A Battle for the Mind: The Use of *Reacting to the Past* in the Academically At-risk Classroom

by

Tiffany R. Miller

A thesis presented to the Honors College of Middle Tennessee State University in partial fulfillment of the requirements for graduation from the University Honors College

Spring 2018
Battle for the Mind: The Use of *Reacting to the Past* in the Academically At-risk Classroom

by
Tiffany R. Miller

APPROVED:

__________________________
Dr. Dawn McCormack
Associate Dean
College of Liberal Arts

__________________________
Dr. Karen Peterson
Dean, College of Liberal Arts

__________________________
Dr. Rebecca McIntyre
Department of History

__________________________
Dr. John R. Vile
Dean, University Honors College
ACKNOWLEDGEMENTS

First and foremost, I must thank God for the grace to learn, the faith to persevere, and the love to help others. I am deeply indebted to my family for their consistent support and love. Thank you for always being willing to listen, telling me truth, and encouraging me to continue!

Thank you, Dr. McCormack, for being my advisor in this project. My first taste of Reacting was in your class and I am consistently reminded of the ways it has impacted the way I learn. I am forever grateful for the ways you have challenged me to perform my best.

Thank you, Dr. McIntyre, for sharing your classes and helping me understand the complexities of teaching. When given the opportunity to implement Reacting, you didn’t have an ounce of hesitation and I am grateful. Your love for your students is evident and inspiring.

Thank you to all of the reading history initiative students who participated in this project! Your flexibility and patience in learning something new made this project a joy to do with you!

Finally, I would like to thank the Honors College for the opportunity to complete an undergraduate thesis. Your consistent support from the beginning was essential to the success of this project.
Abstract

Academically at-risk students face difficult and unique challenges in higher education. In this study, I argue that Reacting to the Past pedagogy provides students the opportunity to learn effectively. The study focuses on a pilot program recently adopted by Middle Tennessee State University’s reading history initiative. The results of the study suggest that the Reacting to the Past pedagogy increases academic self-efficacy among at-risk students. This increase in self-efficacy leads to a deeper appreciation of learning and higher levels of achievement. This study bridges an important connection between Reacting to the Past pedagogy and at-risk students. Ultimately, this study enhances our understanding of the opportunities that emerging instructional practices, such as Reacting to the Past, can have among academically at-risk communities.

Keywords: self-efficacy, Reacting to the Past (RTTP, Reacting), academically at-risk
# TABLE OF CONTENTS

INTRODUCTION ................................................................................................. 1

LITERATURE REVIEW ...................................................................................... 4
  Defining Critical Reading ............................................................................... 5
  Consequences of low-level reading skills .................................................... 6
  Reacting Pedagogy ......................................................................................... 8
  Reacting at MTSU .......................................................................................... 12
  Adjustments to the Game ............................................................................. 15
  Setting the scene .......................................................................................... 17
  Recent Research in Reacting ......................................................................... 18
  Academic Self-Efficacy Theory ..................................................................... 19

METHODS .......................................................................................................... 20
  Surveys ......................................................................................................... 22
  Uniqueness of Study ..................................................................................... 23
  IRB Requirements and Class Observations .................................................. 24

RESULTS ........................................................................................................... 25
  Survey Responses ......................................................................................... 25
  Open-ended Responses ................................................................................. 28
  Class Observations ....................................................................................... 29

DISCUSSION ...................................................................................................... 31
  Limitations and Recommendations ............................................................ 33
  Future Research ............................................................................................ 35

CONCLUSION ..................................................................................................... 37

REFERENCES .................................................................................................... 38

LIST OF APPENDICES ....................................................................................... 43
  APPENDIX A: IRB APPROVAL .................................................................... 44
  APPENDIX B: SURVEYS ................................................................................ 45
  APPENDIX C: CLASS OBSERVATION MAPS ................................................. 49
LIST OF TABLES

TABLE 1: AA&U’S ten high-impact practices………………………………………. 10
TABLE 2: Patriots, Loyalists, and Revolution in NYC, Learning Objectives………… 12
TABLE 3: Patriots, Loyalists, and Revolution in NYC, Key Concepts………………..13
TABLE 4: Combined Pre/Post-test Comparisons for RTTP tasks……………………24
TABLE 5: Combined Pre/Post-test Comparisons for academic tasks………………….24
TABLE 6: Combine Pre/Post-test Comparisons for social tasks……………………...25
TABLE 7: Pre/Post-test Comparisons for Class 1……………………………………25
TABLE 8: Pre/Post-test Comparisons for Class 2……………………………………26
INTRODUCTION

At this very moment, your brain is accomplishing an amazing feat—reading. Your eyes scan the page in short spasmodic movements. Four or five times per second, your gaze stops just long enough to recognize one or two words. You are, of course, unaware of this jerky intake of information. Only the sounds and meanings of the words reach your conscious mind. But how can a few black marks on white paper projected onto your retina evoke an entire universe?

Stanislas Dehaene, a leading neuroscientist who analyzes the relationship between the brain and reading, vividly reminds us that the feat of reading is remarkable and complex (as cited in Manarin, 2015, p. 2).

Undoubtedly, reading plays a key role in the advancement of learning. In fact, by the time a student reaches university, he or she is expected to read a variety of texts and derive deep meanings uniquely from, as Dahaene states, “…a few black marks on white paper.” While some students gain this reading proficiency, sadly, others struggle to attain the goal. In fact, instructors fear that today’s students have less ability to read than previous generations. The National Endowment for the Arts reports three alarming shifts: first, Americans are spending less time reading; second, reading comprehension skills are eroding; and third, these declines have serious civic, social, cultural, and economic implications (as cited in Manarin, 2015, p.1).

Many believe technology has caused the shifts in reading patterns. Younger generations have instant information available to them in an easily digestible format. Others blame the changes in educational policy that stress standardized test scores and provide little opportunity for students to explore the depths of imagination in reading.
Snuffling out the joy of reading leaves little motivation for these students to read on a regular basis. But for whatever the reason, students are reading less, yet are expected to understand more. This paradox proves ill for society as a whole, but particularly for higher education.

Between the year 2004 and 2014, college enrollment increased by 17% (NCES, 2017). In the fall of 2016, 69.7% of high school graduates enrolled in college (U.S. Department of Labor, 2017). Sadly, many of these students were ill-equipped for college coursework. In their annual report on the "Condition of College and Career Readiness," ACT analysts reported only 44% of the class of 2016 satisfactorily reached the benchmark in reading (2016). They are not alone in their findings; the National Assessment of Educational Progress reported that only 37% of students meet or exceed reading proficiency (NAEP, 2016). These reports indicate that universities are increasingly enrolling students ill-prepared for the academic and professional road ahead.

Administrators and instructors have recognized this growing need and have instituted programs designed to assist these students in developing the necessary skills for a successful academic career. These programs vary in scope and complexity. Currently, a university seeking to implement a program for the academically at-risk usually chooses from two popular approaches (Hodges & Agee, 2009, p. 351). The first approach consists of prescribed courses that cater to a subset of the student population. The second consists of learning assistant services offered to the entire student population. Each approach is designed to boost students to higher levels of achievement and have had mixed reports of efficiency and effectiveness (Hodges & Agee, 2009, p. 351).
Beyond the structure of programs, education designed for the academically at-risk employs a variety of reading study strategies. In order to succeed in college, a student must not only be able to identify relevant material but also process the content in a way that reaps the most meaning. To achieve this purpose, instructors have the opportunity to choose from a variety of methods. The more traditional study strategies include: underlining, notetaking, mapping, questioning, and summarizing (Mulcahy-Ernt & Caverly, 2009). These strategies ensure students learn core skills that enable them to process the information more fully. However, beyond the traditional approach, an increasing number of popular study strategies include those with an emphasis in active learning.

