Overview of the Self-Study Research Process

What and How

My goal is to help others gain the kind of knowledge that has helped me in understanding a broad range of science concepts to gain an understanding of the natural world. More importantly, understanding the personal experiences that have enabled me to more quickly grasp the importance of science concepts from well-rounded, well-framed scientific contexts will help me guide students in becoming more aware of the role science will play in their futures.

—Dawn Renee Wilcox (2006), Science Coordinator, Spotsylvania County Public Schools, Virginia

CHAPTER DESCRIPTION

In this chapter, you will gain an overview of the self-study process by reviewing the self-study project planner, which includes components of your final research report. Your attention is brought to the recursive nature of self-study research while also acknowledging that teachers need to have a project planner to move toward the goal of improving practice and students' learning. A suggested timeline also provides a structure for your scholarly project and highlights the many and often overlapping components of conducting a quality self-study research project. A student self-study research exemplar is provided in brief, highlighting project research components.

Reading this chapter will provide you with a framework for your entire study. It allows you to see the big picture before you begin.

A self-study research project planner helps you envision where you are headed. As my yoga teacher explained, consider that like a surfer, the direction you look is where you will go. So look out to your eventual landing—your shore, your professional goal. Your forward-looking gaze gives you balance and propels you toward that goal. It's natural to lose your balance here and there, so be gentle with yourself and the process of learning and developing as a self-study teacher scholar.

Self-study teachers conduct research in their classrooms. That is what you are about to do. You will engage in a process that begins with your questions and curiosities about your practice. Those curiosities will emerge from your observations of your classroom and your dialogue with peers. Research involves designing a study, carefully reviewing the research ethics of your study, collecting data, analyzing the data, and writing and presenting your findings. Each of these components is enriched and supported from collaborative inquiries. Please note that although a planner is offered to give you an overview of your project, self-study is not a linear process. Research is discovery, and discoveries most often involve moving back and forth in a search to understand something yet uncovered. Be patient with yourself and that wonderful process of learning.

Self-study research is recursive. Nonetheless, having a tentative planner serves to document where you are in the process and organizes and stores the insights you gained along the way. We are all busy teachers with busy schedules. So let's embrace the power of getting organized and glancing at what's ahead. You might want to also look ahead at headings and subheadings of your research project, which are presented in detail in Chapter 12.

Organize your project using a self-study research planner (see Table 2.1). Paying attention to what you will do, how you will do it, and when you will do it will assist you in successfully completing a major project. Make note of each component and plan accordingly. Chart your progress using a personal timeline with a feasible schedule for accomplishing each step. Be purposeful, although flexible, in meeting your own deadlines with time to write, receive peer feedback, and rewrite a polished final report. Update your progress weekly and share it with your critical friend and instructor.



Inquire with critical friends throughout entire process.

 Table 2.1
 Self-Study Research Project Planner

	Research Component	Description of Research Component	Suggested Timeline
BEFORE ENACTMENT	• DESIGN • PROTECT	Introduction, Research Question, Conceptual Framework	
1	Author your research question.	A thoughtful, personal, and manageable inquiry situated in your context to improve your practice and to impact learning for yourself and others.	Weeks 1–2
2	Establish your critical friend team.	Peer support and review of your research process including analysis with multiple perspectives, addressing interpretations of findings, and working toward trustworthiness and validation of your findings.	Week 1 and ongoing through study
3	Observe your classroom.	Observations of your teaching, classroom, and students' learning that give you pause and suggest an area worthy of study and research.	Week 1 and ongoing through study
4	Articulate rationale and proposal.	A clear articulation of what you are asking, what you are trying to do, and with whom, how, and why.	Weeks 2–4
5	Frame your question within literature.	A comprehensive review of the literature related to your topic with relevance to your research design and usefulness to extending knowledge of the field; identification of common topics to design conceptual framework; an integrated mapping of the theories and phenomena that frame and shape your study and are informed by the literature reviewed.	Weeks 2–4 and ongoing through study
6	Align your question with self-study method.	Research procedures and techniques useful in providing data specific to your study's purpose (e.g., developmental portfolio, personal history self-study method, living educational theory, collective self-study method, arts-based self-study method, memory work self-study method).	Weeks 3–4

(Continued)

Table 2.1 (Continued)

	Research Component	Description of Research Component	Suggested Timeline
7	Plan purposeful pedagogies.	An inquiry and plan that is purposeful and manageable; includes maintaining a project timeline; involves taking an ethical approach throughout your project assessing the ethics of your pedagogical strategies on participants; assess the ethics of your pedagogical strategies, data collecting, and data reporting.	Weeks 3-4
DURING ENACTMENT	ORGANIZE COLLECT ANALYZE ASSESS RESEARCH QUALITY	Method and Validation	
8	Describe your context.	A detailed description of the research context including the immediate and broader environment (e.g., school community, school, and your classroom).	Weeks 2–3
9	Describe your participants.	A detailed description of the research participants with demographic information.	Weeks 2–3
10	Describe your data sources generated from your pedagogical strategies.	A detailed description of the multiple data sources you collect to help you understand the underlying problem and to assess the impact of your research; includes detail about your planned pedagogical strategies.	Weeks 4-8
11	Explain your data analysis and interpretation to critical friends for validation.	A detailed and transparent data trail describing the analysis process in specific detail used to make meaning of your data and formulate preliminary and concluding interpretations; requires alignment of analysis and interpretation with research question and theoretical framework; presented to critical friends for dialogue, critique, and validation.	Weeks 7–9
AFTER ENACTMENT	• WRITE • PRESENT	Findings, Discussion, and Implications	
12	Write your findings	Research report drafts reviewed by critical friends and finalized into a formal polished final report; includes relevance of findings to national professional standards (e.g., in the United States: INTASC	Weeks 8–10

