



Pittsburgh Public Schools
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**The School District of Pittsburgh
(Pittsburgh, PA)**

REQUEST FOR PROPOSAL (RFP)

**9-12 Science (Biology, Chemistry and
Physics)**

Issuance Date: March 20, 2023
Submission Date: April 13, 2023

1. Introduction

The purpose of this Request for Proposal (RFP) is to solicit established providers of biology, chemistry, and physics instructional materials that are aligned to the Next Generation Science Standards (NGSS) to provide evidence-based, researched, and reviewed instructional materials to Pittsburgh Public Schools (PPS). This RFP seeks curriculum providers (“Respondents” or “Offerors”) who share a vision for ensuring that all students have access to the highest quality instructional resources aligned to the Phenomena-driven 3-dimensional instruction as outlined in the NGSS.

PA Science, Technology, Engineering, Environmental Literacy and Sustainability (STEELS) Standards are in large part aligned to the NGSS and the evidence-based practices to ultimately increase student achievement and ensure success in college, careers, and community participation. PPS seeks comprehensive biology, chemistry, and physics instructional materials that provide up-to-date, evidence-based, research-based, relevant, and appropriate materials that will effectively support the teaching and learning of all learners in all biology, chemistry, and physics classrooms.

Pittsburgh Public Schools (PPS) seeks instructional materials and approaches that are systematic, structured, and culturally responsive; explicitly support science literacy, students with exceptionalities, and students in need of additional intervention; allow for enrichment and acceleration; and provide easy-to-understand resources for parents/guardians. Digital tools and formative assessments utilized by teachers must allow for differentiated instruction and timely support to students, including accessibility features.

Adopted materials will be implemented during the 2023-24 school year and physical materials will need to be delivered by July 31, 2023.

2. Background

The Pittsburgh Public School District is the largest of 43 school districts in Allegheny County and the second largest in Pennsylvania. The District serves approximately 20,000 students in Pre-Kindergarten through Grade 12. Pittsburgh Public Schools has a vision that all students will graduate high school, college, career, and life ready; prepared to complete a two-or four-year college degree or workforce certification.

3. Scope of Services

Although extensive, the requirements outlined in this RFP are not exhaustive and are intended to provide interested Respondents with sufficient basic information to submit proposals meeting minimum requirements but are not intended to limit a proposal’s content or exclude any relevant or essential information. Proposals should address the entire scope of services requested. In this RFP, Curricular and Instructional Materials are defined to be the comprehensive curricula, textbooks, and instructional materials needed for the entire instructional experience for all students in every classroom, aligned to the Next Generation Science Standards, and adaptable to meet the needs of students with exceptionalities and English Language Learners. Respondents do not need to apply to all three content areas.

Proposals must comply with the following selection requirements as written in PPS Board Policy 106, Adoption of Instructional Materials:

- *The primary criteria for the selection of instructional materials are to address the needs of students as described in the Content Standards at each grade level. All instructional materials and supplementary materials shall reflect in both narrative and illustration a diverse American society and shall provide equal representation of African American and other cultural and ethnic groups. Adopted instructional materials should avoid stereotyped images based on race and gender. Instructional materials should reflect gender and ethnic minorities participating in leadership roles in all aspects of society. The instructional materials that are ultimately selected in each subject area must be challenging and stretch students to meet high standards.*

4. Curriculum Requirements

As requirements, the instructional materials for biology, chemistry, and physics must:

- Instructional materials must be informed by and aligned with the Next Generation Science Standards and consistent with the Phenomena-driven 3D approach to instruction that includes explicit reference to phenomena, disciplinary core ideas (DCI’s), science and engineering practices (SEP’s), and crosscutting concepts (CCC’s).
- Lesson design includes evidence-based teaching principles that reflect a 42-minute class period with possible extended periods.
- Instructional materials should include, but not limited to, the following content-specific standards, inclusive of all performance expectations:

Biology	Chemistry	Physics
Structure and Function	Structures and Properties of Matter	Forces and Interactions
Matter and Energy in Organisms and Ecosystems	Chemical Reactions	Energy
Interdependent Relationships in Ecosystems		Waves and Electromagnetic Radiation
Inheritance and Variation of Traits		
Natural Selection and Evolution		
All performance expectations, cross-cutting concepts, science and engineering practices, and disciplinary core ideas aligned to specific standards (NGSS requirements).		

