Teacher summer field experience
Digging dinosaur fossils in Montana with UW Paleontology.

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El Rosario, Baja California

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• #1 Know how to sign up for and participate in DIG.

• #2 Experience the DIG classroom extension and what students do.

• #3 Learn a bit about the K-Pg extinction event of the non-avian dinosaurs.
What is it that your students are highly confident they know about dinosaurs and their extinction?
Teachers engaged in Science Practices

https://www.youtube.com/watch?v=xJu0NYdwKeQ
What teachers do

What students do
Vertebrate microfossils: >125 species

- Sharks & rays: 5 species
- Champsosaurs: 1 species
- Bony fish: 16 species
- Amphibians: 10 species
- Turtles: 19 species
- Lizards & snakes: 13 species
- Crocodiles: 3 species
- Mammals: 28 species
- Dinosaurs: 30 species
A “one-two punch” K/Pg extinction scenario

- Evenness declined in the last 300–500 thousand yrs.

Local biotic communities were destabilized before the K/Pg and predisposed to a ‘knock-out blow’ from the asteroid


Using evidence to construct a more accurate and complete explanation of the K-Pg event.
Fossils in NGSS

• 3-LS4-1. **Analyze and interpret data** from fossils to provide evidence of the **organisms and the environments** in which they lived **long ago**.

• 4-ESS1-1. **Identify evidence** from **patterns** in rock formations and **fossils in rock layers** to support an **explanation** for changes in a landscape over time.

• **MS-ESS2-3. Analyze and interpret data** on the distribution of **fossils and rocks, continental shapes**, and seafloor structures to provide evidence of the **past plate motions**

• **HS-LS4-1. Communicate** scientific information that common ancestry and **biological evolution** are supported by **multiple lines of empirical evidence** (fossils listed in clarifying statement)

*Do Know and Understand are part of each standard and assessment.*
DIG is nationwide – international and K-12
Keep in touch

Jan-Feb: application opens

April- notification of acceptance

Late July early Aug- DIG field school
WSTA + DIG + Burke
“Earth History of WA”