

PROJECT **READi**

Reading, Evidence, and Argumentation in Disciplinary Instruction

Identifying and Responding to Struggle in Middle-School Readers: A Design-Based Research Classroom Perspective

Rick Coppola

8th Grade Teacher: John B. Drake Elementary School

Literature Design Team Member: Project READI

PROJECT **READi**

inquirium



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PROJECT **READi**

Reading, Evidence, and Argumentation in Disciplinary Instruction

PROJECT READI is a multidisciplinary, multi-institution collaboration aimed at research and development to improve complex comprehension of multiple forms of text in literature, history and science.

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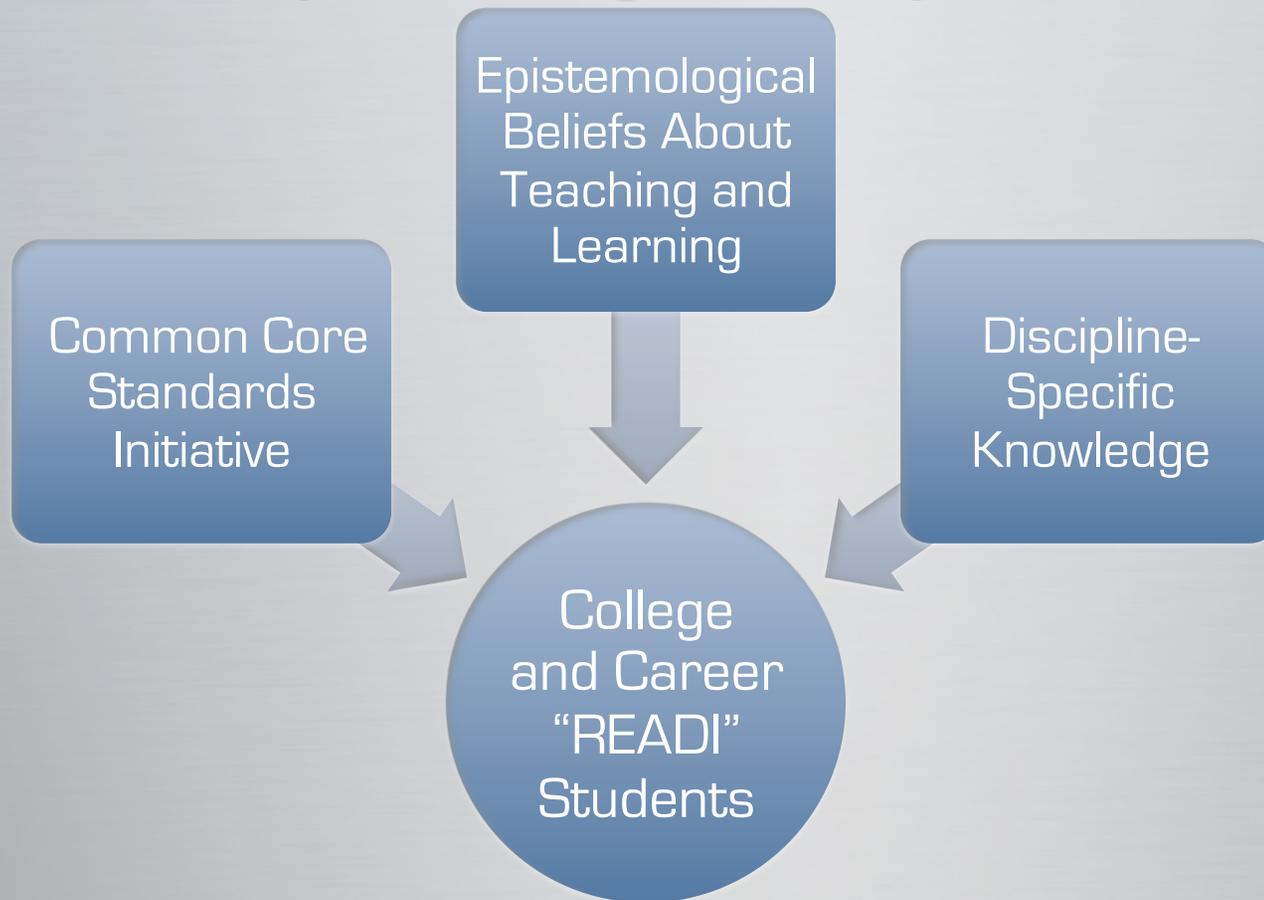
inquiry



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Problem/Background/Context:



Focus of Research:

- 3-year case study
- Middle-school Language Arts Classroom
- Involvement in iterative, design-based research
- Interventions targeted to support Reading comprehension and students' abilities to create evidence-based arguments from multiple text sources.

Setting:

- K-8, neighborhood school within a large, urban district in the Midwest.
- Total school population:

2010 - 2011	2011 - 2012	2012 - 2013
215 students	233 students	239 students

- School Mobility is twice the district average.

2010 - 2011	2011 - 2012	2012 - 2013
37.1% (school)	36.1% (school)	37.7% (school)
17.6% [district]	18.4% [district]	19.0% [district]

Source: Illinois State Board of Education. (2014). *Illinois Interactive Report Card*.
 [Data file] Retrieved from
<http://iirc.niu.edu/Classic/school.aspx?source=Profile&schoolID=150162990252169&level=S>

Setting:

- School has been on academic probation for failing to make Average Yearly Progress (AYP) specifications, according to NCLB.
- Illinois Standardized Achievement Test Trends (ISAT):

Overall Meets & Exceeds in Reading ISAT: Grades 3 - 8:		
2010 - 2011	2011 - 2012	2012 - 2013
67%	67%	70%

Source: Illinois State Board of Education. (2014). *Illinois Interactive Report Card*.
[Data file] Retrieved from

[http://iirc.niu.edu/Classic/school.aspx?
source=Profile&schoolID=150162990252169&level=S](http://iirc.niu.edu/Classic/school.aspx?source=Profile&schoolID=150162990252169&level=S)

Participants:

- 98% of students were African-American.
- 95% participating in free/reduced lunch program.
- 20% of students received special education services.

2010 - 2011

32 students

2011 - 2012

25 students

2012 - 2013

23 students

Research Design

YEAR 1 (2010 - 2011):

Bi-Monthly Literature Design Team Meetings (LDTM), Developing pedagogical knowledge (READi design principles, Cultural Modeling, Gateway activities, Argumentation, and Supports for struggling readers) ; Nominal changes to practice.