Many studies affirm the benefits of active learning strategies such as in-class simulations. The *Reacting to the Past* (RTTP or *Reacting*) program includes a host of simulations that allow students to role-play diverse historical events. Participants have reported higher motivation in attending and contributing to classes (Carnes, 2011 & 2014 and Higbee, 2007). Despite the plethora of literature citing the effectiveness of RTTP in a variety of contexts, there is a lack of literature on its impact on academically at-risk students. To bridge the gap, I observed and analyzed the effectiveness of the *Reacting* method in MTSU’s reading history initiative program. This program follows a corequisite design which includes the courses HIST 2010: “Survey United States History I” and READ 1010: “Reading Lab.” The effectiveness of the pedagogy was measured by a growth in student self-efficacy. While the project design was confined specifically to the Middle Tennessee State University (MTSU) program, the implications of the project has enhanced understanding for underprepared communities across the nation.
To begin, the project will introduce the relevant literature. First, I will help the reader understand what it means to be an academically at-risk student by explaining the complexity of critical reading. Second, I will describe the academically at-risk populace at MTSU. Third, I will explain the Reacting pedagogy and what makes it unique and effective. To sum up the literature review, I will describe self-efficacy theory and its importance in higher education today.

Next, I will describe the methods of the project. This section provides critical information regarding the population examined, the carefully crafted surveys, and the class observations. The recent Indiana University South Bend study measuring self-efficacy in connection with Reacting provides a foundation for much of the project (Schult, Lidinsky, Zwicker, and Dunn, 2018 p. 75-89). Hypotheses are made based on the results of the IU South Bend study. After the methods section, I will detail the results of the project. The surveys, open-ended responses, class observations are all closely examined.

Finally, I will discuss the findings and their significance for this populace and higher education as a whole. I will describe some limitations of the project and conclude with some suggestions for future research.

LITERATURE REVIEW

For the purposes of the project, academically at-risk students are defined as those who have a low-proficiency in critical reading. Universities primarily determine the pool of low proficiency readers through a mix of standardized test scores, high school GPA, etc. (King, McIntosh, & Bell-Ellwanger, 2017). Typically, students who perform poorly
on the ACT are required to take an additional reading assessment before entering college. Based on the results of this assessment, students are either admitted into the supplemental program or permitted to take standard university coursework. Timothy Nelson, one of the coordinators of the reading history initiative, described the enrollment process at MTSU as one that factors in ACT scores that are below a 19 and an additional test that is created and approved by the reading history initiative team (personal communication, Nov. 13, 2017). All of these benchmarks ultimately seek to assess the student’s level of critical reading.

Defining Critical Reading

For most, learning to read begins early in life as individuals practice and understand the components of language such as phonetics, spelling, and vocabulary. This early form of literacy focuses on decoding processes and helps individuals interact with the world around them in the most basic sense. Fortunately, this is not what many college students struggle with, nor is it the focus of our discussion. Manarin, Carey, Rathburn, and Ryland describe the true literacy concerns plaguing higher education today:

“When employers, governments, and faculty complain that postsecondary students today just don’t read, for the most part they are not talking about decoding skills…they are talking about the ability to make meaning out of complicated texts and to apply that knowledge in different contexts (2015, p. 39).”

Critical reading involves the ability to read for both academic purposes and for social or civic engagement. Academic success hinges on an individual’s ability to
identify main points, evaluate their credibility, and apply them to preexisting knowledge. This aspect of critical reading should be employed across disciplines. Today’s demands mean that students must be equipped to garner meaning from a variety of texts including academic research, business reports, and even those of a softer taste such as literature or poetry.

Equally important, yet often overlooked, is reading in a way that advances a democratic and socially relevant education. Manarin, et al., describes this aspect of critical reading as the ability to recognize power relations, question assumptions, engage with the world, and construct new possibilities. In essence, this aspect can recognize everything from propaganda and populist sentiment to inefficient methods of production and business. It works to improve the world around the individual. In this respect, critical reading is more than just helping students achieve high grades in their academic education it is working to create a more just and equitable society. As Manarin, et al. summarizes:

“Critical reading, from this perspective, shifts from being a tool to succeed within the system to a tool for challenging the system within a wider social or civic context. It becomes crucial in an era of increasing inequalities, disenfranchisement, and despair (2015, p. 9).”

Consequences of low-level reading skills

Students with low-proficiency in reading are at higher risk of not learning key concepts, completing their desired program, or establishing an influential career. They may begin this downward spiral by avoiding classes that challenge them to read or write
extensively. Through this avoidance, they are ultimately neglecting classes that advance their degree completion. For example, at MTSU, instructors found that first-year academically at-risk students enrolled in History 2020 courses that feature a reading lab and support, avoided taking History 2010. Some waited up to their senior year to complete this general education requirement; sadly, others never completed the course and thereby, their degree program. Administrators refer to these types of courses as “gatekeeper courses,” which means they have the ability to predict the likelihood of a student’s completion. Since this observation at MTSU, administrators have extended the reading lab and support for select History 2010 courses. Spring of 2018 marks the beginning of this pilot program.

Students with low-proficiency of reading are also at-risk of not gaining a socially relevant education. This second aspect of critical reading can have far-reaching impacts that go beyond the individual and affect society as a whole. For example, these individuals may not fully understand their citizenship rights. These students may feel excluded and unable to change the current system. This exclusion is particularly relevant, because the academically at-risk populace often consists of minorities. At MTSU the program for the academically at-risk impacts roughly 15% of the freshman student population. It consists of a diverse group of individuals, which includes roughly 60% under-represented minorities and 20% international students. A well-functioning society encourages all citizens, particularly minorities, to participate objectively in the democratic process; this requires critical reading skills that readily discern truths from falsehood (Manarin, et al., 2015, p. 4-11).
Academic research provides many opportunities for educators to learn how to help students achieve higher levels of critical reading. Among these tools are active learning strategies such as *Reacting to the Past*.

**Reacting Pedagogy**

*Reacting to the Past* arguably encapsulates the best parts of learning and teaching through student-focused material and activities. Nicolas Proctor, author of *Reacting to the Past Game Designer’s Handbook*, elaborates on the importance of combining the use of games and history in the classroom when he states,

“Games were what originally interested me in history. A boyhood spent playing hex-based historical games with my uncle and grandfather encouraged me to develop the notion that history is not so much a record of things said and done as it is a series of high stakes decisions (2013, p. 3).”

One of the primary goals of *Reacting* is to introduce students to the complex decisions of the past. *Reacting* is not re-enacting events from the past; students may make decisions that deviate from history. It is considered an active learning and high-impact alternative to traditional instruction around the globe (Hagood, Watson, Williams 2018a, p. 3). In fact, RTTP has been implemented in over 350 colleges and universities (Hagood, et al., 2018a p. 2).

Active learning differs from passive learning in the sense that it requires cognitive processing (Hagood, et al. 2018a, p. 3). Passive learning such as lectures, demonstrations, or videos permits students to disengage from the learning process. In these settings, students tend to act as data collectors rather than engaged scholars. They may write down
information without ever internalizing the content. Hagood, et al. describe passive learning settings as environments that have, “…no social requirements or overt expectations that students pay attention, work with the course content, or do little more than not be disruptive (2018a, p. 3).” The question of which form of learning is best for students has already been definitively answered (Hagood, et al. 2018a, p. 3-4). Through the years, researchers have found traditional instruction that emphasizes content delivery through lecturing and note-taking ineffective. They further argue that administrators and instructors should now be focusing on which practices enhance the most active learning (Hagood, et al. 2018a, p. 3-4).

