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To: [ED, State Board of Ed](#)
Subject: [External] Science Standards
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Hello,

As I reviewed the standards, I noticed that they seem very incomplete. The Performance Expectations without the clarifying statements from the Science and Engineering Practices, Disciplinary Core Ideas, and associated Crosscutting Concepts give little to review. The details from the Science and Engineering Practices, Disciplinary Core Ideas, and associated Crosscutting Concepts are needed to provide a more complete review of the standards.

Wonderings:

Why were the NGSS were not more closely followed, the NGSS are much more complete and thorough?

Why were the standard *headings* similar to the NGSS but aligned?

Example: *NGSS MS-LS2 Ecosystems: Interactions, Energy, and Dynamics; PA: Matter and Energy in Organisms and Ecosystems and Interdependent Relationships in Ecosystems*

Noticings:

Is it necessary to mention Environment and Ecology in the title of the standards?
Environmental/ecological concepts seem to be included in the original NGSS.

In conclusion, I believe revisiting the NGSS would be beneficial to the team who is being tasked with developing the standards.

Regards,

Rhonda Graham

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