	Research Component	Description of Research Component	Suggested Timeline
		http://www.ccsso.org/content/pdfs/corestrd .pdf; National Board for Professional Teaching Standards, http://www.nbpts.org/; and professional standards such as those available from http://www.naeyc.org/, http://nsta.org/, http://www.ncss.org/, http://nctm.org/, and http://www.ncte.org/).	Weeks 8–10
13	Write your discussion: Impact on Students.	A discussion and explanation of what the findings or results mean and the impact on students within the context of the study.	Weeks 9–10
	Write your discussion: Impact on Teacher Researcher.	A discussion of the impact of research on your understanding and reframing of teaching; includes a self-assessment of how the self-study methodological components were addressed.	Weeks 9–10
	Write your discussion: Impact on Education Field.	A discussion and explanation of what the findings or results mean for the broader field and possible areas for further study.	Weeks 9–10
14	Write limitations.	Include the limitations that you and your critical friends identified in your dialogic validity activity.	Weeks 9–10
15	Include references.	Include all citations in text.	Week 10
16	Insert appendixes.	Include data that will help the reader better understand your research but perhaps is not needed within the body of your report.	Week 11
17	Write an abstract.	A single, articulate, concise paragraph of no more than 150 words that describes project purpose, context, method, key findings, and significance; note that the abstract is placed at the beginning of your report, yet it cannot be fully written until the end of your project when you have findings.	Weeks 9–12
18	Present and share your research.	An opportunity for you to make your research public through presentation to a larger audience for critique and appraisal.	Week 12 and beyond

The suggested timeline in Table 2.2 is an excellent organizing tool that you can adapt for your project. You will ultimately need to determine a feasible schedule that works best for you.

SELF-STUDY RESEARCH PROJECT TIMELINE

Inquire with critical friends throughout the entire process.

 Table 2.2
 Self-Study Research Project Timeline

	1	2	3	4	5	6	7	8	9	10	11	Dated notes	✓
BEFORE ENACTMENT													
Design and Protect													
Author your research question.	•	•										e.g., How can I create a class learning community? 09/01	
Establish your critical friend team.	•	•										e.g., Anne, Clare, Clive, and I agreed to work as a critical friend team 09/05	✓
Observe your classroom.												e.g., Something I notice often that perplexes me is 09/06	✓
Articulate rationale.													П
Frame question within literature and review and beginnings of your conceptual framework.													
Assess research ethics of study.													
Write research proposal.													
Describe context: community, school, and your classroom.													

	1	2	3	4	5	6	7	8	9	10	11	Dated notes	✓
Describe participants.													
Plan purposeful pedagogies.													
DURING ENACTMENT													
Organize, Collect, Analyze, and Assess Research Quality													
Enact study.													
Describe data sources.													
Explain data analysis.													
Validate with critical friends.													
AFTER ENACTMENT													
Write and Present													
Discussion: Impact on Participants.													
Discussion: Impact on Teacher.													
Discussion: Impact on Education Field.													
Write limitations.													
Include references.													
Insert appendixes.													
Write abstract.													
Complete final project.													
Present													



Student Example: Project Timeline

Patricia Demitry (2009), English Teacher

Below is a timeline Patricia created using a bulleted format rather than a chart. You will find a brief of her project at the end of this chapter. Note that she conducted a literature review to help her refine her question and pedagogies. She understands that research is a process of discovery and takes effort. You may also find that although you choose a research question, it most often is refined later. Furthermore, as you inquire, receive feedback, and make decisions based on new ideas about your question, your research question and ideas for change may shift. Notice that Patricia writes that "the research continues to be something I shape and experiment with each day. I used the following timeline to organize my data during the research process. These dates encompass the set amount of time where data was collected, though the research continues to be something I shape and experiment with every day."

Literature Review:

- I did a preliminary gathering of research on struggling male adolescent readers before deciding on the exact question for my discussion. Completed on 2/28/2009
- Created a focused research question. Completed on 3/1/2009
- Finished gathering literature with a focus on motivating the struggling male adolescent reader. Completed on 3/12/2009

Methods:

 Based on the review of literature, and development of problem, several pedagogies are available to combat failure among male adolescents and are used to support research. Completed on 3/19/2009

Plan of Action:

• Using strategies and practices researched in the literature to combat decreasing grades and interest level in males. Completed on 4/1/2009

Data Collection:

 Collected qualitative and quantitative data based on research methods. Completed on 4/10/2009

Enactment:

- Presurvey linked to reading habits. Collected on 3/25/2009
- Initial average of adolescent males' grade point average. Gathered on 3/25/2009
- Begin journal log on 3/1/2009

- Introduce independent reading as supplementary material at beginning of unit on 3/27/2009
- Kinesthetic lesson plan on 3/30/2009
- Game-based lesson plan/posting of work on 4/3/2009
- Computer-based reading on 4/7/2009 and 4/9/2009
- Postcalculation of adolescent males' grade point average on 4/10/2009
- Postsurveys completed after each new research method on 3/27, 3/30, 4/3, 4/7, & 4/9.

Data Analysis and Findings:

- Data analysis began on 3/25/2009 and continued until 4/10/2009
- Findings: 4/10/2009

My students always appreciate seeing an example early in the semester to get a general overview of what the research project entails. See if you can find the research components listed in the planner in this **exemplar** brief, or "concrete problem-solutions that students encounter from the start of their scientific education" (Kuhn, 1996, p. 187) or "concrete models of research practice" (Mishler, 1990, p. 415). Patricia's work is presented briefly here and does not exactly match the suggested report headings presented in Chapter 12. You will continue to find segments of her project interspersed throughout the book. Likewise, you will also find segments of Amy Smith's self-study research project interspersed throughout the book and then presented in a brief in Appendix A. These two examples are provided to help you gain a fuller picture of what a project entails and the major research components.