- Embedded principles of Universal Design for Learning (UDL).
- Instructional materials must include resources that support the teaching and learning of students needing enrichment and acceleration.
- Instructional materials provide strategies and supports for students who read, write, and/or speak in a language other than English to meet or exceed grade-level standards.
- Integrate explicit instruction and resources to support the teaching and learning of English Language Learners.
- Digital materials include opportunities for teachers to extend learning, to personalize learning for all students, and use adaptive or other technological innovations.
- Include features that support the access of students with disabilities and are adaptable to meet the needs of students who are blind or visually impaired, deaf or hard of hearing, those with print disabilities, and students with significant cognitive disabilities.
- Allow for flexibility in meeting the needs of a wide range of students and include accommodations for special populations, including English Language Learners, students with disabilities, including students who are visually impaired and/or deaf or hard of hearing, those with print disabilities, and students with significant cognitive disabilities, and students identified as gifted and talented.
- Include culturally relevant materials and culturally responsive teaching and instructional practices that are inclusive of a variety of cultures and ethnicities and are free from bias in the portrayal of ethnic groups, gender, age, cultures, religion, and people with exceptionalities.
- Include a suite of accessible formative and summative assessment materials, available digitally, aligned to the curriculum, and intended to inform and improve instruction, not intended to replace other standards-based external assessments administered in PPS.
- Include tools, resources, and documents that provide parents/guardians and others with necessary resources to provide transparency in the curriculum and to provide support to academic progress at home or outside the school setting.
- Provide accessible digitally available student-facing, teacher-facing, and parent/guardian-facing materials and resources in multiple languages.

- Include digital and hard-bound print formats.
- A proposal can be submitted for one or more of the following content areas: Biology, Chemistry and Physics

4.2 Usability

- The instructional materials are organized in a systematic way that is comprehensive and clear.
- The visual design (whether in print or digital) supports students in engaging thoughtfully with the subject and is neither distracting nor chaotic.
- The instructional materials include opportunities for teachers to effectively plan and utilize materials with integrity and to further develop their own understanding of the content.
- The instructional materials include resources that teachers may edit, adapt, or enrich.
- The instructional materials provide teacher guidance with useful annotations and suggestions for how to enact the student materials.
- The instructional materials provide a comprehensive list of supplies needed to support instructional activities, including but not limited to student-centered hands-on investigations.
- The instructional materials include a system of assessments identifying how materials provide tools, guidance, and support for teachers to collect, interpret, and act on data.
- The instructional materials provide data dashboards at the teacher, school, and district level for monitoring usage and performance.
- The instructional materials provide specific guidelines for instruction so digital learning is not solely dependent on student independent work.
- The instructional materials provide strategies for informing all stakeholders, including students, parents, or caregivers, about the program and suggestions for how they can help support student progress and achievement.
- **Teacher materials include a curriculum map and overview, containing:**
 - a) Clearly identified strategies, instructional materials, and differentiated resources that are specific to the teaching and learning of students with exceptionalities including students who are blind or visually impaired, deaf, or hard of hearing, and students with significant cognitive disabilities.
 - b) Research based instructional strategies for a range of academically diverse learners explicitly identified and embedded into the core curriculum.
 - c) Scope and sequences for instruction that explicitly outlines the various pathways available for academically diverse learners.
 - d) Resources for scaffolding for English Language Learners and students with exceptionalities in lessons.
 - e) Embedding of principles of UDL that incorporate multiple means of representation (presentation of information/content, various formats for presenting content, i.e., video, audio, images, text, within a lesson), expression (student options for expression of what they know), and engagement (interesting and motivating ways for students to interact with the information/content). UDL identified in daily instructional teacher-facing materials, such as captioned videos, specialized formats of print materials and accessibility features with both hard copies and online.
 - f) Provide an at-a-glance view of when each standard is addressed.
 - g) Anticipated misconceptions in learning in units of study.
 - h) Tiered interventions, supplemental to the core curricula, provide increasing levels of targeted support and differentiated instruction for students not meeting the learning standards.
 - i) Professional learning resources and opportunities that help teachers both implement the program and deepen their content and pedagogical knowledge of the NGSS.

