PEEC: Frequently Asked Questions

The following questions may help clarify some of the specifics about PEEC.

Question 1: Who is the primary audience for PEEC?

PEEC supports educators, developers, and publishers. For educators, the evaluation tool clarifies *what to look for* when identifying or selecting instructional materials programs and assessments for the NGSS. For developers and publishers, PEEC provides guidance on *what to focus on and integrate* when designing instructional materials programs for the NGSS. This tool (1) prepares educators to accurately identify, select, or evaluate resources and (2) helps enable developers and publishers to effectively design resources that meet criteria for the NGSS.

Question 2: How do the five innovations described in PEEC differ from the "conceptual shifts" in Appendix A of the NGSS and the implications of the vision of the Framework and the NGSS from the Guide to Implementing the NGSS?

PEEC focuses on what makes the NGSS new and different from past science standards. These differences were first articulated as conceptual shifts in Appendix A of the standards. These conceptual shifts still hold true today, but four years of standards implementation has refined the understanding of what is unique about the NGSS and has revealed that these shifts represent innovations in science teaching and learning.

The five "NGSS Innovations" described in PEEC are:

1. **Making Sense of Phenomena and Designing Solutions to Problems**. Making sense of phenomena or designing solutions to problems drives student learning.
2. **Three-Dimensional Learning.** Student engagement in making sense of phenomena and designing solutions to problems *requires* student performances that integrate grade-appropriate elements of the Science and Engineering Practices (SEPs), Crosscutting Concepts (CCCs), and Disciplinary Core Ideas (DCIs) in instruction and assessment.
3. **Building K–12 Progressions.** Students' three-dimensional learning experiences are designed and coordinated over time to ensure students build understanding of *all three dimensions* of the standards, nature of science concepts, and engineering as expected by the standards.
4. **Alignment with English Language Arts and Mathematics.** Students engage in learning experiences with explicit connections to and alignment with English language arts (ELA) and mathematics standards.
5. **All Standards, All Students.** Science instructional materials support equitable access to science education for all students.

Question 3: How does PEEC relate to the EQuIP Rubric for Science?

The EQuIP Rubric for Science is designed to evaluate learning sequences and units for the degree to which they are designed for the NGSS. It is embedded within PEEC as the tool for evaluating a sample unit from the program as Phase 2 in the PEEC process. The evaluation from this phase is combined with the PEEC Phase 1: Prescreen and PEEC Phase 3: Program Evaluation to give an overall picture of how well the instructional materials program is designed for the NGSS.

Question 4: Is this a science version of the Publisher's Criteria that was developed for the Common Core State Standards for mathematics?

Both PEEC and the *Publisher's Criteria* documents are intended to inform both the developers of instructional materials and those making the selection of which materials to use. The *NGSS Innovations* in PEEC highlight the key differences in NGSS from previous sets of standards and clarifies how these innovations should be represented in instructional materials.

Question 5: I'm interested in working with Achieve to train my teachers on how to use PEEC to evaluate instructional materials. What should I do?

If you are interested in hiring Achieve to facilitate professional learning to support your district team in using PEEC to select instructional materials, please contact peec@achieve.org. Training for effective use takes a minimum of two days if the entire group has already received professional learning for and are comfortable using EQuIP and a minimum of four days if they are not proficient in using EQUIP.

Question 6: I'm a science teacher. How should I use PEEC?

PEEC is designed to support building and district-level selection of year-long (or longer) instructional materials programs designed for the NGSS. Sometimes this task falls to teachers to coordinate. PEEC provides guidelines for a process that teams can use to evaluate instructional materials programs.

If you are not part of your school or district's instructional materials program selection process, but you want to make sure that the process is focusing on the appropriate criteria, share and discuss this tool with those responsible for making these decisions.

If you are looking for support in transitioning your classroom lessons and units, you may want to review the NGSS Lesson Screener or the EQUIP Rubric for Science.

Question 7: I'm a school principal. How should I use PEEC?

While principals are not the primary audience for PEEC, there are several ways that it might be relevant to your work. Some principals help with the selection of instructional materials for your school or district, and PEEC includes both criteria and a process that can be used for that purpose. If selecting instructional material programs is not a part of your duties, then share and discuss this tool with those science teachers and administrators who are responsible for making these decisions.

Question 8: I'm a district science leader or curriculum coordinator. How should I use PEEC?