SELF-STUDY TEACHER RESEARCH EXEMPLAR BRIEF

Frustrated and Flunking: The Adolescent Male Struggle With Reading in the Curriculum

Abbreviated Version

Patricia Demitry (2009), English Teacher

Abstract

This study investigates the impact of motivational instruction and technology on curriculum-based texts for the struggling male adolescent reader. Over a 15-week period, a select group of 11th-grade males were taught with a variety of instructional practices aimed at increasing comprehension and alleviating their observed frustration during the reading process. Data collection included Likert scale surveys, calculated grade point averages, a kinesthetic lesson plan, a computer-based lesson plan, independent reading, and reflective teacher-researcher logs. The findings indicated a positive impact between movement-based lessons coupled with technology and an increase in students' motivation and reading comprehension.

Further studies could include investigating the impact of these pedagogical strategies for female student participants as well as ESL (English as a Second Language) students.

Notice how the abstract includes the main purpose of the research, the method of data collection employed, the key findings, the major conclusions and implications, and overall what the researcher did and what was discovered.

I am an English teacher, and while my passion for education and literature has developed since college, I struggled as a high school teacher to find relevance in the texts being studied. This is my first year teaching, and I am surprised at the markedly different experience I am encountering on the other side of the desk. I am no longer a student but responsible for the transmittance of information, assessment, and curriculum development. It became evident as early as September that my 11th-grade male students struggled intensely with mastery of the English language, both reading and writing. I knew, as an educator, it was my job to make the curriculum relevant and engaging, but I was struggling alongside these young men to find new activities and lessons that peaked their interest and fostered a sense of responsibility. My goal was to take my observations and understanding of the curriculum and focus on my struggling male readers who dreaded the prospect of English. I rethought my lesson plans and researched techniques specifically geared toward teaching boys literacy.

Significance of Problem on a Personal Level

My research comprises boys in the 11th grade; however, it is their inability to connect with course curriculum that challenges me, not necessarily the reluctance to read overall. Being in the classroom has afforded me experience with several tactics to combat anxious or bored readers. I have tried literature circles, audio books, movie versions, partner plays, reading out loud, silent reading time, and so on. Many of my 11th-grade boys "appear" to be reading but in actuality find the idea of reading repulsive or threatening. If I gave my students the choice to either read for 30 minutes in class from a magazine or start on a novel that would be due for homework, every single male in the room would reach for *Sports Illustrated*. It isn't the reading that remains a problem; it is the curriculum and how best to reach the target audience (i.e., young adolescent males).

Broader Educational Significance of the Problem

My male students, on average, perform at a lower grade level than my female students. Using grade point averages as a measuring tool, it is statistically evident in my classroom that males are performing at a significantly decreased performance level. I attribute this lack of performance to a struggle with the curriculum. If I can transform the curriculum into a variety of lessons that achieve maximum participation and understanding from my male students, then there should be a rise in academic performance exemplified in the average letter grade for each participant. The tools I am creating could be used across the curriculum, and I would

be anxious to start a program within my school to alleviate the stigma between boys and reading.

In her introduction and rationale section, Patricia presents a case for the personal significance of this study as well as the broader educational significance of this work. She notes the experiences, perspectives, and goals that influenced and shaped her interest in this research topic.

Statement of Research Problem and Question

Research Problem

Since September, I have observed that my adolescent male students struggle with reading—not just any reading, but reading that is a requirement in the curriculum. The behavior exhibited by the majority of the mainstream males includes inattention, seeming laziness, lack of comprehension, and a general distaste for the reading material. I want to combat this disconnect with the curriculum and improve performance-based grades.

Research Question

How can I change my instructional pedagogies to help struggling male adolescents in reading?

Patricia explains the research problem within the context of her observations and her professional goal as a teacher. She presents a clear and specific research question that is meaningful and purposeful for improving her practice to impact learning for herself and her students.

Wonderings and Questions

- Is it all reading my students are struggling with, or just the curriculum?
- Is it a matter of making the material more exciting?
- Can the struggling reader be combated with differentiation? If the curriculum can't be changed, how do I help my male students understand the material and improve the learning process?
- Should secondary material be used to ramp up their interest in often bland and irrelevant texts found in the curriculum?
- Is the presentation of the American literature curriculum off-putting and difficult to understand?
- If I provide my students with copious activities in the classroom to stimulate their reading experience, how do I combat their lack of participation with text at home?
- Are there similar cases of male adolescents struggling to read? Is it just reading in general that is problematic, or is it reading that occurs within the educational curriculum?

I ask students to include their wonderings and questions, which sometimes shift to become the main research question or subquestions useful to articulate as they plan pedagogies and collect research to understand the particulars and sometimes underlying issues. Students recognize that although they can not answer all the subquestions, they may inform their study and provide questions for their continued research.