With Reacting, instructors have the opportunity to incorporate active-learning practices in the classroom. First, the games emphasize teamwork and collaboration by using factions, deal-making, and discussion. This collaboration adds a “social requirement or overt expectation”\(^1\) to participate and not blindly take notes. Students are held accountable to their peers for knowing the material and participating in a manner worthy of their designated characters. Second, students report feeling empowered to learn through the structure of the game. In order to win, they must defend an argument well. A well-constructed argument usually consists of supportive evidence found in the primary documents. Therefore, Reacting emphasizes active learning by encouraging students to collaborate and internalize the material.

While the pedagogy clearly broadens an instructor’s ability to implement active-learning, critics may argue that playing games would diminish the amount of important material students must learn with limited time. However, Hagood, Norman, Park, and

\(^1\) See Hagood, Watson, and Williams (2018b) quote
Williams surveyed instructors across the nation and found general support in the belief that there is not a significant loss between this active learning approach and course content (2018b, p. 159-183). In fact, many of the games are widely researched and vetted by leading scholars in history, anthropology, philosophy, etc. Ultimately, the games are crafted by fellow educators with an earnest concern in the development of students.

**Table 1**  
AAC&U's ten high-impact practices

<table>
<thead>
<tr>
<th>High impact practices</th>
<th>Diversity/Global Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>First year seminars and experiences</td>
<td></td>
</tr>
<tr>
<td>Common intellectual Experiences</td>
<td>ePortfolios</td>
</tr>
<tr>
<td>Learning Communities</td>
<td>Service Learning, Community-Based learning</td>
</tr>
<tr>
<td>Writing-Intensive Courses</td>
<td>Internships</td>
</tr>
<tr>
<td>Collaborative Assignments and Projects</td>
<td>Capstone courses and projects</td>
</tr>
<tr>
<td>Undergraduate Research</td>
<td></td>
</tr>
</tbody>
</table>


High-impact practices (HIPs) are defined as, “…teaching and learning practices (that) have been widely tested and have been shown to be beneficial for college students from many backgrounds (Kuh, 2008).” The findings of high-impact research have led the Association of American Colleges and Universities (AAC&U) to adopt these practices into their movement for national Liberal Education² (Hagood, et. al, 2018a, p. 4-5). George Kuh, a leading scholar on HIPs, believes that in order to enhance student engagement and increase student success we must, “…make it possible for every student

² See Table 1
to participate in at least two high-impact activities during his or her undergraduate program…(2008).”

As Hagood, et al. identify in their discussion of Reacting, the pedagogy aligns with many of the characteristics of HIPs including: involvement in social learning; high time commitment (taking weeks or months to complete); undefined aspects which allows the student to craft individual learning; and ongoing critical thinking and decision-making (2018a, p. 4-5). In McCormack and Peterson’s study of Reacting at MTSU, they elaborate on what makes RTTP a good fit for many students including those from low socioeconomic backgrounds, “At our university, RTTP can engage students from diverse backgrounds without the often-prohibitive costs associated with some types of HIPs, such as study abroad and internship programs (2018, p. 19).” In other words, traditionally underrepresented students can still benefit from HIPs even if they can only participate in college and take courses that utilize Reacting curricula.

Instructors have a wide variety of developed gamebooks to choose from through Barnard’s College RTTP library. From Athens, Greece and the debate of democracy to India’s push for independence, many of the games are set in some of the most highly contested times of history. This game-based pedagogy utilizes students’ desires to win as a motivator for engaging in the complexities of the past. In order to win, students must conduct intensive research, collaborate with peers, and sharpen key rhetoric skills through class debates.

Each gamebook provides all of the necessary materials that introduce the students to the liminal space, such as historical context, primary documents, and role sheets. A

---

3 Reactingconsortiumlibrary.org
host of scholars and instructors design the simulations. Conferences are held each year to make improvements on the pedagogy and to test developing games. The testing phase usually includes input from both instructors and students. The simulations may be designed to last anywhere from one day to multiple weeks. Each game is highly adaptable to suit the objectives set by the instructor.

Reacting at MTSU

Throughout the project, I partnered with History 2010 professor, Dr. Rebecca McIntyre. She has had previous experience working with the academically at-risk community at MTSU. In fact, she is the co-coordinator of MTSU’s reading history initiative. She has also had experience incorporating the Reacting pedagogy in previous classes. MTSU’s History 2010 course focuses on the early period of U.S. history. Therefore, we decided that the RTTP game Patriots, Loyalists, and Revolution in New York City, 1775-1776 best fit the learning objectives of the course (Offut, 2015).4

<table>
<thead>
<tr>
<th><strong>Table 2</strong> Patriots, Loyalists, and Revolution in New York City, 1775-1776</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learning Objectives</strong></td>
</tr>
<tr>
<td>Critical Thinking</td>
</tr>
<tr>
<td>Writing</td>
</tr>
<tr>
<td>Speaking</td>
</tr>
<tr>
<td>Leadership</td>
</tr>
</tbody>
</table>


4 See Table 2
This game introduces students to the political and social chaos of colonial New York City. Patriots and loyalists vie for an advantage in an undecided populace. Through the experience, students begin to understand the strengths and weaknesses of both sides. They also begin to understand how the colonial environment (i.e. economic system, social structure, etc.) shaped the impact and power of the arguments. The main debate centers on whether colonial New York City should pursue a path of reconciliation with the British or independence (and possible war) from the mother country.

The ultimate goal of each student is to gain control of New York City at the end of 1776, as well as, achieve certain victory objectives specific to his or her role and background. Public political persuasion through effective argumentation strengthens the student’s chances of winning. However, these are not the only forms of persuasion. Students may also choose to engage in private personal deal making through bribery, threatened force, etc. when appropriate. The combination of these overt and covert activities determines the student’s ultimate victory.

<table>
<thead>
<tr>
<th>Table 3 Patriots, Loyalists, and Revolution in New York City, 1775-1776</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Concepts</strong></td>
</tr>
<tr>
<td>Philosophical basis of government</td>
</tr>
<tr>
<td>Origin of, rights to, and governmental protection of property</td>
</tr>
<tr>
<td>Rule of law and the role of courts</td>
</tr>
<tr>
<td>Historical contingency</td>
</tr>
<tr>
<td>Right of rebellion and revolution under certain circumstances</td>
</tr>
<tr>
<td>Role and legitimacy of violence</td>
</tr>
<tr>
<td>Political legitimacy of a government and how it is gained, maintained, and lost</td>
</tr>
</tbody>
</table>

Throughout the game the students must also understand the rich philosophical debates of the time.\textsuperscript{5} Political ideologies such as liberalism, republicanism, etc. really began to foment during the colonial era. Students must derive the core of their arguments from these schools of thought. To help students grapple with these deep concepts, the designer added a series of primary sources to the gamebook. These sources include extensive excerpts from John Locke’s \textit{Second Treatise of Government} and pamphlets from Samuel Johnson, Thomas Paine, and James Chalmers.