If you're in charge of coordinating the selection of science instructional materials, PEEC is built to help your team make good decisions about what materials to purchase (or even to wait to purchase materials until you find something that better matches your expectations): the *NGSS Innovations* described in PEEC will help your selection team to develop a common understanding of what to look for in materials designed for the NGSS; PEEC Appendix A will help you to think about building your team and fitting materials selection into your broader implementation plan for science; and the three phases of the PEEC process will help you to design the process that you use for materials selection. If your team is already well-versed in *A Framework for K-12 Science Education* and the NGSS, anticipate about three full days of professional learning to prepare your team for this effort and then several days to dig in and evaluate the materials (depending on how many materials are evaluated).

Question 9: I'm a developer or publisher of science instructional materials. How should I use the PEEC tool?

The *NGSS Innovations* section of PEEC describes the most significant changes from past science standards to the NGSS and their implications for instructional materials. These innovations should focus the efforts to design materials for the NGSS and should be clearly apparent to those making instructional materials selection decisions. A developer might also use the PEEC processes and tools internally to self-evaluate the program that you are developing.

If you are interested in professional learning for your development staff to better understand the evaluations and apply the rubric, or are interested in a confidential review of your materials, please contact peec@achieve.org to discuss your needs in greater depth.

Question 10: Some instructional materials are more expensive than others. Why doesn't PEEC include cost estimates?

PEEC does not attempt to measure all things that might be considered in selecting instructional materials. It is focused on evaluating how well an instructional materials program is designed for the NGSS and asks reviewers to reflect on what the professional learning lift would be to address any

aspects of the innovations that are not well-supported in the materials. There are some additional criteria in PEEC Appendix D that you may want to consider. Of course, purchasers must determine how to weigh quality versus cost considerations in choosing instructional materials.

Question 11: How is this document different from the Guidelines for the Evaluation of Instructional Materials in Science?

The *Guidelines for the Evaluation of Instructional Materials in Science* is not a tool or process for evaluating instructional materials; rather, it describes the research base for evaluative criteria that should be considered in building tools and processes for evaluating instructional materials designed for the NGSS. Its development was informed by early versions of EQuIP Rubric for Science and PEEC, and it informed the most recent version of PEEC. The criteria for all three phases of PEEC have a close connection to those presented in the *Guidelines*.

A full description of alignment to the *Guidelines* will be available in PEEC 1.2.

Question 12: This document is listed as "Version 1.1". What's different from version 1.0?

One of the pieces highlighted for revision in version 1.0 was, "Iterating the Innovations. How can the arguments and discussion about the five NGSS Innovations be more clear and straightforward?" We received feedback from users in the field and from field testing that helped us to revise the language of the innovations to better convey their original intent. In particular, version 1.1:

- highlights the importance of equity and access for all students as foundational to all five innovations;
- separates the NGSS Innovations from their implications for instructional materials in the NGSS Innovations section;
- revises the wording of the NGSS Innovations for clarity.

As was the case with the EQuIP Rubric for Science, we expect that as more and more teachers, schools, districts, authors, developers, and publishers use PEEC, the feedback loops in that process will lead to ongoing improvements in PEEC. Please send comments and suggestions to peec@achieve.org.

Question 13: What's coming in subsequent versions of PEEC?

Subsequent versions of PEEC will include the following enhancements:

Guidelines Alignment. Version 1.2 of PEEC will include a full description of alignment to the *Guidelines for the Evaluation of Instructional Materials in Science.*

Sampling. More specific guidance will be provided about how to sample instructional materials programs to best balance both a rigorous review and the time commitment of the reviewer

Evidence. More examples and specifics will be provided about what users should classify as evidence and provide support to determine if the quantity and quality of evidence collected is sufficient to justify a particular claim.

Utility. The forms and tools will be made more useful for users, including templates and fillable forms.

PEEC Professional Learning Facilitator's Guide Coordination. Just like the EQuIP Rubric for Science, a guide is currently under development to support leaders looking to facilitate professional learning for a selection team. Future versions of PEEC will build a tighter connection to the guide under development. This guidance will include:

- **Streamlined processes for time-constrained users.** Guidance will be provided for how to adapt the PEEC tools and processes for situations that do not allow for the full process due to resource limitations
- **Streamlined presentation of the document and related resources.** PEEC's design will be enhanced to better support users that want to adapt their use to meet local needs.
- **Teaming and Decision Making**. More detailed support about how to put together a materials selection team, how to manage and facilitate the decision-making processes within that team, and how to connect instructional materials review to a broader implementation plan.

PEEC is a work in progress. Please send comments and suggestions for improvement to peec@achieve.org.