Review of the Literature

The Issue

My research focused on male adolescent students' underachievement in reading and the various strategies being employed to bridge the educational gap causing a result of failure and frustration. Adolescent males bring a different mental and physical energy to the classroom. Many English educators have a streamlined, organized, multifaceted approach to teaching and "view the natural assets that boys bring to learning—impulsivity, single-task focus, spatialkinesthetic learning, and physical aggression—as problems" (King & Gurian, 2006, p. 57). The lack of attention to male-oriented differentiation is causing a serious rift between boys and reading. Through my research I discovered that most males refuse to pick up a book outside of the classroom and find the rigors of literacy stupid and pointless: "The gender issue is relevant to classroom learning in more ways than one. Increasingly in the United States, young boys are saying that school is stupid and they don't like to read" (Sax, 2007, p. 42). Interestingly, this sentiment is not affected by socioeconomic conditions; rather boys of all ages and ethnicities are struggling with reading and choose to be "BURNED AT THE STAKE [rather] than read a book!" (Sax, 2007, p. 42). There are numerous articles latent with research on the differences between boys and girls related to reading. There appears to be a perpetuating cycle or self-fulfilling process, where educators accept that boys will never succeed at reading: "This long, well-documented history of underachievement has helped contribute to an entrenched perception—indeed, an expectation—that many boys simply will not become thoughtful, accomplished readers" (Brozo, 2006, p. 71). My purpose in researching this problem was a concerted effort to step outside of the stigma that links boys and a failure to read and use the research to alter my pedagogy and ultimately improve the environment in my classroom.

What Now?

The research illuminated an important question in my report: Are boys struggling to read or merely unmotivated? After surveying my male students, it became evident that they had the ability to read and comprehend but hated the process and neglected to engage in the text. Through my literature review, I discovered numerous tactics educators may employ within the classroom to combat disinterest and boredom in males' reading. (Patricia continues to describe the strategies and cites the related research that supports success in their application.)

Patricia uses an interactive style in conducting her literature as she weaves her thinking about the problem with support she locates through her literature review. Her pedagogies are informed by the literature she reviewed.

Method

Context

Description of the Setting

All names have been changed to protect the privacy of participants and the community. Asheville High School is located in Northern Virginia. The demographic breakdown of Asheville is as follows: 21.8% Asian, 5.7% Black, 0.6% American Indian, 8.9% Latino, and 59.4% White. There are slightly more males at 51.8% than females at 48.2%. The total student population at Asheville High is 2,776. Approximately 11% of the population is on free or reduced lunch.

Asheville High is a 4-year study program, housing Grades 9 through 12. The school is separated into four subschools, with assistant principals presiding over sections of students and the various academic departments. Asheville runs on a block schedule, with three 90-minute periods each day, with alternating "A" and "B" days. Asheville, last year, implemented a new form of enrichment during the school day in the form of LS, or Learning Seminars. This 90-minute block on "A" days is used for remediation and enrichment between students and teachers. Also new to Asheville are 50-minute periods at the beginning of each Friday called PLC, or Professional Learning Communities. These sessions are used as collaborative sessions between team teachers to share lesson plans, test scores, and learning strategies.

Asheville is a fiercely proud school boasting colors of green and gold in banners across the school. The sports program is rife with young athletes in a variety of sports The SGA, or student government association, prides itself on student-centered pep rallies, educational presentations, and exciting dances. Asheville also has an award-winning newspaper, year-book, drama team, literary magazine, and debate team.

This context section allows us to "see" Patricia's school and community and place her study within that context.

Description of Participants

The participants in this research project come from my two sections of English 11. I am focusing only on my male adolescent readers; therefore the research concerns 25 boys. Due to the specific nature of my research, girls were eliminated from the data collection. I teach one set of males during the midmorning period from 9:00 a.m. to 10:30 a.m. I teach another class of males at the end of the day from 12:50 p.m. to 2:05 p.m. The adolescent males in this study are between 16 and 17 years of age and originate from varying ethnicities and with a range of learning performance rates. In this study, 2% of the males have an IEP, or Individualized Education Plan, for individuals with disabilities.

Description of the Classroom Setting

My classroom is plastered with quotations from literary giants such as Hemingway, Wilde, Franklin, and Shakespeare. My bulletin board houses a white envelope labeled "exit tickets," which students drop off on their way out the door, as well as bell schedules and a Standards of Learning (SOL) countdown. My desks are arranged in an unconventional double U, with seats pointed to the front. I was inspired by stadium seating and Socratic seminar

forums, and I am the only English teacher on my hall to experiment in this way. I do not showcase my students' work on the wall and have instead opted for a natural setting, with photos of nature meant to inspire and spur creativity. As a personal touch, I mounted small biographies of each of my students in diamond pendants on the side wall, for students to learn more about each other and feel a sense of ownership in the classroom. I wanted to create a warm, inspiring, and safe environment that my students would treasure.

Again here in this participants section, Patricia offers us rich details that invite us into her teaching and help us "see" her classroom and her teaching philosophy.

Data Collection

Initial Grade Calculations

It was important to calculate an average grade for the male adolescents in my study. My objective was to test my new pedagogies in a concrete and visual manner. I wanted to use the current grade point averages as an initial calculation to examine for either a negative or a positive correlation at the conclusion of my research.

Presurvey

My data collection included a presurvey to decipher the reading habits of male adolescents in my classroom. I administered the survey to every student in my 11th-grade periods, and while they were anonymous, I did have the students specify their gender. For this study I disregarded female participants and only included the male results in my data collection. The presurvey focused on male reading habits, both inside and outside of the classroom, as well as personal reading preferences.

Independent Reading

I came across a variety of programs and groups supporting free-choice, independent readings for adolescent boys. Studies show that boys will read, if the literature focuses on masculine-dominated topics. General reading, however, was not the focus of my research problem. Therefore, I used this information as a tool for transforming my own plan for creating lessons. The idea behind independent reading is a deeper appreciation for literature and a personal connection with the text. Using this method, I created a new way of introducing a text that fosters connections to the outside world, as well as incorporating student choice. This anticipation guide disregards the typical mundane series of questions in favor of a student-led quest.