The roles were designed to be as diverse as the people that populated colonial New York City. The primary factions are the Patriots and Loyalists each made up of an assortment of wealthy landowners, merchants, and entrepreneurs. The Moderate faction represents the middle-class sentiment and can be swayed to either side. The laborers represent the many landless, poor, white males in colonial society with great resentment against the wealthy and can easily be persuaded to use violence to achieve goals. The women are highly interested in the political and economic systems of the colony. They have played critical roles in boycotting, substituting goods, and managing farms and shops. Their support will be influential in the final outcome of the game. The slaves see the current chaos and political rhetoric as an opportunity to gain freedom. All of these roles work to create the unique atmosphere of a city on the verge of revolution.

\textsuperscript{5} See Table 3
Adjustments to the Game

As noted before, each game is designed to be highly adaptable to the objectives of the instruction. Therefore, Dr. McIntyre and I had to carefully craft it to fit the needs of the academically at-risk students. We made important changes to the RTTP game. First, we changed the time frame for the Reacting game. The game designer, Bill Offut, organized the schedule to fit four weeks for classes that meet twice-a-week. Because of the newness of the game to the students and the program, we decided to condense the game into a more compressed schedule that lasted three weeks. We believed a more compressed schedule would give the students a taste of the method without overwhelming them for an extended period of time. Per the recommendation of the game designer, the simulation was set in the time period of late 1776. This compressed schedule included debates about the roles of women, slaves, and landless laborers in colonial society.

Our context sessions included an overview of colonial society, important political and economic activities such as the Navigation Acts and the Stamp Act, and international events such as the French and Indian War and the Treaty of Paris 1763. While the context sessions gave an overview, we later learned that the students would want more economic and military material in the beginning. Specifically, they wanted to know how the economy and currency system worked in colonial society. The patriots struggled to formulate plans about raising a military and wanted to know the specific requirements of this time period.

Second, we made major adjustments to the role sheets. Many of the role sheets included material that was more relevant to the eliminated sessions. We left the
backgrounds and biographies of the different characters the same. We then added some pictures to the role sheets so the students could get a better idea of what their character would have looked and dressed like.

Before finalizing our game adjustments, we met with Dr. Lisa Pruitt who had done this RTTP game in previous classes. She advised us to use the smuggler role with caution as it did not go as planned in her other classes. Again because of the newness of the game, we finally made the decision to eliminate the smuggler role altogether. The time period and setting of the game really encouraged us to consider using a Native American in the game, and we were able to include this role in the larger class.

Third, we made major adjustments to the reading requirements. The game really centered on the use of Lockean argument found in excerpts of his *Second Treatise of Government*. However due to the limited time, we decided to give a brief introduction and overview of Locke instead of making the students digest all of the material in three short weeks. This adjustment was not an easy decision to make, because a key advantage of using *Reacting* is to motivate students to study primary documents and use them in their arguments. However, timing would not allow us to utilize this approach. Our recommendation would be to allot greater time for the students to read through and understand the material. Some may even want to consider using the game for half the semester or longer if appropriate.

Although, we did not include Locke, we still wanted to have strong primary documents for both the Patriot and Loyalist perspectives. Therefore, we directed the students to use Thomas Paine’s *Common Sense* and James Chalmers’ *Plain Truth*. Paine’s *Common Sense* addresses the shared grievances of the Patriots. Although a little
less well-known, Chalmers wrote *Plain Truth* as a rebuttal to Paine’s argument and strongly supports the loyalist cause. All were encouraged to read both documents to get a better grasp of both sides. We also introduced a draft of the *Declaration of Independence* in the middle of the game.

Fourth, we made major changes to the assignments. The game’s original design includes a variety of assignment options. Dr. McIntyre decided that she would grade on participation and speeches. For participation, students were graded on more than just showing up to class. They had to be actively involved in the discussion. They also had to demonstrate that they understood the objectives of their role. This was determined by the actions they took and the words they spoke.

**Setting the scene**

From the beginning, we encouraged the students to adjust the classroom to resemble a legislature. This included moving the desks into an angled semi-circle. We also encouraged our students to sit with their factions. We found a little bit of resistance to these two rules. Understandably, the students already have friends and preferences on where and with whom they would like to sit. However, one of the important benefits of *Reacting* is pushing the students out of their comfort zone. Arranging the classroom to resemble a legislature would remind the students that when they step into the room, they are stepping into another place. Ultimately, we learned that it is important to be firm in these guidelines.
Recent Research in Reacting

There is debate among researchers on the effects of Reacting can have on student retention rates. McCormack and Peterson’s study suggests that RTTP is an effective pedagogical tool for student engagement, and the experience helps students gain important skills (2018, p. 27-28). All of this, they argue, should aid in retention and appreciation for liberal arts education. Bernstein, Strasma, Olwell, and Higbee conducted a follow-up study of students that had participated in Reacting courses to understand the longitudinal effects of the pedagogy (2018, p. 141-157). They found that students experienced increased empathy, saw multiple perspectives, and understood similarities among their academic pursuits. However, despite the expectation that Reacting would help retention rates, there was little evidence to support this, and the researchers even cautioned future practitioners of the unsettling effect Reacting can have on some students. Both studies encourage future researchers to not ascribe too much power to one course or component of a course. Many factors can contribute to student retention rates.

Another notable study that examined Reacting conducted by Hagood, Norman, Park, and Williams sought to examine the pedagogy from both sides of the classroom: students and instructors through nation-wide surveys (2018b, p. 159-192). Overall, their respondents believe that Reacting fundamentally changed how they learn and teach. They also found that the more classes a student takes the bigger the impact.

Researchers have also examined the effects Reacting can have on student self-efficacy. As mentioned earlier, the IU South Bend study, delves into the complex relationship of Reacting and self-efficacy (Schult, et al. 2018). The results suggest that there was an overall increase in student efficacy with the largest improvements for
women. It documents a difference in RTTP impact for men and women and concludes, “…Reacting pedagogy might be most powerful for students who find traditional classrooms least empowering (Schult, et al. 2018 p. 75).” But what exactly is self-efficacy and why is it relevant to education today?

Academic Self-Efficacy Theory

Self-efficacy is an individual’s belief in the ability to accomplish tasks. Academic self-efficacy implies that the tasks must relate to academic goals. Many researchers choose to measure self-efficacy through a series of surveys. Although popularly confused, self-efficacy is not the same as self-esteem or self-confidence, which tend to measure an individual’s self-worth. Even the most intellectual of students may struggle to excel in the classroom. As noted by Bandura, “There is a marked difference between possessing knowledge and skills and being able to use them well under taxing conditions.” Bandura’s social cognitive theory argues that a student’s self-efficacy contributes to academic development by determining their aspirations, level of motivation, and even academic accomplishments (1993). Ultimately, there is a positive relationship between self-efficacy and learning (Barry and Finney, 2009). The more a student believes he or she can accomplish a task, the higher the performance.

Bandura suggests that there are two dominant ways a student may construe ability (1993). Some students regard ability as an acquirable skill that can be improved through knowledge. They tend to judge their capabilities based on personal improvement rather

---

6 Vuong, et al. (Citing Bandura)
than comparison with others. This view helps the student advance and adapt to changing academic intensities.

Other students see ability as an inherent capacity. If they perform well, it is because they have the intellectual capacity; if they perform poorly, they lack this intellectual capacity. Moreover, they tend to judge their capabilities based on others’ performances, which can belittle their view of advancement. Understandably, this can lead to a highly frustrated student with little adaptability. Both views may be expressed on the self-efficacy surveys of this project.

Quantitatively, researchers have found the level of self-efficacy to be the single strongest predictor of GPA when examining academic success models (Faust, 2017 and Solberg and Villareal, 1997). Researchers have also found that self-efficacy measures are a useful predictor of continuing in a chosen field of study and even graduation (Vuong, et al. 2010). Ultimately, measuring the impact a pedagogy has on student self-efficacy can reveal much about the effectiveness of the practice.

