1 Shifts Involved in Implementation

1. Teaching $\rightarrow$ figuring things out (Engaging in scientific thinking)
2. Learning scientific facts $\rightarrow$ Creating explanatory knowledge

2 Key Principles

1. Learning oriented around complex and puzzling event (Anchoring Phenomenon)
2. Students' ideas and experiences are treated as resources for learning
3. Allowing students to reason through talking
4. Thinking made visible
5. Students construct, revise, and improve models over time
6. Role as a teacher is to create specialized tools and scaffolds

2.1 What is an Anchoring Phenomenon

Event or process that captures intereest (breaking glass)

Central focus to tie together concepts and practices

$\rightarrow$ Motivates students to wonder

Examples

1. Changes over time
2. How do 2 cases differ?