Kinesthetic Lesson Plan

The idea here is movement, movement. Using a foundation of research that supports tapping into the physical dexterity of males, I created a lesson that employs activity

and engagement. The idea here is to get males out of their seats and use activity to elevate comprehension, erase frustration, and eliminate the negative stigma surrounding reading. Lessons include dramatizations and student-created videos. My idea was that by developing a community of readers, there will no longer be a self-fulfilling prophecy of failure in my male students: "I can't do it" or "I just don't get it." Now, reading isn't personal or private; it is something to be shared. Here, I have linked the idea of movement and community. I experimented with activity and gender-specific communities, in hopes of achieving greater comprehension and engagement with the English curriculum.

Computer-Based Reading Tools

If males hate reading and have trouble comprehending a text, then I wanted to change the medium through which they read. There is a positive influence between males and technology; therefore I wanted to introduce literature through computers. I created new lessons that prompted my students to experience a text through computer-based books. The experience is interactive and may be completed either in the classroom with lab carts or at home using personal computers. Similarly, I created online study guides and mini quizzes to accompany the technological experience and to determine if males comprehend literature when it is introduced through this new medium.

Postcalculation of Grade Point Average

After careful research and planning, I implemented several strategies in my classroom to combat the male adolescent struggle with reading. I began the project by documenting the male class average of my students to discern if there was a positive reaction to my new pedagogical practices, and I calculated a post average.

Mini Surveys

In order to gauge the success of my lessons, I provided my students with mini surveys. Each survey had the same number of questions and was modeled after the Likert scale with five questions. Using the same survey in a repetitive fashion tested each student's perspective of each lesson. The surveys were also useful for reflection as I learned what motivated my struggling males and worked to alleviate their concerns with comprehension. The surveys were anonymous except for a gender-specific question, and due to the nature of my research, I disregarded female responses in my data.

Researcher Log

A major component of my research consisted of my ongoing process and documentation of self-reflection. I kept a journal of my progress as an educator as I began building lesson plans, sorting through research, and ultimately adopting a new pedagogy. This log helped me reflect on the reactions of my male students after implementing a new lesson, find areas of improvement, and tweak my practices. I could see my growth through this process, as well as continually notice and become aware of the specifically male sentiment within my classroom in conjunction with reading.

Implement and Evaluate Solution Strategies

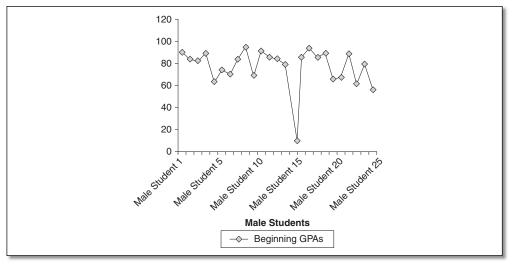
The males in this study were unaware of their singular involvement in my research. I carefully included all of my students in every activity, survey, and discussion; however, my data collection was exclusively focused on male participants. Using a calculated average from male students as a preliminary marker, I graphically organized the breakdown of grades that would be used to chart any progress made over the observation period. The presurvey focused mainly on reading habits in my male students. I tailored my lesson plans based on research and their candid responses. My observations during the research, planning, and implementation stages were closely monitored in my daily log. Documenting the effectiveness of my lessons occurred through postactivity surveys from all male adolescents as well as noticing the level of engagement and comprehension.

Examine how Patricia provided a detailed description of the data she collected, the pedagogical strategies she enacted, and the multiple data sources generated from the strategies to help her understand the underlying problem and assess the impact of her research.

Data Analysis

Initial Grade Calculations

I began my research by examining the grade point averages of male adolescents in two periods of English II. I placed the averages on a graphing chart to document each male student and his corresponding grade before implementation of strategies occurred. The averages revealed a wide variability of performance from 95 % to 11 % illustrating a gross disconnect between performance and comprehension.



Note: GPAs are calculated in percentages.

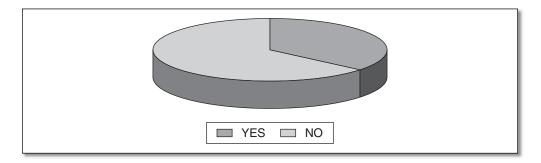
Presurvey

After tallying grades, I surveyed my male students on their reading habits both in and out of the classroom. The survey included questions like "How many hours a week do you read?" and "Do you read for pleasure?" followed by "What type of reading material do you prefer?" While results varied on these questions, a concerning pattern emerged.

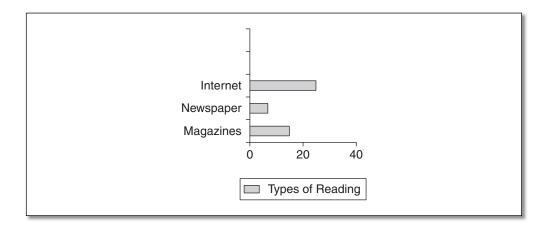
"How many hours a week do you read?"

Hours read per week	0-1 hour	1-2 hours	2-3 hours	3-4 hours	5 hours and beyond
Male participants	16	4	0	1	4

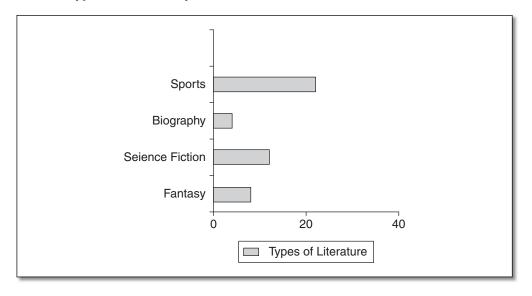
"Do you read for pleasure?"



