Objectives

- What is Inquiry?
- Inquiry Process and Strategies
- Available Resources
What is Inquiry?

Inquiry-based learning is a complex process where students attempt to convert information into useful knowledge.

- They do this by...
  - asking questions
  - finding resources to gather information to answer questions
  - interpreting the information
  - reporting the findings
  - reflecting upon their thinking
Why Inquiry?

- **Benefits for Students**
  - More engaging for kids
  - Makes learning more meaningful and impactful for students
    - Will help kids internalize what’s being taught rather than memorizing content

- **Benefits for Teachers**
  - Helps develop cohesive units with multiple skills and/or concepts integrated
    - Focus on the big ideas rather than details
  - Engaging students positively impacts classroom management issues

- **In the standards**
  - **Social Science** - Inquiry Skills Standards
  - **Science** - Science and Engineering Practices
  - **ELA** - Weave together ELA strands of standards
  - **Math** - Math Practice Standards (1, 3)
**Why Inquiry?**

- Aligns to Danielson
- Components in Domains 1, 2, & 3 can all be addressed with the use of inquiry in the classroom
Inquiry Process

- 5 stages to guide students through the inquiry process in the classroom:
  - Engage and Ask
  - Think Critically
  - Draw Conclusions
  - Communicate Findings
  - Reflect

- All stages are emphasizing things **STUDENTS** should be doing in the classroom!
Engage and Ask

- What topic are we studying?
  - Should adhere to state mandates and lend itself to addressing multiple standards.

- What are the big questions I want my students to be able to answer at the end of the unit?
  - What are the main take-aways I need my kids to understand to address these standards?

- How will I engage or interest my students in this topic?
  - What will grab students’ attention and interest AND enable students to ask questions?
  - EXAMPLES: video, picture, artwork, guest speaker, book, poem, question, article, quote

- What questions do my students have about this topic?
  - What are my kids wondering about this topic?
  - Questions kids ask will give teacher insight into background knowledge.

- What questions are manageable within the unit?
  - Available resources and time
Think Critically

- Reading and understanding information
  - Incorporating *multiple* sources to gather information
- Analyzing sources, information, or data
  - Conducting investigations
  - Critically analyze sources
  - How do I know which sources are valid or reliable? Is there implicit or apparent bias in the sources?
- Using progressive graphic organizers, journaling, writing or drawing to organize initial thoughts
- Using collaboration or discussion techniques to further refine thinking
Draw Conclusions

- Answering big question(s) of unit
  - Addressing enduring understandings or main take-aways
- Synthesizing ideas to draw conclusions
- Supporting answers with information learned from sources or investigations
Communicate Findings

- What methods will be used for students to demonstrate what they have learned?
  - Answer the overall question(s) of the unit
  - This can be the unit assessment as long as it connects to overall unit objectives

- Who will this learning be shared with?
  - Engagement is enhanced when students can share what has been learned beyond the classroom
  - Take informed action (advocate) based upon what students have learned if/when appropriate
Reflect

- How has students’ thinking changed based on what they have learned through the inquiry process?
  - Beliefs
  - Behaviors
  - Students and teachers reflect on experience with the inquiry process
What Stages Do You See?

Some strategies address one stage of the inquiry process:

- **QFT Worksheet**
  - Qfocus can be an image, quote, video, phrase, etc. something to pique students’ curiosity and allow them to generate questions

Others can address multiple stages:

- **Textbook Activity Guide**
  - With your group, read through the TAG and mark activities that you see that address the various stages of the inquiry process
    - TC = Think Critically
    - DC = Draw Conclusions
    - CF = Communicate Findings
    - R = Reflect
Engage and Ask: Strategies

- Question brainstorm
- KWL (and variations)
- Question Formulation Technique ([http://rightquestion.org/](http://rightquestion.org/))
  - QFT Small Group Worksheet

**Consider providing students with an image, quote, video/audio clip, or text excerpt to prompt their questioning.**
**Think Critically: Strategies**

