

Design Principles for Power of Data Teacher Workshops

- Geospatial Inquiry requires **purpose**: answering a question, solving a problem, or explaining a phenomenon.
- Geospatial Inquiry employs geospatial technologies as **tools** which enhance the ability to make sense of **relationships and patterns** in geospatial data and to create **visual** evidence to support written arguments.
- Geospatial Inquiry promotes **cross-disciplinary practices** and **21st century skills** such as collaborating with peers to ask questions, creatively selecting and displaying appropriate geospatial data, critically analyzing and interpreting geospatial data, and engaging in argument using geospatial data as evidence to communicate ideas to diverse audiences.
- Geospatial Inquiry is **iterative and sequenced over time** and employs technological and communication **scaffolds** to promote **conceptual understanding** of big disciplinary ideas.
- Geospatial Inquiry is **socially constructed**. It provides opportunities to collaborate, compare ideas, and receive feedback on those ideas through productive, equitable and respectful discourse.
- Geospatial Inquiry involves **reflective practice**. Learning builds from prior knowledge and experience and requires metacognition to support conceptual understanding.
- Engaging in Geospatial Inquiry and seeing how Geospatial Inquiry is used by professionals provides inspiration to enter **STEM careers**.



GEOSPATIAL INQUIRY