YEAR 2 (2011 -2012):

Bi-Monthly LDTM, Participation in READi Teacher Network, Continued development of pedagogical knowledge;
Design and Implementation of Modules: Coming of Age/
Symbolism & Unreliable Narrator

YEAR 3 (2012 - 2013):

Bi-Monthly LDTM, Year 2 of READi Teacher Network, Continued development of pedagogical knowledge;
Design and Implementation of Modules: Argumentation/
Epistemology of Literature, Coming of Age/Symbolism &
Unreliable Narrator



Architecture of Module Design

- **Informed by 6 Literature Learning Objectives**
- **Tasks**
 - Integration across multiple sources
 - Problematizes phenomena; draws attention to things that puzzle us
 - Meaningful to discipline and students
- **Text Materials**
 - Test sets built around causal model/interpretive problem
 - Represents a range of difficulty
 - Sequenced to build conceptual understanding
- **Instructional Supports**
 - Cultural data sets; Gateway activities
 - Close reading routines
 - Supports for analysis, discussion & synthesis
 - Argumentation templates & Schemas
 - Participation Structures
 - Normalizing Struggle
 - Ongoing Formal/Informal Assessment

Sample Module Template:

Lesson Plan Template for Project READI Module:

Module Overview

Focus:

Anticipated Length/Number of Class Periods/Lessons:

Targeted Knowledge and Skills:

Rationale for Module: *Describe your thinking as to how this module will advance your students' thinking and develop their skill set in the discipline.*

Essential Question: *An essential question: (a) involves important questions that recur throughout one's life, (b) refers to key inquiries within the discipline of Literature and (c) helps students make sense of important but complicated ideas, knowledge and concepts.*

Consequential Task: *What is the culminating activity?*

Lesson Planning Template

Approximate Day(s): 2-3 days

Common Core Standards Alignment:

Lesson Goal(s): *What will the students be able to accomplish at the end of the lesson?*

Assessment: *What work products/student work (formative and/or summative) will provide the evidence of what they know and can do?*

Materials:

Sample Module Template Cont...:

Key Components:



Sequence of Learning Activities, Including Instructional Supports <i>(e.g., gateway activities; note-taking templates or graphic organizers; etc.)</i>	Text(s) Used <i>Texts include traditional print-based texts as well as graphic, pictorial, audio/digital, etc.</i>	Teacher Role <i>What was the teacher doing? (e.g. modeled close reading; monitored small group discussions around identification of claims; etc.)</i>	Student Role <i>What were the students doing? (e.g., worked independently to talk to the text with annotations; participated in paired metacognitive conversations about their reading; etc.)</i>	Rationale: <i>Why did you design it this way? Reflect on the sequence and how they reflect Project READi Learning Objectives.</i>
Reflection: : <i>(What happened? Expected? Unexpected? What worked as anticipated and how do you know? What did not work as anticipated and how do you know? What would you change and why?)</i>				



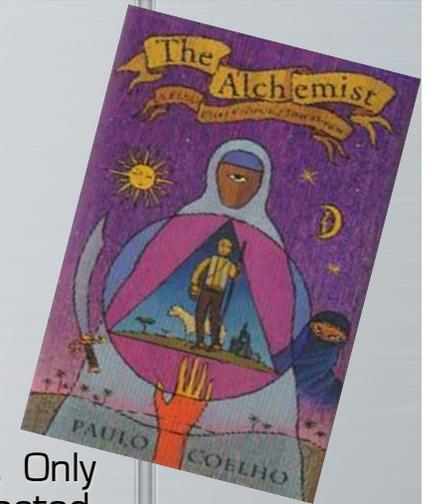
Data Collection:

- Designed Modules
- Field notes taken by Project READI researchers
- Student work samples across module work
- Teacher reflections:
Design elements and Implementation outcomes
- Video/Audio Recordings of Classroom Discourse

Data Analysis:

- Content analysis yielded themes & identified specific instances of struggle:
- Themes I will discuss further:
 - #1. Socializing students into assuming the cognitive demands of the intellectual work:
 - (a). Normalizing struggle/No opting out.
 - (b). Supports for close reading & literary interpretation.
 - (c). Supports for social interaction.
 - #2. Transfer from Oral Discussion to Written Argumentation.

Module #1: Coming of Age/Symbolism Module



Reflection Journal: Day 11: 9/13/2011

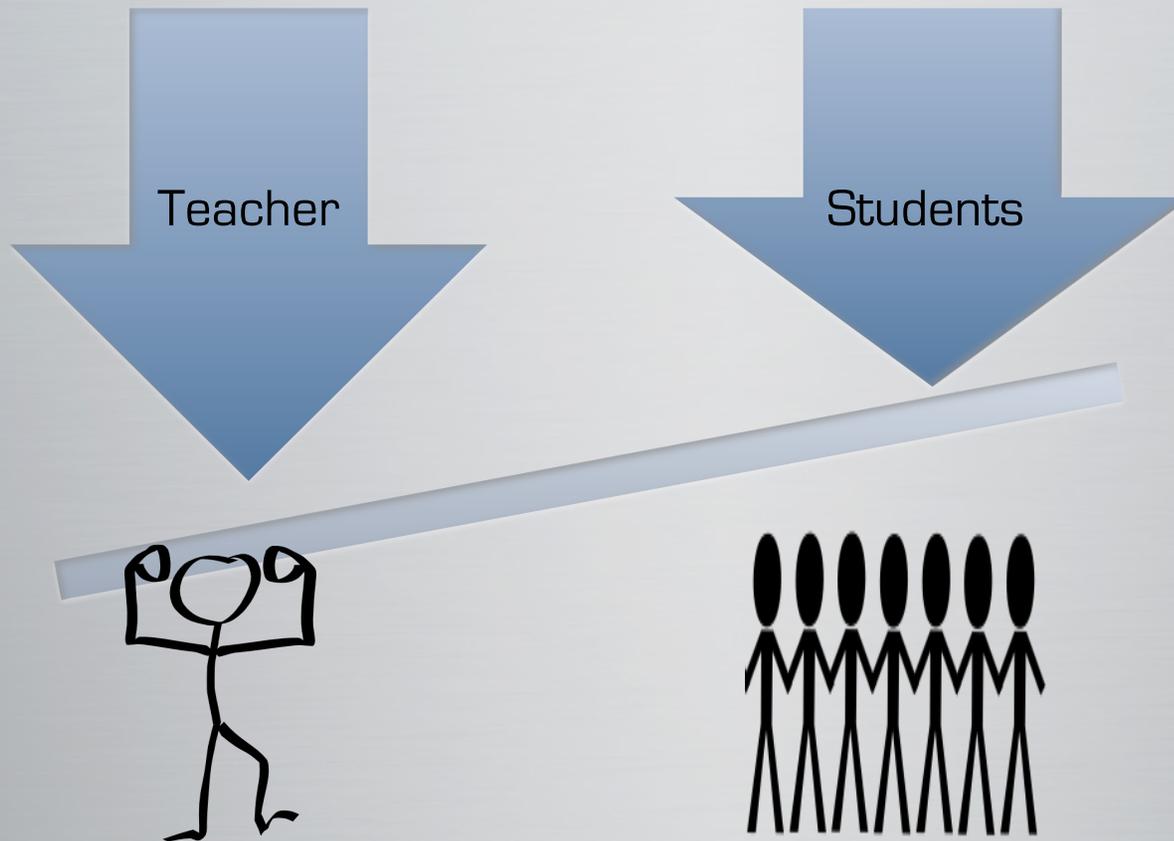
“Performance on the quizzes indicates **students have stopped reading the text**. Only 9 out of 22 [about 41%] students passed, and the multiple-choice questions reflected the literal dimensions of the Hillocks and Ludlow (1984) taxonomy (e.g. basic stated information, key details and basic stated relationships). There were 2 short answers that were targeted at simple implied relationships (see quiz #2). This is concerning moving forward, because **I have asked the students to read independently, and we are now starting to move through the audio at a snail’s pace**. I need to figure out what’s going on quickly.

Another emerging wondering: **how do I get students to a place where they contribute without being prompted**, or called upon to share? I am hoping this resolves itself organically, as we progress, but I need to come up with a plan.

Finally, **how much of the collective knowledge created is actually being owned by the students?** I need a way to assess this aspect, since I am certain not every learner in the room comprehends the text to the same degree. Furthermore, do they have the religious schema to make the connections independently? The small groups have individuals with some expertise about the Bible, but that was an accident. Something else to be more intentional moving forward.”