"What type of reading material do you prefer?"



"What type of literature do you like?"



Shockingly, 72% of male students surveyed only read a maximum of one hour per week. Similarly, but not surprisingly, 70% of males do not read for pleasure. When questioned on the types of reading material preferred, the majority of males responded with Internet sources and magazines. The favored literary genre for surveyed males was sports by a land-slide, followed by science fiction and fantasy. While I was not surprised to discover my male adolescent students enjoy sports and computers, I was deeply concerned with the lack of reading occurring outside the classroom. After compiling the data and consulting my research I began formulating new lessons to increase male students' interests in reading, to heighten their motivation, and to increase their comprehension of curriculum-based texts.

Independent Reading

The initial survey of my male students suggested a small amount of reading, both required and independent reading, both inside and outside of the classroom. I designed an independent reading lesson to bridge the gap between outdated curriculum and male adolescents' interest. The theory behind independent study is to make a personal connection with a text, thereby increasing comprehension through freedom of choice. Learning through reading is facilitated when males take ownership of the text; therefore I introduced a unit on *The Catcher in the Rye* by requiring student choice through an anticipation guide. The guide posed questions about themes the students would uncover in the curriculum-based novel; however, they were asked to find examples in magazines, newspaper articles, and novels of their choice. For instance, one question on the guide stated, "You have to let children make mistakes so they can learn from their own decisions." Students were required to form an opinion about this statement but had to support it with a current example from a magazine or newspaper article, an alternate novel, a radio transcript, a movie script, or a song lyric. I designed this guide specifically for my male students who struggle with comprehending

curriculum because the texts are often outdated and disconnected from their interests. The discussion that ensued from this anticipation guide was positive and engaging. Male students, employing types of reading they enjoy, found examples from popular culture to pose arguments about the statements on the guide. I observed that without knowing it, my male students who usually struggle with these preunit questions found clarity and safety in their own reading materials. When I surveyed my male students at the conclusion of the lesson I had mixed reviews. Almost all of my male students disliked the amount of work associated with the guide, but as a teacher, I observed a raised level of consciousness and understanding concerning the themes. There was 100% participation, and my male students were eager to share their sports article, lyric, or newspaper clipping. I was encouraged by this activity and will use it again because it masterfully connects the important concepts and themes of curriculum-based texts with student choice and young adult literature. Using a two-question 5-point Likert scale I compiled male reactions to the lesson.

"I liked this activity."

1-Strongly Disagree	2-Disagree	3-Undecided	4-Agree	5-Strongly Agree
3	14	1	4	3

"I have a better understanding of the class reading/discussion after this activity."

1-Strongly Disagree	2-Disagree	3-Undecided	4-Agree	5-Strongly Agree
2	4	5	10	4

Corresponding with my observations, male students disliked the activity but admitted to a better understanding of the text, themes, and discussion, ultimately leading to greater comprehension of the curriculum throughout the unit.

Kinesthetic Lesson Plan

Receiving positive results for comprehension during the independent reading activity but failure in positive engagement, my goal during this lesson was to excite the struggling male readers through movement and activity. The lesson I created linked the curriculum being studied, *The Catcher in the Rye*, and positive reinforcement. Using video cameras, students were separated into groups and asked to perform scenes from the novel. Creating their own videos, students were responsible for turning the narrative into a script, assigning roles, staging their videos, shooting the film, and splicing the scenes. At the conclusion of the lesson, we made popcorn and viewed each group's movie. Observing my students, paying special attention to the males, I viewed an engagement with the technology as well as the novel. Particularly interesting, the struggling male readers were flipping through the text, furiously

rewriting the narrative, and laughing with their peers. This activity simultaneously created a community of learners engaged in a common goal, while leading to mastery of the content. I was anxious to survey my students at the conclusion of this activity, because my observations were extremely positive. Using the same two questions, carefully surveying the lesson and not my students' ability to answer a questionnaire, I diagrammed their interest and engagement with the activity.

"I liked this activity."

1-Strongly Disagree	2-Disagree	3-Undecided	4-Agree	5-Strongly Agree
0	3	0	10	12

"I have a better understanding of the class reading/discussion after this activity."

1-Strongly Disagree	2-Disagree	3-Undecided	4-Agree	5-Strongly Agree
0	0	6	15	4

I was pleased to see the results of this survey aligning with my observations of the lesson. The male students polled overwhelmingly that they enjoyed the activity, which was also discernible through the high energy, laughter, and overall enjoyment of the videomaking process. More impressive was the 76% tally of male students who felt the activity improved their comprehension of the text. I will use this activity for every core text in the curriculum because it embraces the masculine personalities in my classroom and encourages collaboration among my students, further aiding my struggling males and turning a seemingly dull text into an exciting piece of film study.

Computer-Based Reading Tools

Introducing technology into my classroom as well as my unit was an attempt to make reading more approachable. When surveyed, my male students admitted to reading Internet sources often; however, few read for more than one hour a week. Linking computers and reading was an effort to erase the stigma surrounding literature and update its relevance. I began by finding chapters of *The Catcher in the Rye* online and linking them to a student-run discussion board on Blackboard. In the classroom, using a mobile laptop cart, each student had a computer and access to the site. Students would be assigned three chapters of reading for homework, and I would allow time for completion of one chapter in class. On Blackboard, students would follow the link for the chapter, read an attached snippet of the novel, and then answer questions about the reading using a discussion thread. Each student would be responsible for answering all questions and responding to at least three threads from his or her classmates. At home, students would complete the remaining two

chapters or reading assignment online and corresponding questions. Similarly, I designed reading quizzes on *The Catcher in the Rye* to serve as review, and these were easily accessed from the Blackboard site. Males who struggle with reading could sit comfortably at the computer, look at the answer choices, and find out immediately if they were on the right track. I had students complete these quizzes in the classroom, but I observed an immediate behavioral change when I switched from paper-based assessment to computer-based assessment. There were fewer groans, no sleeping, and better quiz grades. My struggling male readers were the first to grab their laptop, sign on, and get started. This medium really transformed the way my male students viewed reading, and I saw the greatest improvement in my study during these lessons. I surveyed my students after introducing this technique, collecting data only from the males, and calculated their responses below.