5.0 Training and Professional Development

- The proposal shall describe the initial training and professional development necessary to begin implementation of the proposed instructional materials. The training plan should include mechanisms to train district teachers and central staff who, in turn, will train school staff and provide support districtwide, including availability of digital professional learning tools.
- The professional development plan should be designed to supplement, not supplant, the district’s existing approach to professional development that includes development of school and district expertise and capacity to deliver training districtwide; a focus on equity and cultural proficiency; school-based embedded support from school and district staff; and development of blended professional learning models that include both face-to-face and virtual learning.
- What is the training required to prevent drift in instructional implementation and assessment administration processes?
- What is the cost and how often does research show that refresher training is required?

5.1 Proposal Submission and Deadline

- All proposals must be submitted electronically to Rhonda Graham by 5:00 PM EST by March 16, 2023, with “PPS Science Resource Materials” as the subject line; please note the content in the subject line, i.e., “PPS Science Biology Resource Materials”. Proposals, including any/all attachments and cover letters, should be submitted as a single PDF document. In addition, digital access to all program materials must be provided along with hard copy sample instructional materials units that can be mailed directly to: Rhonda Graham, K-12 Science Supervisor, School District of Pittsburgh Greenway Professional Development Center, Room 223, 1400 Crucible Street, Pittsburgh, PA 15205. Proposals should be submitted in accordance with the proposal guidelines outlined in this RFP. Pittsburgh Public Schools reserves the right to reject any and all proposals, waive irregularities, and to select the proposal that is determined to be the most advantageous to the school district. Late proposals will not be accepted. Proposals submitted via hard copy or fax will not be accepted.

5.2 Timeline

- The Pittsburgh Public Schools is requesting proposals from experienced and qualified firms to provide the services described herein. Selection of the firm will be made based upon proposals submitted. There may also be presentations or interviews (conducted remotely). A timetable for the selection process is provided below:

RFP Issued	March 13, 2023
Proposals Due	April 6, 2023
Presentations (If requested)	May 9, 2023, and May 10, 2023
Approval by the Board of Directors	May 24, 2023
Notification of Board Recommendation to Applicant Finalist	May 25, 2023

Upon the release of this RFP and during the conclusion of the selection process, there shall be no communication between any prospective respondents, their lobbyist(s) or agent(s) and any employee of PPS or its elected Board of Directors, except as provided for in the RFP. Any violation of this provision by any prospective firm and/or its agent shall be grounds for immediate disqualification.

All proposal packages shall be submitted to PPS as follows:

Rhonda Graham

K-12 Science Supervisor

School District of Pittsburgh

Greenway Professional Development Center, Room 223

1400 Crucible Street

Pittsburgh, PA 15205

Email: rgraham1@pghschools.org

5.3 Proposal Introduction

- **Cover Letter:** Provide the name, mailing address, e-mail address, and telephone number of the firm submitting the proposal. The cover letter must be signed by an authorized officer of the organization.
- **Table of Contents:** Clearly identify material contained in the proposal by section and page number.
- **Introduction:** Provide an overview of the company and its products as they relate to this RFP. Share relevant data-based evidence of impact, outcomes from prior and current school districts with similar demographics.
- **Program Overview:** Provide an overview of the program and its core components.
- **Independent External Evaluations:** Provide access to findings from independent external evaluations, conducted by non-profit organizations.

5.4 Evaluation Criteria and Selection Process

- The contract will be awarded to the qualified proposer whose proposal is most advantageous to PPS, based on the evaluation criteria specified below. The overall evaluation feedback from reviewers will guide PPS in making an award decision based on the evaluation criteria.
- PPS reserves the right to request an interview from those companies determined to be in a competitive range and shall use the information derived from these interviews, if any, in its evaluation.
- An evaluation committee, including but not limited to science teachers, principals, chief academic officer, curriculum and instruction staff, assistant superintendents, district-level staff, board members, parents and community members, will review the proposals. The role of the evaluation committee is to review and assess to what extent submitted proposals meet the evaluation criteria and to make a recommendation. The contract will be awarded to the qualified bidder whose proposal is most advantageous to the District. The evaluation criteria will be considered but will not be the sole factor used to determine the successful bidder.

6.0 Platform and Solution Requirements

- Is your online platform compatible with Clever?
- Does your program have a method of effective use within blended learning to promote independent work and teach direct instruction for large and small groups?
- Does your platform provide real-time data reporting in a dashboard with progress reports at the standard and skill level?
- Can your online program be customized to a variety of student proficiency levels?
- Is your online platform aligned to NGSS Standards and Phenomena-driven 3-Dimensional Instruction?
- Does your platform have the ability to create learning paths that specifically meet the needs of individual students?