Findings: Theme #1

Cognitive Distribution of Workload



Findings: Coming of Age/Symbolism Module:

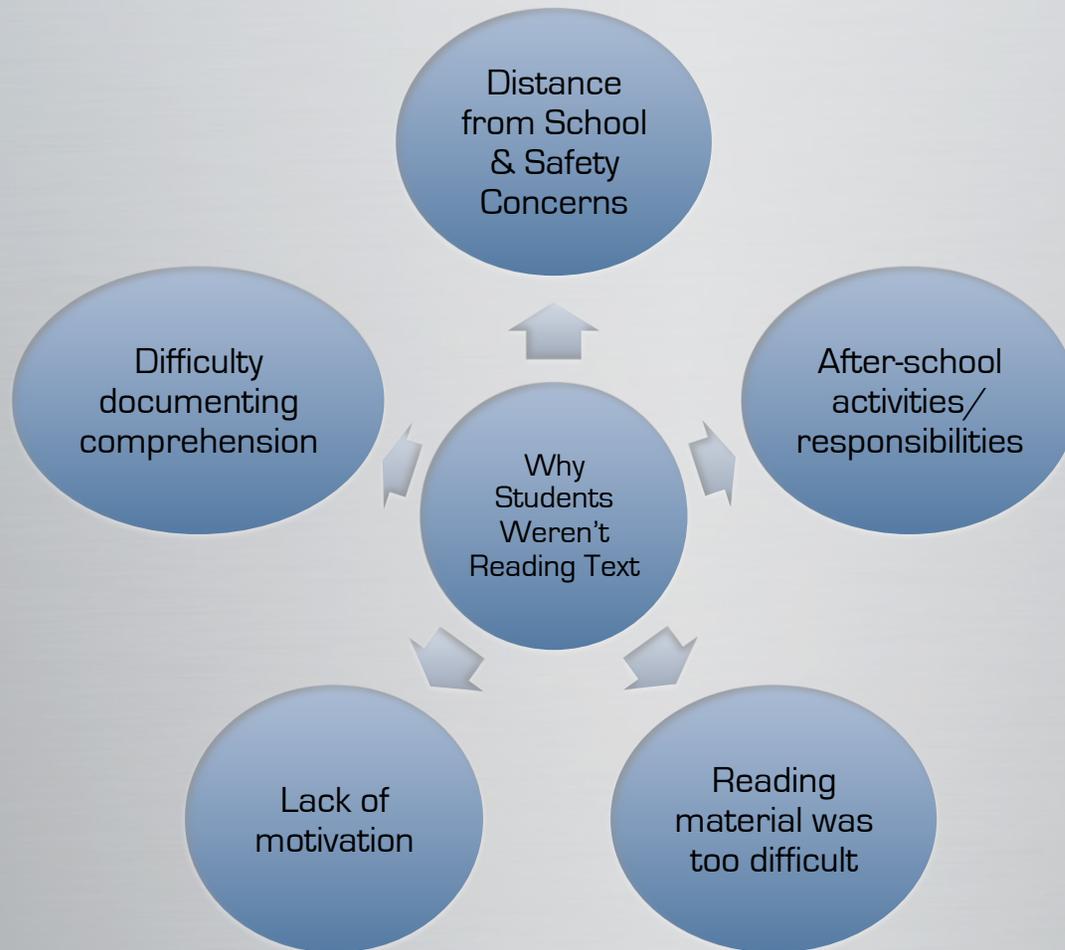
Problem of Pedagogical Disposition

- Assumption that students had supports in place to read text independently.
- Concern that level of book was too challenging for some of the students.

Problem of Practice

- No motivation for students to read (proficient and struggling).
- Assessments ended up measuring listening comprehension rather than reading comprehension.

Findings: Student Interviews:



Changes to Design:

- Reduction in the playing of audio in Symbolism/Coming of Age Module; NO audio in module work thereafter.
- Validating/sourcing student struggle.
- Development of no-opting out policy.
- Implementation of reading journals to scaffold literary interpretation.

Finding: Normalizing Struggle:

The Golden Rule

IN ROOM 315

**You may opt for help,
You may opt for a break,
You may opt for a second
chance,
But you may NEVER, EVER opt
out!!!**

Reading Journal: Following the Plot:

Following the Plot

Action/Event	Page	Order	What does one action/event have to do with another?

Reading Journal: Following Characters

Following Characters

Page #	What the text says	Your comments

Reading Journal: Noticing the Unusual

Unusual things I notice --- description, action, event, object

I paid attention because of the following:

- Very unusual
- Repeated
- In a prominent position (title, beginning, ending, where an important action takes place)
- Pattern
- Something in tension
- Something that seems contradictory

I noticed	Pg. #	It is	I paid attention because	I think it means

Patterns I Notice:

The object, event, action, character, description	Where I found it	What I think it means