In summary, the literature view has identified the academically at-risk student as defined by a student with low levels of critical reading, described the active learning practice Reacting to the Past and the game utilized, and explained academic self-efficacy theory, we now move on to a thorough examination of the methods.

METHODS

This project studied two sections of the MTSU History 2010 course, which met for about three hours a week for the history lecture followed by a one hour reading lab. Class 1 met two days a week with a longer class period that lasted about 1 hour and 25
minutes each day. I observed three standard sessions (total: 255 min) and four RTTP sessions (total: 340 min) in class 1. Class 2 met three days a week with a shorter period that lasted 55 minutes each day. For class 2, I observed three standard sessions (total: 165 min) and six RTTP sessions (total: 330 min). In total, the study includes 1,090 minutes (approx. 18 hours) of direct class observations.

In terms of overall class behavior and environment, the classes differed greatly. Class 1 seemed to have more energy and vocalized ideas and opinions. Although more timid with the new material, Class 2 maintained attentiveness and engaged with the material as necessary. The sharp behavioral difference between the classes, led me to include class specific measures of self-efficacy in addition to the overall measures.

This study builds on the Indiana University South Bend study measuring the self-efficacy of college students enrolled in eight sections of their Literary and Intellectual Traditions Reacting courses. Overall, the results of the study found an increase in self-efficacy for the majority of the general tasks and a few Reacting-specific areas had the greatest gains such as making a speech in class and understanding different perspectives. Therefore, I hypothesize similar gains will be made in MTSU’s academically at-risk classrooms.

**Hypothesis 1**: After using Reacting to the Past, students will indicate an overall increase in self-efficacy.

To support this hypothesis, I will evaluate the mean difference and significance value for each survey category. If a majority (seven of the twelve) of the categories see an increase in self-efficacy, then there will be support for this hypothesis.
**Hypothesis 2**: After using Reacting to the Past, students will indicate the highest increase in self-efficacy in the *making a speech* category.

To support this hypothesis, I will evaluate the *making a speech* category’s mean difference and significance value in relation to the other categories.

**Hypothesis 3**: After using Reacting to the Past, students will indicate the second highest increase in self-efficacy in the *understanding different perspectives* category.

In a similar fashion, to support this hypothesis, I will evaluate the *understanding different perspectives* category’s mean difference and significance value in relation to the other categories.

**Surveys**

To test these hypotheses, a pre-survey and post-survey was administered to each class. Surveys were the chosen instrument to measure changes in self-efficacy, primarily because self-efficacy is an individually perceived measure best captured by surveys. The survey was adapted from the IU South Bend study which utilized an adjusted form of Barry and Finney’s (2009) College Self-Efficacy Survey for RTTP. In sum, the adapted survey represents a shortened version of the IU South Bend study (2018) and subsequently, Barry and Finney’s (2009).

The survey asked questions in three primary task areas. First, there were questions that specifically related to *Reacting* tasks such as speeches, identifying main points, and understanding different perspectives. Second, there were questions that evaluated student perception on academic tasks such as researching and writing papers, understanding
readings, and managing time. Third, there were questions that evaluated student perception on social tasks such as making friends, working well in a group, and joining a class discussion. Because some of the tasks were essential to multiple areas, there was some overlap in questions.

The pre-survey measured student self-efficacy levels before the Reacting pedagogy. The pre-survey was followed by the Reacting phase in which the students engaged in the game. Next, a post-survey was administered to determine any change in self-efficacy levels. The post-survey featured a free-response question that the pre-survey did not, so that the students could freely address additional changes.

Uniqueness of Study

While the study is based on the IU South Bend study, it is important to note some key differences. First, the size of participant pool for the IU South Bend study was 134, for the MTSU study it was 25. An added advantage of the smaller participant pool is the opportunity to make personal classroom observations.

Second, the participants of the IU South Bend study were standard students; the MTSU study includes participants that are academically at-risk. The results of the IU South Bend study indicated that the students who benefited the most from the Reacting pedagogy were those who found traditional forms of instruction ineffective, which proves promising for the MTSU academically at-risk community.

Third, the self-efficacy surveys used by the IU South Bend study were adapted to fit the MTSU study. The primary changes included reducing the number of questions and adjusting the wording of the open-ended response question. The primary three-fold layout
of the survey questions focusing on Reacting, academic, and social skills remained the same. Similarly, students were asked to indicate their confidence about the questions on a 1-10 scale.

Fourth, the distribution of surveys occurred at different times. The IU South Bend study gave the pre-survey at the beginning of the semester and the post-survey at the end. The MTSU study gives the pre-survey at the beginning of the Reacting component and the post-survey once Reacting was completed (a period of about 3 weeks). I believe conducting the surveys centered on the Reacting component helps isolate the effects of this pedagogy.

IRB Requirements and Class Observations

The design and purpose of the study was presented to the students in accordance with IRB standards. Students were reminded that participation was completely voluntary and signed a consent form at the beginning of the study. Next, students were given a copy of the pre-survey. In the classes leading up to RTTP, I conducted a series of class observations. I drew maps of the professor and student interaction (See Appendix C). I took notes on perceived engagement. I continued class observations throughout the game and marked differences. Although subjective, these observations proved fruitful for analysis and discussion.
RESULTS

Survey Responses

While 34 out of the 35 eligible students agreed to participate, only 25 completely filled out the surveys. I believe the lack of participation could be attributed to some unforeseen absences. In fact, in class 2 there was a significant number of absences on discussion day: 5 in a class of 15. Possible reasons for the spike in absences could include: the proximity to Spring Break and poor weather.

As tables 4, 5, and 6 illustrate, overall the students experienced an increase in self-efficacy. Twelve out of the twelve tasks saw some degree of significant growth. Therefore, the study provides support for hypothesis 1. The largest gains were made in two Reacting specific tasks: make a speech (+2.52) and reading (+1.44). Therefore, the study supports hypothesis 2, but not hypothesis 3. Even though understanding different perspectives was not the second highest increase, it did see significant growth (+1.12). Other Reacting specific tasks such as identifying main points and supporting points of view also saw significant increases in self-efficacy.

The area with the third-highest gain was tied between two general academic tasks: write papers (+1.40) and understand readings (+1.40). All four of the general academic skills saw increases in self-efficacy. The social tasks saw increases in all three of the areas of making friends, working well with a group, and joining a class discussion. Again, while it ranged from modest to large increases, students indicated a significant increase in self-efficacy in all twelve of the tasks areas.
**Table 4** Combined (Class 1 & 2) Pre-test/post-test comparisons for RTTP tasks

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-test</th>
<th>Post-Test</th>
<th>Mean Difference</th>
<th>t (25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make a speech</td>
<td>5.4</td>
<td>7.92</td>
<td>2.52</td>
<td>1.67E-05</td>
</tr>
<tr>
<td>Understand Different Perspectives</td>
<td>7.4</td>
<td>8.52</td>
<td>1.12</td>
<td>0.229</td>
</tr>
<tr>
<td>Identify main points</td>
<td>7.6</td>
<td>8.52</td>
<td>0.92</td>
<td>0.598</td>
</tr>
<tr>
<td>Reading</td>
<td>6.64</td>
<td>8.08</td>
<td>1.44</td>
<td>0.041</td>
</tr>
<tr>
<td>Support POV</td>
<td>7.88</td>
<td>8.8</td>
<td>0.92</td>
<td>0.334</td>
</tr>
</tbody>
</table>