**Some strategies used to help students think critically can actually propel them through the rest of the inquiry process.**

- **Textbook Activity Guide (TAG)** - (adapted from Janet Allen author of *Yellow Brick Roads to Reading*)
  - about TAG

- **Read, Rate, Reread** - Kelly Gallagher

- **Collaboration and Discussion Techniques**
  - Think Pair Share (and variations)
  - Structured Academic Controversy
  - Back Pocket Questions - general and math
  - Sentence Stems
  - Sketch to Stretch
Text Activity Guide Tips:

- Determine what is most important
- Use the Inquiry Process Guide
- Scaffold instruction

- Increase the amount students read in a single task, start with short passages and gradually increase
- Increase the complexity/difficulty
  - From beginning of the guide to the end of the guide
  - Beginning of the year to the end of the year
- Some skills might be practiced with a partner near the beginning of the year but expected independently later in the year. (Summarizing, synthesizing, analyzing, etc..)
**Draw Conclusions: Strategies**

- **Collaboration and Discussion Techniques**
  - Sentence Stems
  - Numbered heads/Talking Chips
  - Think Pair Share (and variations)
  - Structured Academic Controversy
  - Back Pocket Questions - general and math

- **Written Strategies**
  - Written Response
    - Journaling, Graphic Organizer, Short Responses
  - Textbook Activity Guide - (adapted from Janet Allen author of *Yellow Brick Roads to Reading*)
    - about TAG
  - Article of the Week - from Kelly Gallagher
    - Kelly Gallagher’s AOW

**Collaboration and Discussion Techniques can help students refine their thinking but students need opportunities to explain their thinking independently even after group discussion or deliberation.**
teacher, author, speaker, coach—dedicated to helping students become better readers and writers

Vale MS in Vale, OR sample AOW
Communicate Findings: Strategies

- Writing
- Product/project
  - Poster
  - Flyer
  - Brochure
  - Cartoon/Comic Strip
  - Tic-Tac-Toe/Choice Board
- Presentation/Speech
  - PPT
  - Commercial
  - Rap
  - Play
Reflect: Strategies

- Collaboration and Discussion Techniques
  - Think Pair Share (and variations)
  - 3-2-1 (and variations)
  - Sentence Stems
  - MRI - summarize the Main idea; Reflect on the meaning; what are the Implications for my life?

- Independent Reflections
  - Exit Note
    - Response Questions: How might you look at _____ differently now? How might you respond differently now?
    - Suggestion for improving the inquiry process in the future
  - 3-2-1 (and variations)
  - Sketch
Available Resources
Newly-Released Illinois-Specific Resources

- Illinois Social Science in Action website
  - [http://www.ilsocialscienceinaction.org/](http://www.ilsocialscienceinaction.org/) (is also linked from IL Classrooms in Action)

- Resources:
  - **Illinois Resources** - all resources created by Content Specialists specifically aligned to the Illinois Social Science Standards
  - **Resource Website** - external websites that may be helpful to support standards implementation in the classroom (many may be aligned to C3 Framework)
Newly-Released Illinois-Specific Resources

- Inquiry Graphics K-12
  - Intention is to support teachers with the goal of engaging students in the inquiry process
  - Statements include suggested steps for each stage of the inquiry process
  - Select grade level from: http://www.ilsocialscienceinaction.org/illinois-resources.html
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- www.ilsocialscienceinaction.org
  - Illinois Resources - all resources created by Content Specialists specifically aligned to the Illinois Social Science Standards
  - Resource Website - external websites that may be helpful to support standards implementation in the classroom (many may be aligned to C3 Framework)
- www.ilclassroomsinaction.org
  - Resources to support all content areas

Please provide some brief feedback: http://bit.ly/RSAC-SSIInquiry
Real-World Example

As you watch:
Identify at least one key component necessary in the inquiry process.

Full Video Link:
http://goo.gl/kxyXC0