The National Academies of
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Design, Selection and Implementation of Instructional Materials for the Next Generation Science Standards (NGSS): A Public Workshop

Board on Science Education

The Board on Science Education at the National Academies of Sciences, Engineering, and Medicine proposes to convene a two-day public workshop focused on developing instructional materials that reflect the principles of *A Framework for K-12 Science Education* (Framework) and the *Next Generation Science Standards* (NGSS). The workshop will bring together a variety of stakeholders that have developed or are developing tools for selection and design of instructional materials corresponding to the Framework and the NGSS. During the sessions of the workshop, participants will: (1) explore ideas for designing and selecting instructional materials, (2) discuss models for professional learning that are linked to implementing high quality instructional materials, and (3) establish shared principles for development, selection and implementation of instructional materials. The workshop will be webcast to allow for participation by individuals who cannot travel to the meeting and a recording will be made available on the website after the meeting is held. We anticipate that there will be between 70-100 participants attending the meeting in person and 70-80 participating via webcast.

An ad hoc committee will plan and conduct the workshop that will feature invited commissioned papers and presentations on identified themes and will produce a proceedings that will be published in book form and as a free, downloadable PDF through the National Academies Press website. The workshop will consider the following themes and questions:

1) Development of materials consistent with the Framework and NGSS
    - What criteria are developers using to guide their work and how do they determine whether materials are consistent with the Framework and NGSS?
    - What are the key challenges developers encounter in developing and piloting instructional materials?
    - What tools are available or are planned to help guide development efforts?
    - What is the connection between the development process and implementation support?
        - Who is involved in the development?
        - What are the goals of the development process?
        - What are the models for developing materials that increases the chances they are implemented with fidelity to the vision of the Framework?

2) Selection of materials consistent with the Framework and NGSS
    - How are district and schools identifying materials that are consistent with the Framework and NGSS?
    - What tools currently exist or are being developed that can aid in selection?
    - What additional tools or guidance would be helpful?

3) Implementation of materials with particular attention to professional learning
    - What strategies are districts and states using to support teachers as they implement new instructional materials?
    - What role do curriculum developers play in providing professional learning opportunities for teachers?

4) Collaboration across stakeholders

- What mechanisms might the community develop to provide wide access to new materials, allow developers to coordinate with each other, and offer a way to verify the quality of materials?

5) Evaluating the utility and efficacy of materials

- How do districts and schools know if materials are successful in supporting instruction of NGSS?