

Spelman FITW Findings


Findings from RCT 1 and 2



CREATIVE RESEARCH SOLUTIONS

FITW Study Questions

Does Metacognitive Awareness in classroom instruction compared to a “business as usual” approach...

- impact GPA for students enrolled in the African Diaspora and the World course?
 - increase the use of metacognitive learning strategies among students enrolled in the African Diaspora and the World course?
 - increase retention among students enrolled in the African Diaspora and the World course?
 - impact GPA for students enrolled in the African Diaspora and the World course?
 - increase the use of metacognitive learning strategies among students enrolled in the African Diaspora and the World course?
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Methodology

Qualitative data collection methods across included:

- Faculty Interviews
- Student Focus Groups (grouped by condition)
- PRF Interviews



RCT 1, Year 1 High Level Findings

- Fall 2016 - Spring 2017, Pilot: Spring 2016; classroom-only approach
- **Evidence of impact on classroom behavior:**
 - **Students initiated asking questions in the treatment condition.**
 - **Students responded to other students by evaluating and integrating information more frequently in the treatment condition.**
 - **Students initiated applying and expanding on information more frequently in the treatment condition.**



RCT 1, Year 1 Treatment v. Control: Key Differences

Behavior	Result	p-value	Covariate
Generating Questions	<u>No effect of condition</u> Less instructor initiation, more student engagement in response later in semester.	Instructor initiated: .015 Instructor initiated/students engage: .018	Time
Summarizing	<u>No effect of condition</u> Students initiated summarizing more often earlier in the semester.	.047	Time
Applying Material	Treatment students responded to instructors more often	.039	Condition

RCT 1, Year 1 Treatment v. Control: Key Differences

Behavior	Result	p-value	Covariate
Predicting	More treatment students when instructor initiates	.037	Time and condition
Instructor Sets Reading & Writing Goals	Treatment instructors set goals more often	.017	Condition
Instructor encourages internal dialogue	T instructors encourage this more often earlier in the semester and more often, earlier in the treatment group	Time: .003 Condition: .019	Time and condition

RCT 1, Year 2 High Level Findings

- Fall 2017 - Spring 2018
- Students have not fully incorporated metacognitive behaviors into their work outside of the classroom according to MSLQ results
- Higher level of comfort among faculty with applying metacognitive strategies
- **Treatment students able to identify metacognitive strategies taught**



RCT 1, Year 2 High Level Findings

Some evidence of impact on classroom behavior:

- Students initiated question-asking in the treatment condition
- Students responded to other students by evaluating and integrating information more frequently in the treatment condition
- Students initiated applying and expanding on information more frequently in the treatment condition
- Implementation of metacognitive strategy use alone is insufficient to improve student retention and success



RCT 1, Year 2 Treatment v. Control: Key Differences

Behavior	Result*	p-value	Additional Effects
Generating Questions	More common in treatment	0.0195	
Summarizing Synthesizing	More common in treatment	0.00239	Semester
Clarifying	More common in treatment	0.02987	Semester
Quality of Feedback	More common in treatment	0.0148	Semester

*Given that not all of the observers could be blind to condition, these results could potentially overestimate the impact of the intervention.



RCT 1, Year 2 Treatment v. Control: Key Differences

Behavior	Result	p-value	Additional Effects
Class Objectives	More common in treatment	0.00864	
Student Interest	More common in treatment	0.0019	
Global Metacognitive Instruction Behaviors	More common in treatment	0.002031	Semester
Global Critical Thinking Skills	More common in treatment	0.00118	

RCT 2, Year 1 PRF Comments - Student Motivation

- “I always look forward to my sessions because they always have something to say, they always have something unique to bring to the table. So I'm just excited to facilitate another conversation.”
- “I think that the sessions allow girls who don't always talk in class, a chance to flesh out their ideas and then we can clear some things up, so that when they do go to class, they feel more confident speaking.”



RCT 2, Year 1 PRF Comments - Student Feedback

- “They believe that people [who are] failing should attend the sessions or [students who do] not have a clear understanding of the topic(s). [Students told me they think] that [participation in the PRF program] should be recommended by the teacher.”
- “I have to redirect the whole lesson plan from this thing that I wanted them to do. Because if you haven't read, I can't talk about it or discuss it. And [PRFs have to] just be adaptable to coming up with things on the spot, because that will happen.”



Summary

RCT 1 and 2 Trends/Themes

- ADW content itself had the most salient impact on students
 - Generally, added value (both T and C)
- Increased application and understanding of metacognitive strategies among students and faculty from RCT 1 Year 1 to RCT 1 Year 2
- Limited application of metacognitive strategies among PRFs, but there was only one year of implementation in RCT 2
- Implementation challenges: Scheduling and finding space for PRF sessions on a small campus
- Overall, faculty gained increased confidence and ability discussing and encouraging the use of metacognitive strategies in the classroom, particularly for more challenging or complex strategies.