"I liked this activity."

1-Strongly Disagree	2-Disagree	3-Undecided	4-Agree	5-Strongly Agree
0	0	5	16	4

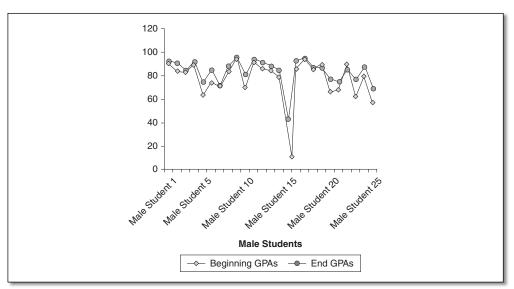
"I have a better understanding of the class reading/discussion after this activity."

1-Strongly Disagree	2-Disagree	3-Undecided	4-Agree	5-Strongly Agree
0	0	3	15	7

The results showed that 80% of male students surveyed liked using the computers to read and to respond to questions about the curriculum-based text being studied. An exciting 88% of male students had a better understanding of the novel at the conclusion of the activity. These numbers align with the increase in quiz scores, as males who struggled with content received instantaneous results on the computer when answering a question correctly or incorrectly. This active gauge of their understanding helped males remedy their mistakes, encouraged them to ask questions, and promoted self-reflection about their reading practices. Using computers and literature is time consuming; however, in the future I want to turn an entire reading unit into a technological experience, as well as incorporate at least one computer-based element into every core novel studied.

Postcalculation of Male Grade Point Averages

At the conclusion of my research I examined the grade point averages of the initial 25 males included in my study. I placed the newly calculated averages against the old, to create a visual representation of the data.



Note: GPAs are calculated in percentages.

The data show an increase in grade point averages in my course from the beginning of the study to the end, illustrating a greater comprehension of the material. I was excited, as an educator, to see the grades rise, but I was equally as impressed with the positive engagement my struggling male students had with the text. Enjoyment of the text is inextricably linked to better performance, and the males in my study excelled in both arenas.

Researcher Log

Keeping a daily log of observations and reactions to classroom activities and lessons was an excellent way for me to reflect on successes and failures in my struggling male students. Similarly, I have noted further areas that need improvement in these lessons, which will benefit my new group of students next year. My log documented my observations of an increase in engagement with reading, which are also supported by the data shown in the above charts. Overall, my researcher log was a reflective space that captured my thinking about the behaviors witnessed in my classroom. I enjoyed the process of making connections among what I was seeing in their work, what I was hearing in their discussions, and what I was calculating in their grade point averages.

Role of a Critical Friend

Critical friends are an important aspect of self-study. As a critical friend, I found the process of editing extremely insightful. I could see the holes in my critical friends' research, which also allowed me to better examine my own data with an analytical eye. Sharing ideas, formulating questions, and communicating on a weekly basis make the relationship current and influential. In the future, I would like to expand my circle to include several critical friends. Similarly, my critical friend works within the same field of study, and I would like to have other disciplines providing feedback on my work and research.

In this section, Patricia provides a detailed and transparent data trail describing her data analysis. She includes data displays and the procedures she used to make meaning of her data and formulate preliminary and concluding interpretations. She offers a discussion of the role of critical friend in the research process.

Findings

Student Choice

Through data analyzed about the new pedagogies as presented above and personal reflection written in my log, I have found several pertinent ways to increase motivation and reading comprehension in struggling male adolescents. At the beginning of my research and implementation process, I found reluctance on the part of male students as new lessons increased the amount of writing associated with reading. While my activity promoting student choice connected the students to popular culture, it demanded attention and only proved effective if students completed the work. Male students reported that they did not appreciate the work. However, the activity linked themes in a curriculum-based text with similar themes found by the student in popular young adult literature. I observed, throughout the course of the unit, that students were aware of the themes, made connections to the novel, and referred back to this guide continuously. In the future, I would like to alter this assignment because it only proved effective if students participated.

Motivation Through Action

Observing my students during the kinesthetic lesson plan, it was clear that their motivation was undeniably linked to comprehension and their comprehension was linked to their academic success. By creating lesson plans that increased movement and utilized previously admonished male behaviors, I was able to promote action and understanding in my classroom. I witnessed all participants answering questions, using the text, and excitedly arguing about themes, symbols, and characters. Similarly, there was a marked success when I introduced video cameras into my classroom and encouraged the students to use dramatization in their understanding of a novel. Here, students responded in their surveys with an overwhelming appreciation for the lesson and attributed the activity to an increase in comprehension and understanding of the text. In a way, I used the energy and psychological differences in males as a proponent for learning. Reading should be engaging, and I have learned that a seemingly boring curriculum-based text can function as a portal to active participation, and capturing a struggling reader's attention facilitates successful comprehension and test scores.