Reading Journal: Interpreting Symbolism

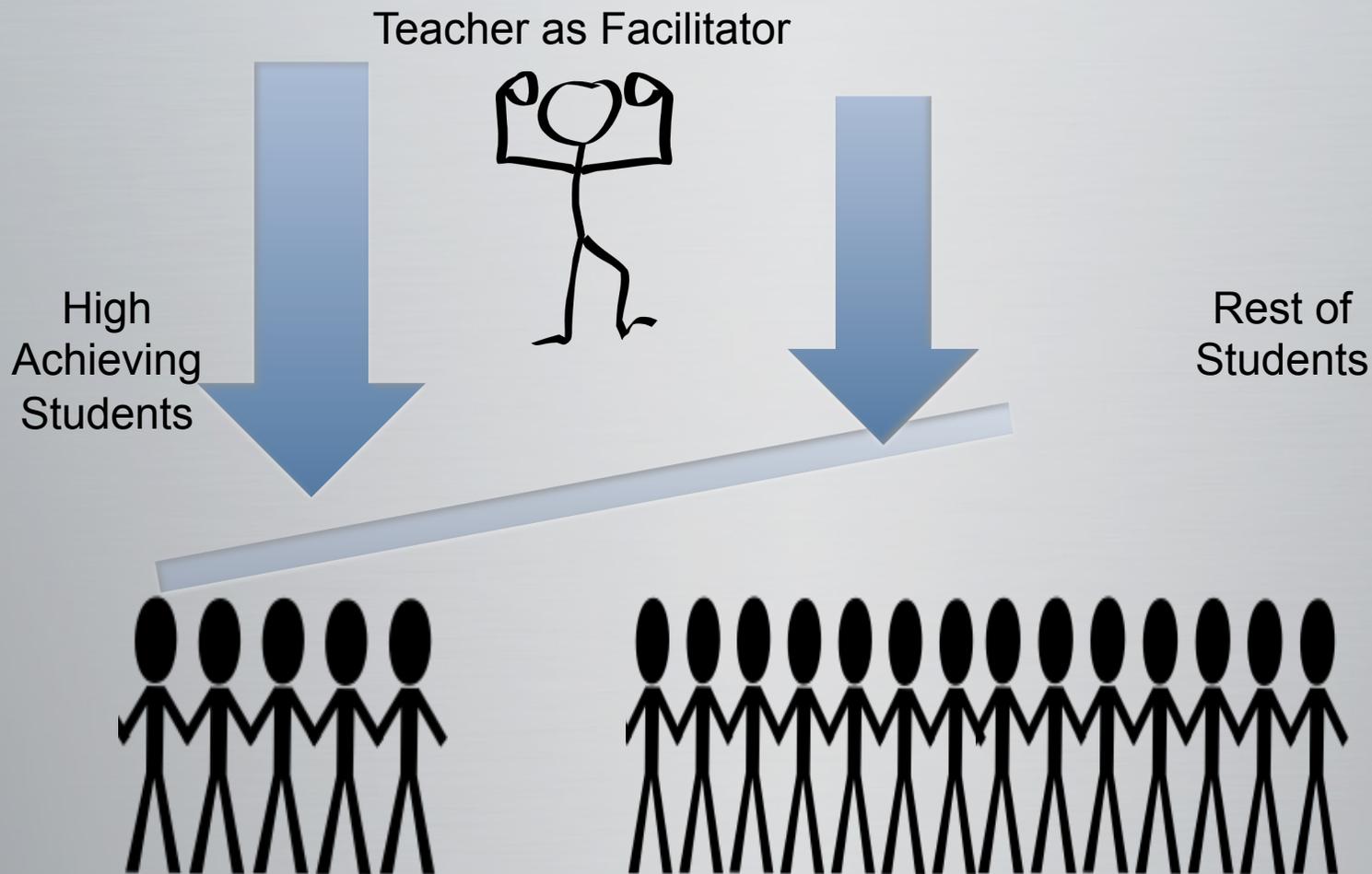
Interpreting Symbolism

What I think is symbolic: Image, event, character, action, object, name, places	What the text says (p. #)	Associations I can make with the image, event, character, action, object, name, or place	What do the words in the text and the associations I make lead me to think about what the symbol means?

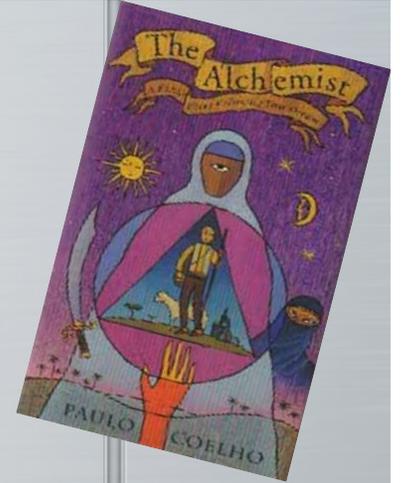
BSICS Symbolism Graphic – 8.24.11

Findings: Theme #1a

New Cognitive Distribution of Workload



Module #1: Coming of Age/Symbolism Module



Field Notes: 9/23/2011

“Observing in three small groups today, one thing I noticed was that **many of the students were letting [‘the most able student’] do the work.** Some were adding to their notes, while others were copying right from [‘the most able student’s’] paper. Talk to Rick about possibility of going to **pair shares where there is more individual student accountability.**”

–Marianne George, Project READi researcher

Reflection Journal: Day 16: 9/26/2011

“I realized over the weekend that **evidence really drives the argument.** Students have been making unsubstantiated claims, with no evidence to back up their thinking. In the last couple of weeks, I would entertain it. Today, I squashed it quickly. Closing off avenues of misguided thinking, not grounded in appropriate citation of textual evidence really did the class a huge favor...it forced them to dig deeper.”

Findings: Coming of Age/Symbolism Module

Problem of Pedagogical Disposition

- Classroom management concerns (small groups/pairs).
- My own disciplinary knowledge

Problem of Practice

- Strong students assuming cognitive load
- Some students' interpretations were (a). not evidence-based, (b). reflected literal dimensions of comprehension.

Changes to Design:

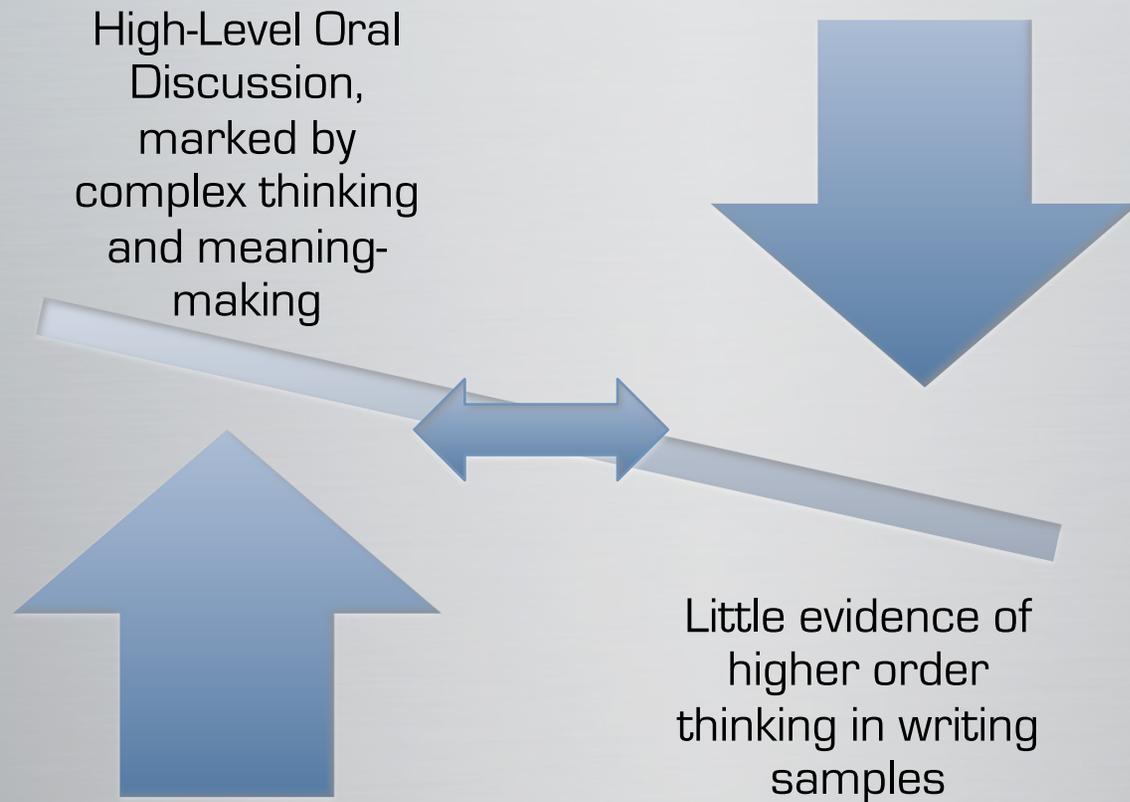
- Developing of future modules, incorporating pair share to promote individual accountability.
- More targeted intervention with students struggling with literary interpretation/disciplinary thinking.
- Realization that a module on Argumentation/Epistemology of Literature was needed in Year 2.

Outcomes: Year 1: Unreliable Narrator

Module: Whole Class Panorama



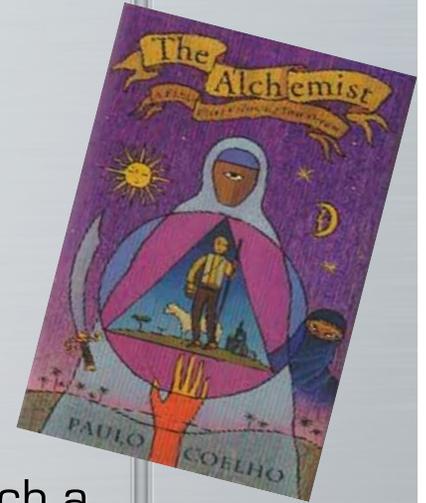
Findings: Theme #2:



Module #1: Coming of Age/Symbolism Module

Reflection Journal: Day 1: 9/26/2011

“Students are engaging in high-level text discussion. Yet, there’s such a **disparity between what they produce in oral discussion vs. what is produced in their writing.** My training in shared inquiry has really helped to foster discussion. I need some support in helping the students develop as writers, particularly **they need support in using academic language,** and the connections between their C-E-R chains.”



