The Importance of Pre-Service Training for the Success of the NGSS

ABSTRACT
Pre-service teacher training is critical to the success of the Next Generation Science Standards (NGSS). The NGSS are designed to be the minimum for all students. Instructional supports will therefore be needed for English language learners, language-deficient learners, disadvantaged students, and so on. However, new teachers, who have not been part of past traditional science education of the past century, and will require a wholly new approach toward teacher training before the full impact of the NGSS can be realized. In-service training for current teachers is also important, but given the realities of limited funds and resources for teacher PD, a fully new approach toward teacher training is important.

The Disciplinary Core Ideas (DCIs), Science and Engineering Practices (SEPs), and Crosscutting Concepts (CCCs) should be learned in the context of constructing an explanation to an overarching scientific Essential Question and/or designing a solution to a problem or challenge.

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