Computer-Based Tools

Introducing technology into my classroom is not a new phenomenon; however, using it as a source of reading comprehension did not present itself until the completion

of my research. The lower-achieving male readers in my class struggle with the process of reading, both inside and outside of the classroom. In lieu of attempting the reading, the majority of my male students prefer taking a zero, progressively dropping their grade point averages. To alleviate the anxiety and apprehension that accompanies reading, I introduced literature on a computer. During this lesson I observed my male students engaging with the text, using class time to complete work, and behaving with focused intent. Reading no longer became an isolated function, but instead the males were a community of learners, sharing and discussing using online quizzes and communication threads. Every male student in this study completed his homework, scored above a 64% on all the quizzes, and participated in the online discussion board. Using the computer to facilitate a variety of readers and learning styles caused an increase in participation and comprehension. I attribute the success of my struggling male students to the launch of a curriculum-based text on the computer.

In this findings section, Patricia provides a discussion and explanation of her interpretations of her data analysis with evidence for her claims. She presents the themes identified through her analysis.

Discussion and Implications

The implications of this study are dual-fold. First, it is necessary for educators to understand the learning differences between boys and girls. Second, this study seeks to acknowledge these differences and promote awareness in classrooms. Adolescent males process information often in a manner contradictory to the pace and style of female-run classrooms and struggle to make sense of outdated and lengthy curriculum. Understanding their behavior and creating lessons that promote their natural energies give struggling males a chance for success. If, as educators, we make ourselves aware of these differences, embrace the behavior, and begin changing our pedagogies, there will be an increase in male comprehension and motivation.

Within the lessons, there was a small matter of time management, because computer-based tools take an enormous amount of time to prepare and execute. Similarly, many of the activities that utilize movement take at least half a class period, if not an entire block. Similarly, access to computer labs may be a challenge; therefore preparation on behalf of the educator becomes essential. Another complication would be employing excellent classroom management skills before attempting new pedagogies. These activities are easily managed when definitive rules are posted for students; however, it is imperative to set ground rules for students before they begin the lesson.

Impact on Participants

My struggling male readers found great success during this research study, and I documented a positive impact between activities that promoted movement and technology and an increase in comprehension and motivation. Each male student improved within one facet of this study, and I was encouraged by the level of discourse being produced by previously shy and frustrated boys. Through my observations, I noted an increased level of

excitement, participation, and understanding. All of my male students appreciated a class-room atmosphere that fostered a competitive spirit as well as a connecting of curriculum to popular songs, articles, and novels.

Impact on Teacher

This study has provided me with a new way of looking at my students. Before I began, the frustrations of my male students were reflected in my own teaching practices. I took personal offense to their lack of attention and felt resentment over their lack of participation and subsequent low grades. Over the course of this study, I have realized that research within the educational field provides insight, teaching tools, and an invaluable community of professionals dealing with the same disappointments. Using research and collaboration, previous notions of teaching may be dispelled in favor of new techniques. I embraced the transition in my pedagogy and will continue to further my studies in an effort to continually enhance the learning experience for my students.

My daily log, while not expansive, lent great resources to my research. Becoming an active observer in my own classroom made me notice and study my own teaching practices and ultimately allowed me to grasp the connection between males and reading comprehension.

Using research and my critical friend, I expounded on the topic until I had solidified a meaningful study to conduct with my students. Through active lesson planning, student choice, competition, and technology-based tools, I wanted to change the way my adolescent boys view reading. While reading and planning, my initial questioning underwent several transformations. Initially, I was going to study all of my students, but then I concentrated solely on my male students. Similarly, I began questioning if it was reading in general or texts in the curriculum that caused my students' frustration. After closely viewing their study habits, I concluded that material within the curriculum, and the way I approached the texts, needed to undergo a change. I would like to present my findings to my department and encourage other teachers to approach lesson planning with a strict eye toward gender differentiation.

Impact on Education Field

Although there is a growing amount of literature present on reading and adolescent males, my study further supports that antiquated classroom settings will not facilitate engagement or success for struggling male readers. Researchers are proving discernible differences between the way boys and girls learn. My study, with concrete data, further supports the notion that males excel when presented with activities that challenge their natural behavior and foster a community of learning that includes student choice and technology. As educators, if we become informed of the disparity between students, not merely differentiation between types of learner but between genders as well, there can be an increase in success and comprehension.

In this section on discussion and implications, Patricia provides a discussion of the impact on her research, on her students, on her teaching, and on her understanding and reframing of teaching. She discusses what her study offers the broader realm of education and her specific topic of male adolescent readers.

Limitations

My study was limited to my own classroom setting, grade of teaching, and population of a selective sampling of 25 male students. In the future, I hope to expand my knowledge and include girls in my study, learning how to improve collaboration and increase reading comprehension. On a personal note, I encountered my own limitation as I began researching this topic. As an educator, I had to completely abandon my previous notions of teaching and lesson planning and embrace new pedagogical ideas, specifically geared toward a mind-set very different from my own. Eliminating biases and focusing solely on the adolescent males in my classroom was a difficult experience, and in the future I would be interested in collecting data on female literacy. I opened myself completely to new methods of teaching adolescent males and saw the fallacy of my own practices.

It is obvious that Patricia has acknowledged the limitations of her research including her own biases and learning and that self-study teacher research improved her practice and her students' learning.

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KEY IDEAS

- Self-study teacher research involves you in designing a study, carefully reviewing the research ethics of your study, collecting data, analyzing data, and writing and presenting your findings.
- A Self-Study Research Project Planner highlights the specific and the overlapping research components that highlight the recursive nature of self-study research.
- A Self-Study Research Project Timeline is a tool for charting your progress and sharing it with critical friends throughout the research process.
- An example of self-study research gives you a general overview of what a research project entails.