Findings: Coming of Age/Symbolism Module:

Problem of Pedagogical Disposition

- Reading assessments are tied to evaluation of students and teacher.
- Writing is time consuming to assess.

Problem of Practice

- Student writing does not reflect command of academic discourse.
- Students have had little practice writing daily.
- Students would rather talk than write.

Module #1: Coming of Age/Symbolism Module

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
SYMBOLISM	✓	✓	✓	✓							✓	✓				
ARGUMENT Oral	✓	✓	✓	✓		✓						✓				✓
ARGUMENT Written		✓	✓							✓	✓		✓	✓	✓	
THEME:			✓	✓	✓	✓					✓		✓			
DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
SYMBOLISM				✓					✓	✓				✓	✓	
ARGUMENT Oral												✓			✓	
ARGUMENT Written	✓	✓	✓			✓	✓									
THEME:	✓		✓		✓			✓	✓		✓			✓	✓	

Sentence Frames: The Language of “Rules”

**Support
Striving
Writers:
Warrants**



*The Language of “Rules”
Some Sentence Frames to Try:*

- *As a rule...*
- *Generally speaking...*
- *Typically...*
- *In most situations...*
- *In many situations...*
- *One would expect...*
- *If..., then...*

Outcomes:

Illinois Standardized Achievement Test (ISAT) Trends in Reading Over Course of READi Interventions

Percent of Students Meeting/Exceeding State Standards in Reading				
Grade	2010	2011	2012	2013
7	78.6	69.2	50.0	52.4
8	82.8	90.0	96.3	75.0
		Pre-Module	Year 1 Modules	Year 2 Modules

Conclusions

- Supports need to be in place that address the struggle that students encounter when dealing with complex texts/challenging intellectual tasks.
- Socializing students into practices associated with the discipline of literature is possible with supports to promote engagement with text/literary interpretation.
- Collaboration is essential. Intentionally orchestrating social interaction can facilitates students' meaning making.
- Students benefit from scaffolds to support the development of academic language (oral and written).

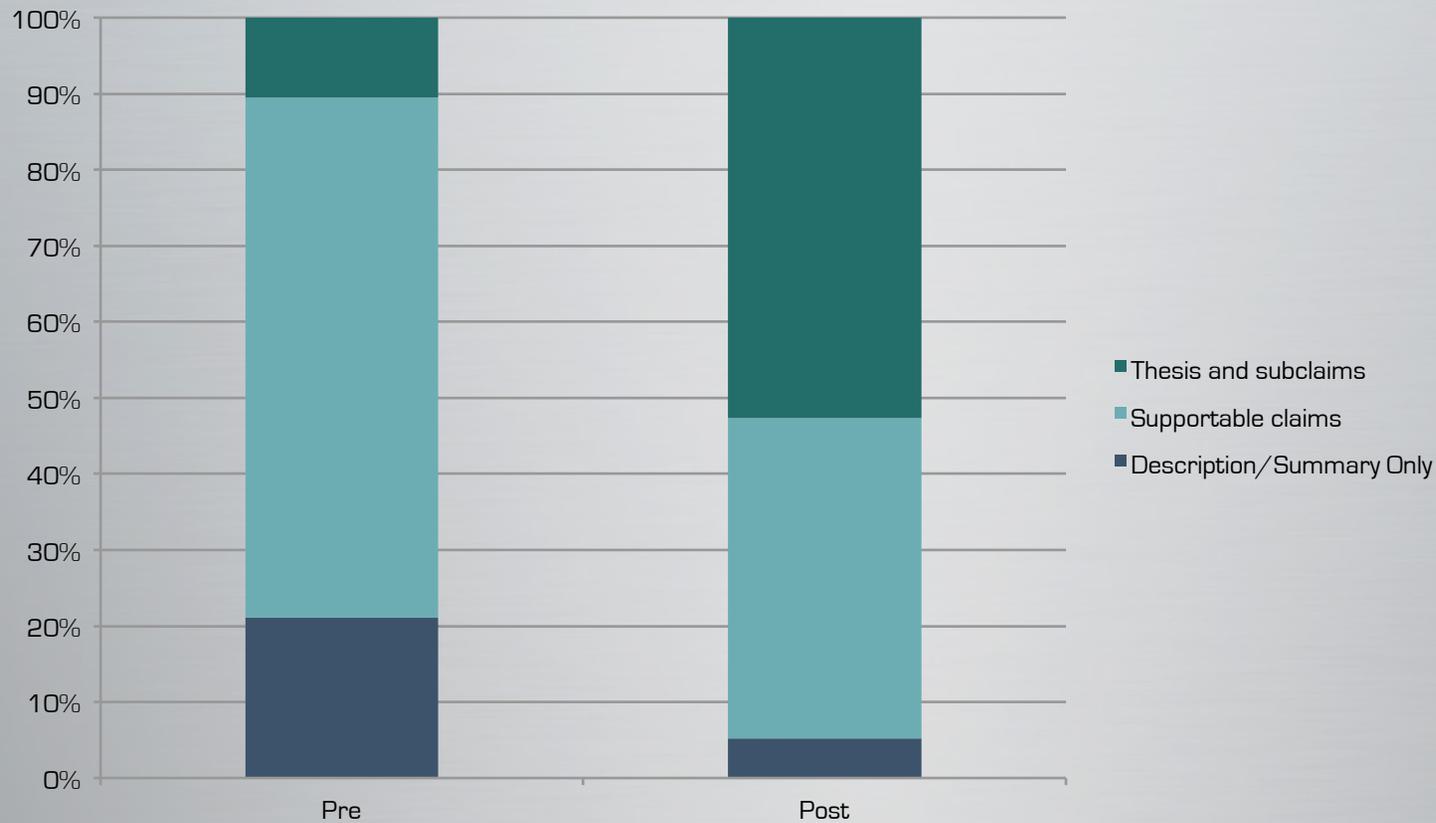
Outcomes:

Spring 2012: Unreliable Narrator Pre/Post Test

- (N=19); students who had both pre and post test scores.
- Rubric dimensions include: claim, evidence, reasoning, counterclaims, thematic connections, and organization
- All pre-post differences were measured using Wilcoxon signed ranks tests.