6.1 Product Information

- Software product name
- Complete Product Description
- Current release version and length this product has been on the market. If you are presenting multiple products to meet our business requirements, please specify for each product.
- Total customer sites that are currently using the current version of the product, particularly with a client of our size. Please indicate if any of them are in Pennsylvania.
- Product licensing structure

6.2 Technical Specifications

- Is this a web-based application or would the product need to be installed on premises?
- What browsers are compatible with this product?
- If locally hosted and installed on premises, what are the recommended/required hardware and operating system platforms for deployment.
- If locally hosted, what are the recommended/required Relational Database Management System for deployment.
- If locally hosted, do you recommend a dedicated server to support your application?
- How much bandwidth is required for connectivity?
- Is external access required?
- What ports does the application/website use?
- What are the URLs?
- Is the website HTTPS?
- How frequently are system back-ups created?
- What Operating System does the application use?
- What database does the application use?
- Do we need to purchase end user devices?
- What is the authentication method?
- How are logins managed?
- What, if any, 3rd party vendors or stakeholders involved and what is the expiration?
- Are SSLs involved and what is the expiration?
- Do we need to be aware of any legal or regulatory constraints?
- Is there inherent risk, weakness, or data threats?
- Data protection – sharing data social medial policy.
- Data privacy – what are the rules for personally identifiable information, protected health information, and other private data?
- Encryption rules?
- Do you support Clever as a single sign-on using our Active Directory (Azure)?
- What data is needed from other district systems?
- What data will be provided to other district systems?
- How often does data need to be exchanged?
- How are changes in the data handled?
- Students transferring schools, staffing changes, etc.
- How can we ensure the security of the data during exchange?
- Is there a mitigation process established?
- Is there any existing metadata, definition, or classifications of the data elements?
- Is there an existing data dictionary?
- What is the Right to Know procedure?

6.3 Data Exchange

- Rostering & data import into your system (in order of preference) – provide the import specifications for review by IT team.
- Do you support ed-fi integration (if yes what version & have you accomplished this with)?
- Do you have 1EdTech One Roster integration (1.1)?
- Do you support clever integration?
- CSV/flat file (provide import specifications)
- Exporting data from your system? (Provide data export specifications and data dictionaries for review by IT and DREA team).
- Ed-fi (what version and what organization have you accomplished this with)
- API (provide documentation to include what endpoints are included in the API)
- FTP (provide export specifications)
- Your nightly export is expected to provide information related to student usage and staff usage explain what elements address the following:
 - Fidelity of usage for students (e.g. daily time logged-in, daily time on task, lessons/segments completed, metrics providing insight into student growth)
 - Staff usage
 - Student and staff audit trails
- Do you support nightly automated loads to and from your system (we have high mobility and systems must reflect at least a day-behind state)
- If no, how do you reflect current student assignment and provide teachers/educators with appropriate access to student data.
- Describe your data access/permissions at a minimum address:
 - How do you establish data access and permissions for teachers and school administrators?
 - How do you establish permissions for district administrators?
 - Provide your auditing capabilities (click paths, change log, etc.)

6.4 Data security and Destruction

- The district does not allow organizations to maintain copies of student data provided by the district or generated in the system by our students beyond the scope of the contract. What are your procedures to ensure that all student data is destroyed and eliminated from your system?
- What are your policies and processes for the use of individual student data for anything outside of the delivery of the service provided by your platform?
- Security, privacy, and other agreements must be in addendums to the contracts the contract and agreement shall not reference agreements housed on websites or other changeable mediums– they may not be changed without approval and agreement from the school board.
- The application must include the following:
 - The frequency of data exchange must be nightly.
 - The data exchange must be automated.
- The program must have data available to support fidelity of usage (minutes logged-in, time on task, lessons/segments completed and student growth)

7. Technology Cost

- What is the entire cost of implementation? You may attach a separate budget sheet if you prefer.
- One-time cost?
- Ongoing yearly cost?
- Customization rate?
- Report's development costs?
- Is there an additional cost for training?
- Is there an additional cost for support?
- What is the cost associated with integrating other third-party providers?
- If your solution is a cloud-based service, is there a service-level agreement and uptime guarantee? If not, do you provide any discount for the customers?
- Do you provide any contractual flexibility and price discount if either party decides to terminate?

7.1 Overall Program Cost

- Include overall costs for the entire curriculum and materials including but not limited to instructional materials and guides, interventions, assessments, professional development, program setup, delivery service, and related materials.