*Note: n = 25, *p <0.05

**Table 5** Combined (Class 1 & 2) Pre-test/post-test comparisons for academic tasks

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-test</th>
<th>Post-Test</th>
<th>Mean Difference</th>
<th>t (25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research for Paper</td>
<td>6.76</td>
<td>7.84</td>
<td>1.08</td>
<td>0.681</td>
</tr>
<tr>
<td>Write Papers</td>
<td>6.36</td>
<td>7.76</td>
<td>1.4</td>
<td>0.008</td>
</tr>
<tr>
<td>Understand Readings</td>
<td>6.84</td>
<td>8.24</td>
<td>1.4</td>
<td>0.071</td>
</tr>
<tr>
<td>Manage Time</td>
<td>7.36</td>
<td>8.32</td>
<td>0.96</td>
<td>2.250</td>
</tr>
</tbody>
</table>

*Note: n = 25, *p <0.05

**Table 6** Combined (Class 1 and 2) Pre-test/post-test comparisons for social tasks

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-test</th>
<th>Post-Test</th>
<th>Mean Difference</th>
<th>t (25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make Friends</td>
<td>7.28</td>
<td>8.4</td>
<td>1.12</td>
<td>0.076</td>
</tr>
<tr>
<td>Work Well with Group</td>
<td>7.64</td>
<td>8.44</td>
<td>0.8</td>
<td>2.198</td>
</tr>
<tr>
<td>Join Class Discussion</td>
<td>7.68</td>
<td>8.72</td>
<td>1.04</td>
<td>0.033</td>
</tr>
</tbody>
</table>

*Note: n = 25, *p <0.05
Next, I divided the data and conducted class specific analyses. Class 1 saw the
greatest increases in the areas of making a speech (+2.88), researching for a paper
(+1.75), and writing for a paper (+1.75). Ten of the twelve task areas indicated a

| Table 7 Pre-test/post-test comparisons for Class 1 |
|---------------------------------|----------------|----------------|----------------|----------------|
| Question                        | Pre-test |           | Post-Test |           | Mean Difference | t (16) |
|                                 | M       | SD       | M       | SD       |                |       |
| Make a speech                   | 5.44    | 1.79     | 8.31    | 1.40     | 2.88           | 0.001 | * |
| Understand Different Perspectives| 7.69    | 1.49     | 8.63    | 1.15     | 0.94           | 6.440 |   |
| Identify main points            | 7.75    | 1.65     | 8.88    | 1.09     | 1.13           | 1.067 | * |
| Reading                         | 6.56    | 2.25     | 8.25    | 1.39     | 1.69           | 0.403 | * |
| Support POV                     | 7.88    | 1.78     | 8.94    | 1.24     | 1.06           | 1.619 | * |
| Research for Paper              | 6.38    | 2.16     | 8.13    | 1.78     | 1.75           | 0.088 | * |
| Write Papers                    | 6.00    | 2.45     | 7.75    | 1.73     | 1.75           | 0.058 | * |
| Understand Readings             | 6.94    | 2.21     | 8.50    | 1.59     | 1.56           | 0.849 | * |
| Manage Time                     | 7.19    | 2.81     | 8.56    | 1.55     | 1.38           | 2.547 | * |
| Make Friends                    | 7.38    | 2.00     | 8.81    | 1.38     | 1.44           | 0.166 | * |
| Work Well with Group            | 7.94    | 1.73     | 8.44    | 1.93     | 0.50           | 26.114 |   |
| Join Class Discussion           | 8.06    | 1.53     | 9.13    | 1.15     | 1.06           | 0.036 | * |

*Note: n = 16, *p <0.05
significant increase.

Class 2 saw the greatest increase also in making a speech, but at a more modest
amount +1.89 (versus Class 1 of +2.88). The next largest increase was in understanding
different perspectives (+1.44). Only seven of the twelve areas indicated a significant
increase in self-efficacy. The lack of significance could be attributed to the smaller class
size. Class 2 had only 9 out of its 15 students complete both surveys; this resulted in only
a 60% participation rate. Class 1 had 16 of its 20 students sufficiently complete both surveys; this resulted in an 80% participation rate.

Table 8 Pre-test/post-test comparisons for Class 2

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-test</th>
<th>Post-Test</th>
<th>Mean Difference</th>
<th>t (9)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Make a speech</td>
<td>5.33</td>
<td>2.74</td>
<td>7.22</td>
<td>1.86</td>
</tr>
<tr>
<td>Understand Different Perspectives</td>
<td>6.89</td>
<td>1.76</td>
<td>8.33</td>
<td>0.71</td>
</tr>
<tr>
<td>Identify main points</td>
<td>7.33</td>
<td>1.73</td>
<td>7.89</td>
<td>1.27</td>
</tr>
<tr>
<td>Reading</td>
<td>6.78</td>
<td>1.39</td>
<td>7.78</td>
<td>1.39</td>
</tr>
<tr>
<td>Support POV</td>
<td>7.89</td>
<td>1.76</td>
<td>8.56</td>
<td>1.33</td>
</tr>
<tr>
<td>Research for Paper</td>
<td>7.44</td>
<td>2.01</td>
<td>7.33</td>
<td>2.24</td>
</tr>
<tr>
<td>Write Papers</td>
<td>7.00</td>
<td>2.29</td>
<td>7.78</td>
<td>2.28</td>
</tr>
<tr>
<td>Understand Readings</td>
<td>6.67</td>
<td>2.00</td>
<td>7.78</td>
<td>1.56</td>
</tr>
<tr>
<td>Manage Time</td>
<td>7.67</td>
<td>1.80</td>
<td>7.89</td>
<td>1.62</td>
</tr>
<tr>
<td>Make Friends</td>
<td>7.11</td>
<td>2.62</td>
<td>7.67</td>
<td>2.45</td>
</tr>
<tr>
<td>Work Well with Group</td>
<td>7.11</td>
<td>2.15</td>
<td>8.44</td>
<td>1.24</td>
</tr>
<tr>
<td>Join Class Discussion</td>
<td>7.00</td>
<td>2.65</td>
<td>8.00</td>
<td>1.66</td>
</tr>
</tbody>
</table>

Note: $n = 9$, *p < 0.05

Open-ended Responses

The qualitative observations are also useful in examining the effects of Reacting on self-efficacy. The open-ended responses provide more detail into the students’ personal observations of growth in self-efficacy. The responses centered around two areas.

First, the students indicated that they gained the most confidence in making speeches. One student stated, “I have always had a problem with introducing a speech before a crowd. This project really helped me. I wouldn’t say I have fully overcome speaking in front of people, but when I made my speech, and I got an applause, I felt like I really did something.” The student recognized a weak skill that could be improved with experience. The student also indicated that peer feedback such as applause helped to
boost and strengthen beliefs about abilities. Another student found the power of words really impactful, “I believe I gained the most confidence in forming a speech. Particularly a speech to make a certain point or to try and get people to think a certain way or vote on a certain thing.” For this student, speaking while participating in Reacting was not just another assignment, it was an opportunity to take a stand for something important.

The second area that most students chose to discuss was the peer-to-peer interaction. For many the opportunity to interact with others challenged them to go beyond their comfort zone. One student stated, “Working with other students helped me come out of my comfort zone and learn about different characters in the game.” A different student understood the importance of working with others in the pursuit of something bigger. The student stated, “I believe I gained the most confidence in engaging with classmates in physical class activities. I feel more comfortable working with other people to complete one goal.”

