

Educational Resources from *Phenomenon Science Education*

Student Proficiency Goals for NGSS K-ESS3-2



Information about K-ESS3-2

NGSS Performance Expectation K-ESS3-2.

Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

Clarification Statement.

Emphasis is on local forms of severe weather.

Assessment Limits.

No specific assessment limits are listed for this Performance Expectation.

Science and Engineering Practice (Asking Questions and Defining Problems)

- Ask questions based on observations to find more information about the designed world.

Science and Engineering Practice (Obtaining Evaluating and Communicating Information)

- Read grade-appropriate texts and/or use media to obtain scientific information to describe patterns in the natural world.

Disciplinary Core Idea (ESS3.B: Natural Hazards)

- Some kinds of severe weather are more likely than others in a given region. Weather scientists forecast severe weather so that the communities can prepare for and respond to these events.

Disciplinary Core Idea (ETS1.A: Defining and Delimiting an Engineering Problem)

- Asking questions, making observations, and gathering information are helpful in thinking about problems. (secondary)

Crosscutting Concept (Cause and Effect)

- Events have causes that generate observable patterns.

Educational Resources from *Phenomenon Science Education*

Student Proficiency Goals for **NGSS K-ESS3-2**



Student Proficiency Goals

SEP (Asking Questions and Defining Problems):

- Students ask questions about severe weather in their region to find information about the impacts of relevant severe weather events.
- Students ask questions about forecasting severe weather to find information about ways of avoiding or reducing the most serious impacts of relevant severe weather events.

SEP (Obtaining, Evaluating and Communicating Information):

- Students read grade-appropriate texts and/or use grade-appropriate media to obtain information about common types and patterns of severe weather in their region, in order to describe those types and patterns of weather.
- Students read grade-appropriate texts and/or use grade-appropriate media to obtain information about severe weather warnings and what steps people take to avoid or reduce the most serious impacts of relevant severe weather events.

DCI (ESS3.B Natural Hazards):

- Students know the common types of severe weather events in their region.
- Students know what the common weather alerts are and where to find them.
- Students know common strategies to avoid or reduce the most serious impacts of severe weather events in their region.
- Students know that weather scientists watch patterns in the weather over time to try and predict severe weather events, allowing people time to do things that will reduce the most serious impacts of severe weather.

CCC (Cause and Effect):

- Students notice patterns in how people respond to severe weather in their communities.
- Students consider specific impacts that common forms of severe weather can have in their communities.
- Students consider things that severe weather causes people to commonly do to reduce the most serious impacts of that weather.