



## Thinking With Data Suggested Best Practices for Teaching the TWD Curriculum

### Executive Summary

This document contains recommended approaches for teaching the TWD unit as a whole as well as each individual module, based on the additional analysis of collected data as part of Activity 2.1 of the NSF TWD supplement funding. In short, we recommend that teachers do the following:

#### TWD Unit

1. *Facilitate students' conceptual understandings and development of problem-solving strategies.*
2. *Facilitate students retaining and building upon their learnings from previous modules.*

#### Social Studies Module

1. *Discuss module fit in the overall unit.*
2. *Focus on problematizing and contextualizing.*
3. *Teach students how to work with data.*
4. *Prepare students for learning in mathematics.*

#### Mathematics Module

1. *Discuss module fit in the overall unit.*
2. *Focus on targeted preparation for and learning of proportionality.*
3. *Use productive ways for sharing student solutions.*
4. *Use data to focus on proportionality.*
5. *Use data in arguments.*
6. *Prepare students for learning in the other modules.*

#### Science Module

1. *Discuss module fit in the overall unit.*
2. *Teach how to obtain relevant data from real data sources to answer questions.*
3. *Share student solutions.*
4. *Use data to focus on proportionality.*
5. *Use data to work through arguments.*

#### English Language Arts Module

1. *Discuss module fit in the overall unit.*
2. *Focus on argumentation.*
3. *Emphasize the use of data to support an argument.*
4. *Provide opportunities for dialogue surrounding students' persuasive speeches.*