Class Observations

In my observations, I marked the professor to student and student to student interaction. Again, for this project, I was able to complete over 18 hours of direct in-class observations. In the beginning, I observed a few traditional lectures. During these traditional lectures, I mapped the interaction and took side notes (See Appendix C). Once Reacting began, it became difficult to similarly map this interaction; however, I continued to make notes of peer-to-peer interaction, speeches, and interest.

First, I will discuss the speeches. Most students were required to give at least one speech. Despite the newness of the game, the opening speeches were very strong and
highlighted the costs and benefits of each side. As the game continued, some students chose to give their speeches in pairs, particularly within factions. This pairing allowed the students to appear united in cause and reason. It also allayed some fears related to public speaking. During the speeches, there were some side conversations within other factions and noises (“boos and hear-hears” from the crowd) that might have been mildly disrupting. But the speakers continued speaking with boldness.

While there were many strengths demonstrated by the students in communicating through RTTP, there were equally some weaknesses. Sadly, many students chose to read their speeches, never reaching into the higher realms of rhetoric. Equally disheartening was the lack of historical material utilized by the students in discussion. Debates over colonial flashpoints such as the *Stamp Act* and the French and Indian War were never introduced. Despite encouragement by the professor, the students rarely utilized the historical texts written by Paine or Chalmers in their speeches or discussion.

In studying peer-to-peer interaction, I began to notice similar patterns brought about by RTTP in both classes. In order to be successful in the game, students were encouraged to speak and listen to the needs and objectives of the different factions. Frequently during faction meetings, students would spend 1-2 minutes within their own faction strategizing and the rest of the time interacting with other factions. Personal deals (a key element to the game) were formed early. Although there was a little hesitancy in the beginning, the students began to sit with their faction members and rearrange the desks without instruction from the professor.

Again, although, these observations demonstrate strong evidence to support that the students gained experience and thereby confidence in a variety of peer-to-peer
oriented tasks, there is also evidence against this. A primary example was the lack of interaction or discussion among students in between game sessions (particularly right before the start of class). Before the last session of Class 1, I arrived a little early hoping to hear students discussing the elements of the game. Sadly, the students stood silently outside of the class absorbed by the content on their phones (like most typical college classrooms).

DISCUSSION

The major findings of the study suggest that MTSU’s academically at-risk community did experience an increase in self-efficacy through the Reacting pedagogy. This finding supports previous literature and encourages others to consider implementing Reacting pedagogy to achieve an increase in self-efficacy learning outcomes.

The largest increase in self-efficacy across the board was in making a speech. This supports previous literature, particularly the IU South Bend study. It does pose a new question for future researchers for why this occurs. Could it be that the students have had limited practice with public speaking up to this point, and the opportunity to practice helped them feel like they could do it better or more often in the future? Or was it the collaborative atmosphere created by Reacting that encourages students to step out in this area?

While the surveys and short-response answers indicated great strides in this area, the in-class observations encourage us to use caution before attributing too much growth. The students did not branch far from reading off the speech. Very few utilized the
primary documents that were replete with evidence and examples that could strengthen their arguments.

Contrary to hypothesis three, which suggested the second greatest stride would be in understanding different perspectives, the second greatest increase was in reading. This finding could be particular to this group of students. Being already labeled low-ability readers could have made these students perceive and indicate a low score on the pre-survey allowing greater room for growth on the post-survey. Unfortunately, much of the reading occurred outside the classroom, which means very few in-class observations could help identify growth. However, the aforementioned observation that the students utilized the primary documents sparingly could be interpreted as a lack of perceived interest or importance in reading the class materials. For future research, I recommend using an instrument that can more accurately determine the growth of learning for out-of-class activities.

From the beginning, the differences between the classes were evident and sharp. Behaviorally, class 1 adopted a highly vocal and engaged approach to the new material. In contrast, class 2 adopted a quiet and reserved approach to the new material. Despite these differences, the Reacting pedagogy achieved an increase in self-efficacy in the majority of task areas for both classes. Logically, one of the marks of an effective pedagogy is its adaptability to a variety of contexts, and this proves true for Reacting.

In terms of peer-to-peer interaction, the students tended to work well with each other as indicated by the social task section on the surveys and the in-class observations. Interestingly, based on the pre-survey scores, students expressed the greatest confidence in the social area tasks. So, from the beginning, the students generally felt confident in
collaborating and working with their peers. This finding bodes well for student-centered curriculum. In other words, the students have a lot to learn from each other, and as indicated by the surveys and observations, they are eager to do so.

Limitations and Recommendations

My project, while producing findings that could prove beneficial to the academic community, is limited in its size. The sample size of participants was very small with only 25 students completing both surveys fully. Therefore, it is difficult to project these findings as comprehensive for at-risk students nation-wide. Also, factoring in multiple days to retrieve the data may help with unforeseen absences in subsequent studies.

A second limitation for our sample is the fact that although the project emphasized research with the academically at-risk, there are some among the sample pool who did not meet the specified criteria. In fact, while the course highly encouraged the enrollment of high-risk students, it was open to all. A few of the students self-selected themselves to enroll in the HIST 2010 and READ 1010 courses. Although few in number, these students can skew the results and implications of the project.

A third limitation to the project is the timing of the distribution of the surveys. The previous IU South Bend study conducted surveys at the beginning of the semester and at the end of the semester. For my study, I distributed the surveys right before the simulation began and then directly after the simulation ended. I felt that this best isolated the Reacting effect. However, past studies have found that self-efficacy is best measured over long periods of time. Student perceptions tend to change slowly, and this should be factored into the measurement tools.
A fourth limitation to the project is the survey structure. I shortened a survey that consisted of twenty questions down to twelve. Previous research has indicated that survey structure is very important to the success of measuring self-efficacy (Barry and Finney, 2009). Meddling with the survey questions means that my results may not fully represent the psychological states of the students.

Finally, Dr. McIntyre and I made many changes to the Reacting game that may have impacted the outcome. A few of the changes proved beneficial, but other changes did not. While a host of recommendations can be made, I will highlight three that I believe to be the most beneficial for the future use of this pedagogy with at-risk students.

My first recommendation is to factor in more time for the simulation. In fact, it might be more beneficial to increase the Reacting time schedule to the full amount the game designer planned or even more. This increase would allow the students optimal time to digest the material, complete assignments, and get into the rhythm of the game. In the end-of-the-simulation discussions, this increase was also highly encouraged by the students.

Second, I recommend using extreme caution when making changes to the character roles and debate topics. The debates of women’s, slave’s, and landless laborer’s voting rights frequently took the center stage of the discussion. Often the students felt bewildered as to whether or not their character would support these causes. This lack of clarity created many lively and interesting discussions, but also created outcomes that veered off historical accuracy (i.e. slaves gained freedom in both classes in the year 1776, landless laborers were given the right to vote, etc.). While some veering from historical accuracy is allowed within the Reacting pedagogy, certain constraints must be made.
Helping the students more clearly understand the immense opposition to these causes during the time period is imperative for the future.

Finally, I believe more can be done to encourage the students to engage with the primary documents. Some suggestions include introducing the material and assessing the students through a quiz or test; directing the students to complete the smaller practice assignments such as a Venn diagram contrasting Paine’s and Chalmer’s arguments; or emphasizing the use of primary documents on the speech grading rubric.

While some of these recommendations address mistakes that should have been blindingly clear in the beginning, we must remember that learning and teaching is progressive. Fortunately, these mistakes did not detrimentally hinder the functionality of the project. The students continued to participate and gave their best effort throughout the project. This fact provides even more encouragement to the adaptability of the pedagogy. Instructors should continue to make adjustments to any pedagogy, especially as new students and methods emerge. We learn from the mistakes, make adjustments, and push forward.