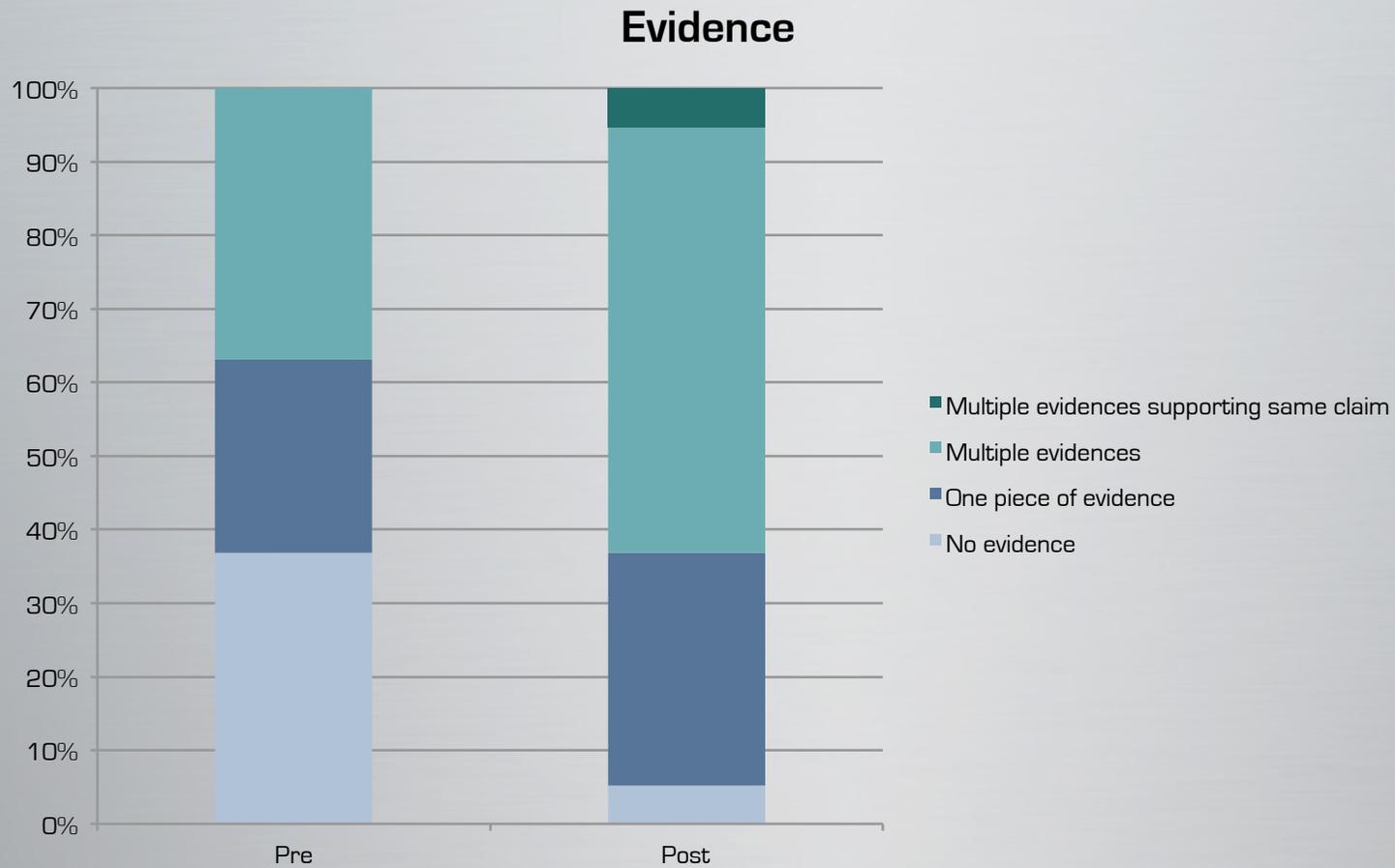
Outcomes:

Claims



Significant increase in Claims at post, $Z = 2.84$, $p = .005$

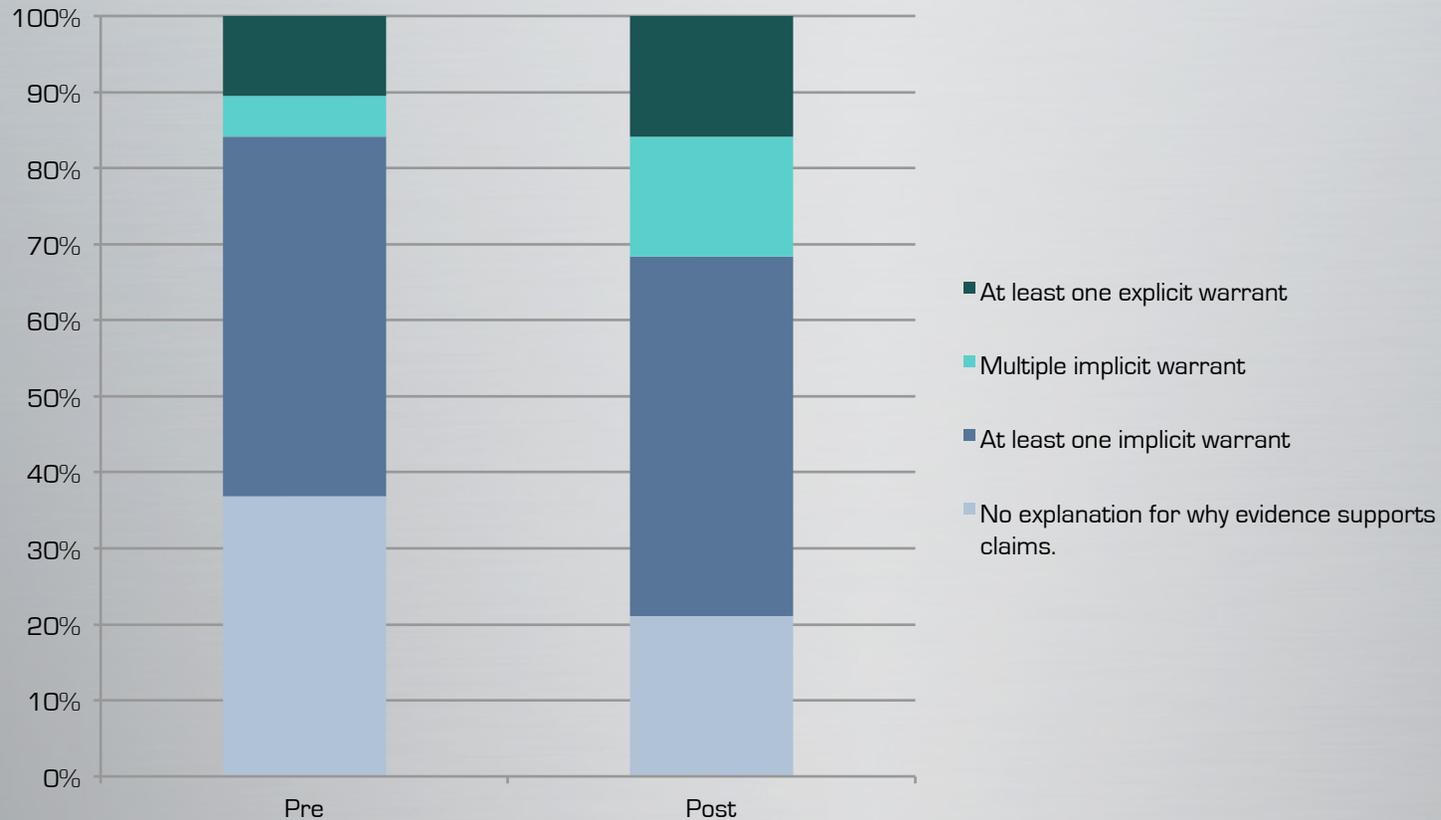
Outcomes:



Significant increase in Claims at post, $Z = 2.36$, $p = .02$

Outcomes:

Reasoning



Significant increase in Claims at post, $Z = 2.07$, $p = .04$

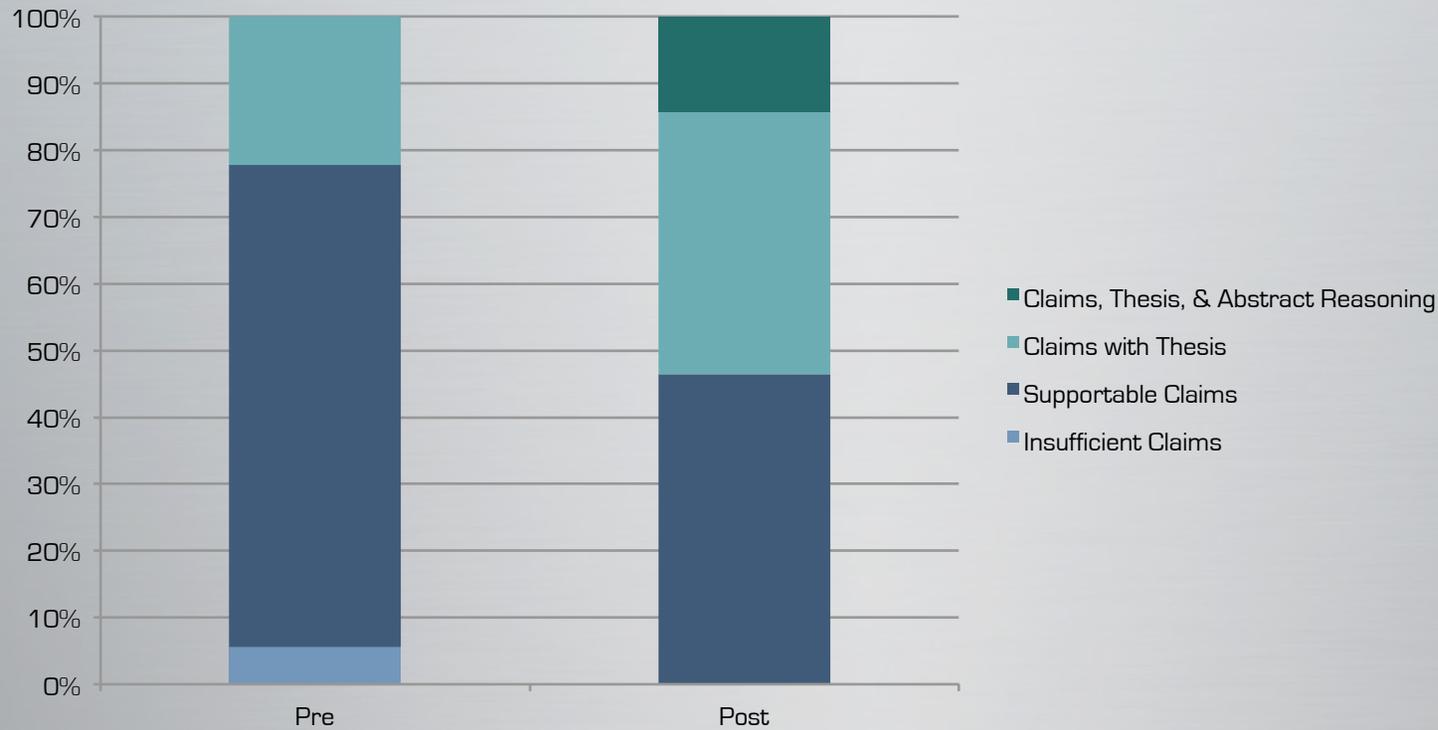
Outcomes:

Spring 2013: Unreliable Narrator Pre/Post Test

- (N=18); students who had both pre and post test scores
- All pre-post differences were measured using Wilcoxon signed ranks tests.

Outcomes:

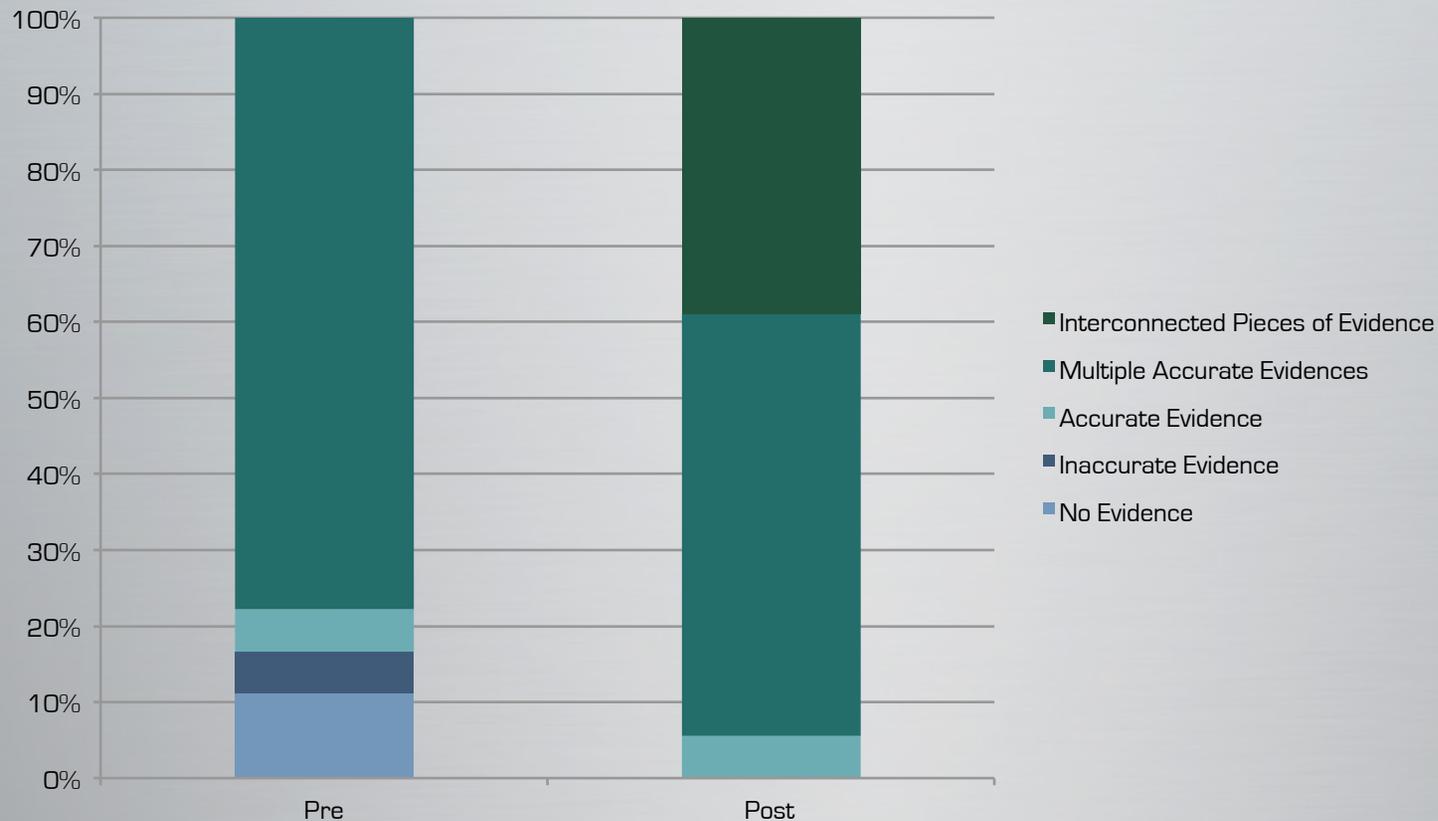
Claims



Significant increase in Claims at post, $Z = 3.56$, $p < .001$.

