second project was to identify key

strategies for realizing this vision. Each key strategy below is followed by several concrete steps. We concluded our summer work by developing this proposal, where we lay out the road ahead, including a timeline, resources, and policy commitments which will be required.

Representing BPS on the design committee were the founders and leaders of PS 366 Research Laboratory High School for Bioinformatics & Life Sciences (RLHS-BLS), which has built a rich partnership with UB's Jacobs School of Medicine since its inception in 2016. The committee quickly recognized that RLHS-BLS has achieved a great deal over the last eight years which is closely-aligned with our visions for a new school, and has learned a lot about what works in its specific context. Rather than starting from scratch, therefore, one of the committee's first decisions was to focus on transforming and extending the existing school's structures, practices, and community.

Vision

The committee's shared vision for the next iteration of Research Lab High School:

Research Lab High School (RLHS) is a joyful and collaborative community where students engage in democratic decision-making with community and university partners. At RLHS, we build on the strengths of our communities, their lived experiences, and cultural knowledge to address contemporary challenges in meaningful and authentic ways. Students are supported in their development as proactive and creative problem solvers, capable of effective communication and social change, through project-based learning and an interdisciplinary emphasis on computing. RLHS supports the development of the whole child by valuing their curiosity, academic growth and social-emotional well being.

Key Strategies

Personal growth and relationships

Relationships are at the heart of RLHS's work–in and out of the classroom and during students' high school years and in the futures they are shaping. RLHS will build on the strengths of our communities through use of resources from both BPS and UB communities to provide support to specific needs of the students and communities through which they engage.

- **All students will be known, loved, and supported** through strong school-family relationships, with a faculty advisor as a key point of contact. Students will meet regularly in small-group advisory. Restorative circles are used to address conflict within the school community.

- **Support planning and transitioning from high school to postsecondary education and careers** through internships at UB and with community partners during summers and during the senior year. These internships will support near-peer and mentorship relationships through which students will join communities of practice and build identities which may lead them into future education and careers.

- **Create an ongoing partnership with UB's Department of Counseling, School and Educational Psychology** through which UB and BPS resources can be integrated, to best support youth's changing and intersectional needs.

Authentic inquiry and democratic decision making

Students, teachers, and families will experience RLHS as a democratic institution, with meaningful roles in the school's structure and decision-making processes. Students will integrate and apply their academic learning in the context of yearlong self-directed inquiry projects rooted in community issues and in university-based research.

- **Project-based learning**. All students will take a research course across each of the four years of high school. Each year students will work in groups on a yearlong inquiry project; the research course will be a key orchestrating structure for this inquiry, collaborating with university research and teaching where possible. Each year's inquiry projects will conclude with a research symposium showcasing research conducted by students and teachers at the K12 and university level. The symposium's audience will be the broader school community as well as university partners. We see the symposium as a key moment for establishing the school-university partnerships as a democratic anchor institution, building relationships across roles and institutions.

- **Unified, inquiry-based curriculum**. Each grade level will adopt essential questions which are integrated into all academic courses, and through which academic courses will engage with community issues. (For example, the Science Leadership Academy's essential questions are organized around identity (grade 9), systems (grade 10), change (grade 11), and creation (grade 12).

- **Teacher professionalism and agency.** All teachers teach four sections daily, providing time for planning, collaboration, and professional learning, which will be supported by UB's Department of Learning and Instruction. Teachers are committed to consistent standards, but have flexibility to meet those goals in ways that best meet students' needs and take advantage of emergent opportunities.

- **Align with state-level efforts.**
  - **Community Schools** emphasizing family engagement, strong community partnerships and additional support for students and families.

  - **Seal of Civic Readiness,** a formal recognition that a student has attained a high level of proficiency in terms of civic knowledge, civic skills, civic mindset, and civic experiences.

  - **Culturally Responsive-Sustaining Framework**, which is committed to preparing students who: experience academic success; are sociopolitically conscious and socioculturally responsive; and (3) have a critical lens through which they challenge inequitable systems of access, power, and privilege.

Computer science as an interdisciplinary nexus

All students at RLHS will study computer science (CS) as a standalone subject, integrated into their other courses, and as a skillset which catalyzes university-school relationships. Through framings such as digital civics, digital humanities, and data science and modeling, CS will transform and unite existing disciplines rather than becoming the center of attention.

- **CS as a standalone subject**. Custom-designed CS units will be integrated into each year of the research course, first introducing the subject and later supporting its application to student inquiry projects. All students will take AP CS Principles in the tenth grade. Students

who wish to continue formal study of CS will have the option to take UB's CSE 115 (and potentially also 116) during 11th or 12th grade, in a specially-designed section. Ideally, an instructor would be hired who would teach three periods and push-in the remainder of the day to support integration of the CS standards across the curriculum

- **Interdisciplinary computing**. Computing will function as an interdisciplinary nexus through which the year's theme is integrated into all subjects, and through which skills learned in each subject are applied to student research projects. A full-time CS teacher will have time dedicated to supporting interdisciplinary CS.

- **CS as a catalyst for school-university relationships**. In addition to the potential for taking UB CS coursework, UB will provide support for high school students to learn CS skills which are most needed by UB research groups, and then ongoing support for high school students to have paid apprenticeships in UB research groups.

School-university partnership

The school-university partnership will adopt a model developed by Penn's Netter Center for Community Partnerships, which has three key strategies:

- **University-assisted community schools**. (UACS) UB will be a lead partner to RLHS in enriching its educational offerings and meeting the holistic needs of the school community. For example: field trips to UB labs, researcher visits to campus, curricular co-planning, grant-funded PD opportunities for teachers, and paid apprenticeships in UB labs for high school students.

- **Academically-based community service**. (ABCS) Participating UB faculty will orient their coursework and research toward building knowledge which is meaningful to Buffalo and which contributes to local change. For example, undergraduate architecture studios will work on sites within the RLHS community and will emphasize community engagement in collaboration with RLHS students. RLHS will serve as a research-practice partnership site for researchers in UB's Graduate School of Education and as a hub for UB's teacher residency program.

- The partnership will function as a **democratic anchor institution** "where the university engages its full range of resources (academic, human, economic, cultural) in sustained, mutually transformative partnerships with the local community." Specifically, the partnership will focus on creating pathways into college for high school students and their families, and on transforming UB into a more welcoming and supportive environment where those youth can thrive.