Outcomes:

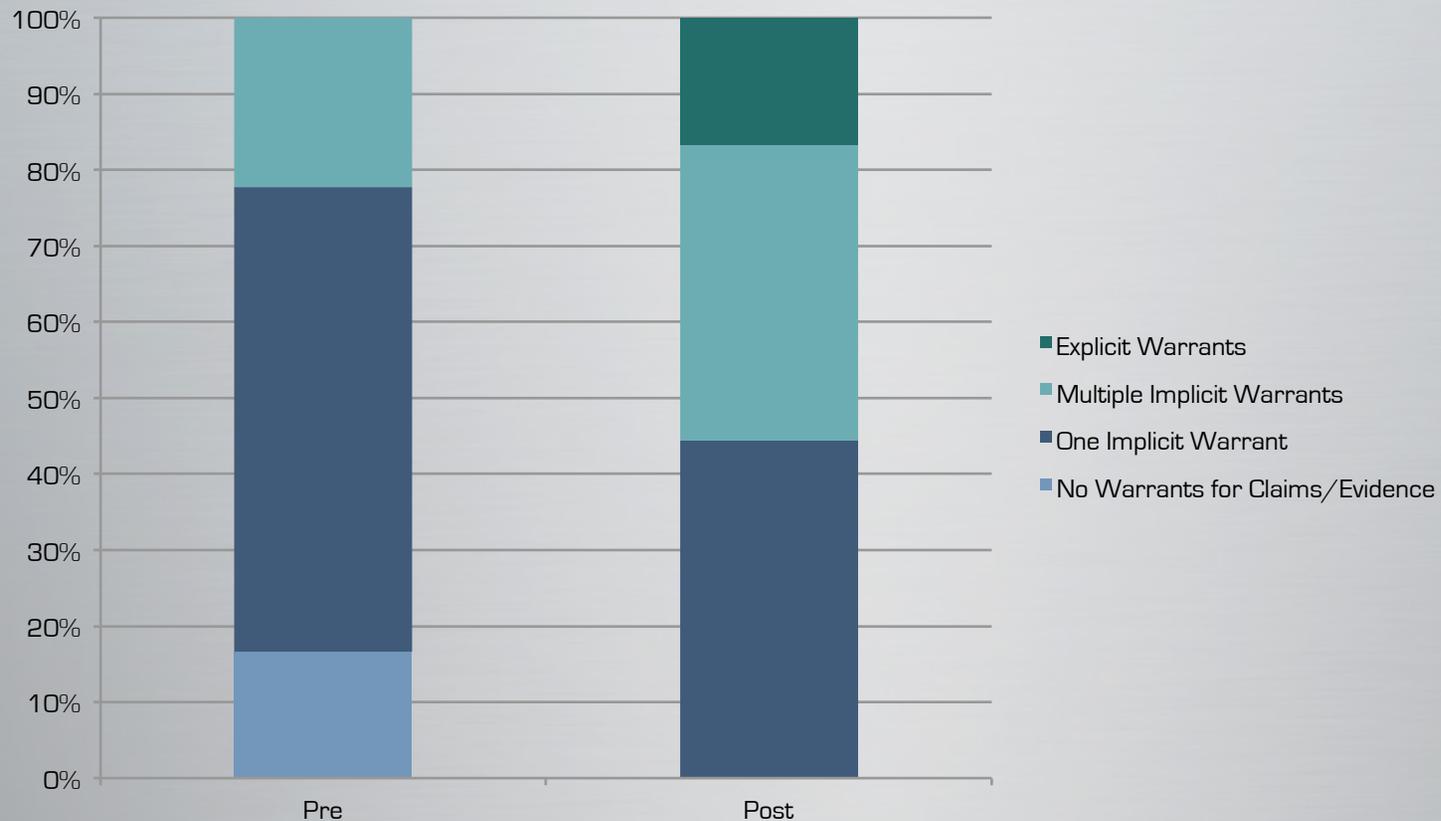
Evidence



Significant increase in Evidence at post, $Z = 2.35$, $p = .19$.

Outcomes:

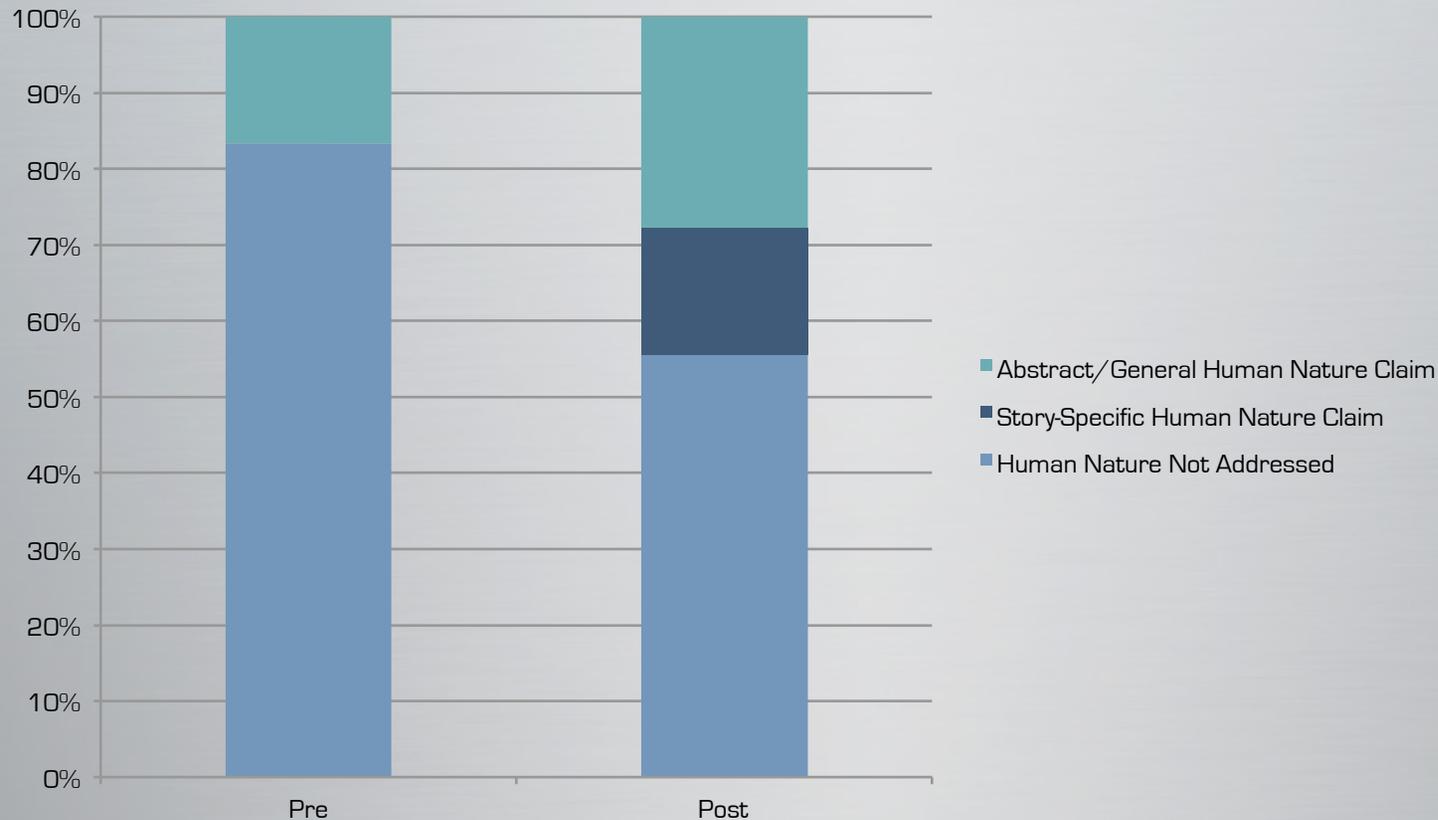
Reasoning



Significant increase in Reasoning at post, $Z = 2.65$, $p = .008$.

Outcomes:

Human Nature



Significant change in Human Nature at posttest, $Z = 2.07$, $p = .038$.