Future Research

Much of educational research focuses on the standard student, even Reacting research until recently has primarily focused on the impact for traditional classrooms. However, I argue that the academically at-risk communities in universities and colleges around the country today are ripe for more research. As higher education begins to focus more on degree completion, rather than simply high enrollment numbers, this community should increasingly gain attention in the spotlight. The diversity of these students
uniquely tests the durability and functionality of educational practices. I suggest additional studies that have an emphasis in both academically at-risk communities and Reacting be conducted. These studies can help identify the unique differences of these students and the way that they learn.

One of the best recommendations for future research I can offer is to conduct a similar study with a larger sample size. Collaboration among universities and colleges would be very beneficial and the implications far-reaching.

One of the more surprising findings of this study was the sharp differences in the classes and the environments they created. An interesting study could be to examine the similarities and differences among classes and their outcomes to determine common patterns and warning signs for this pedagogy.

Additional research in this field can be done with different adjustments to the game we used or a different game entirely. Do some adjustments (particularly the ones I recommended above) help the students learn? What degree should these adjustments be made, if any? Do some Reacting games work better than others? What games do these students prefer or learn from the most? One could also examine, the use of this pedagogy in relation to other educational practices these students have been exposed to such as concept-mapping, reading management, etc.

Finally, I suggest more longitudinal studies be done to examine the full and long-term impact of Reacting for these students. Do these students seek out additional Reacting classes? Do these students come back for the next semester? Do these students gain a greater interest in history, perhaps even change their major? Do these students
complete their degree program? How quickly do these students find jobs in the future? How do these students remember and utilize the lessons they learned from Reacting?

CONCLUSION

This project examined the impact of Reacting pedagogy on the self-efficacy of academically at-risk students. The study included a series of quantitative and qualitative measures to determine growth including surveys, free-responses, and in-class observations. The findings suggest that this pedagogy can be a useful practice to increase self-efficacy among these students. More research must be done to understand the effects of this pedagogy more fully including conducting studies at multiple universities, over-time, and with different Reacting games. As the field continues to research best practices for the academically at-risk, this study finds that Reacting provides many opportunities to advance student confidence and learning.
REFERENCES

http://www.act.org/content/dam/act/unsecured/documents/2016-CCCR-
InfoGraphic.pdf


Barry, C. L., & Finney, S. J. (2009). Can We Feel Confident in How We Measure
College Confidence? A Psychometric Investigation of the College Self-Efficacy
Inventory. *Measurement and Evaluation in Counseling and Development, 42* (3),
197-222. doi:10.1177/0748175609344095

Reacting? A Follow-Up Study of Past RTTP Participants at a Public Regional
University. In C. E. Watson & T. C. Hagood (Eds.), *Playing to Learn with
Reacting to the Past: Research on High Impact, Active Learning Practices* (pp.


LIST OF APPENDICES

APPENDIX A: IRB APPROVAL ................................................................. 43
APPENDIX B: SURVEY INSTRUMENTS .................................................... 44
APPENDIX C: CLASS OBSERVATION MAPS ........................................... 48
APPENDIX A: IRB APPROVAL

IRB
INSTITUTIONAL REVIEW BOARD
Office of Research Compliance,
010A Sam Ingram Building,
2269 Middle Tennessee Blvd
Murfreesboro, TN 37129

IRBN007 – EXEMPTION DETERMINATION NOTICE

Monday, February 05, 2018

Investigator(s): Tiffany Miller; Dawn McCormack; Becky McIntyre
Investigator(s) Email(s): tm4p@mtmail.mtsu.edu; dawn.mccormack@mtsu.edu;
becky.mcintyre@mtsu.edu
Department: Liberal Arts
Study Title: A Battle for the Mind: The Use of Reacting to the Past in the
Academically At-risk Classroom
Protocol ID: 18-1152

Dear Investigator(s),

The above identified research proposal has been reviewed by the MTSU Institutional Review
Board (IRB) through the EXEMPT review mechanism under 45 CFR 46.101(b)(2) within the
research category (2) Educational Tests. A summary of the IRB action and other particulars in
regard to this protocol application is tabulated as shown below:

<table>
<thead>
<tr>
<th>IRB Action</th>
<th>EXEMPT from further IRB review***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of expiration</td>
<td>NOT APPLICABLE</td>
</tr>
<tr>
<td>Participant Size</td>
<td>30 [Thirty]</td>
</tr>
<tr>
<td>Participant Pool</td>
<td>Adults 18+</td>
</tr>
</tbody>
</table>
| Mandatory Restrictions | 1. Participants must be age 18+
                         | 2. Informed consent must be obtained
                         | 3. Identifiable information may not be collected |
| Additional Restrictions | None at this time               |
| Comments          | None at this time                |
| Amendments        | Date | Post-Approval Amendments
|                   | None at this time                |

***This exemption determination only allows above defined protocol from further IRB review such
as continuing review. However, the following post-approval requirements still apply:

- Addition/removal of subject population should not be implemented without IRB approval
- Change in investigators must be notified and approved
- Modifications to procedures must be clearly articulated in an addendum request and the
  proposed changes must not be incorporated without an approval
- Be advised that the proposed change must comply within the requirements for exemption
- Changes to the research location must be approved – appropriate permission letter(s)
  from external institutions must accompany the addendum request form

IRBN007 Version 1.2 Revision Date 03.08.2016
APPENDIX B: SURVEYS

Self-Efficacy RTTP Survey (Pre-test)

**SCALE:**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
</table>

*Not at all confident* | *Extremely Confident*

Indicate your confidence to the following statements:

**RTTP Questions**

1. I feel ________ in making a speech.
   
   1 2 3 4 5 6 7 8 9 10

2. I feel ________ in understanding different perspectives.
   
   1 2 3 4 5 6 7 8 9 10

3. I feel ________ in identifying important points.
   
   1 2 3 4 5 6 7 8 9 10

4. I feel ________ in reading.
   
   1 2 3 4 5 6 7 8 9 10

5. I feel ________ in using evidence to support a point of view.
   
   1 2 3 4 5 6 7 8 9 10

**Academic Questions:**

1. I feel ________ in researching for a paper.
   
   1 2 3 4 5 6 7 8 9 10

2. I feel ________ in writing papers.
   
   1 2 3 4 5 6 7 8 9 10

3. I feel ________ in understanding readings.
   
   1 2 3 4 5 6 7 8 9 10

4. I feel ________ in managing time.
   
   1 2 3 4 5 6 7 8 9 10
Social Questions

1. I feel ________ in making friends.
   1 2 3 4 5 6 7 8 9 10

2. I feel ________ in working well in a group.
   1 2 3 4 5 6 7 8 9 10

3. I feel ________ in joining a class discussion.
   1 2 3 4 5 6 7 8 9 10

Adapted from “Strengthening Students’ Self-Efficacy Through Reacting to the Past.” By Carolyn A. Schult, April Lidinsky, Lisa Fetheringill Zwicker, and Elizabeth Dunn
Self-Efficacy RTTP Survey (Post-test)

**SCALE:**

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>

*Not at all confident*  *Extremely Confident*

Indicate your confidence to the following statements:

**RTTP Questions**

6. I feel ________ in making a speech.
   1 2 3 4 5 6 7 8 9 10

7. I feel ________ in understanding different perspectives.
   1 2 3 4 5 6 7 8 9 10

8. I feel ________ in identifying important points.
   1 2 3 4 5 6 7 8 9 10

9. I feel ________ in reading.
   1 2 3 4 5 6 7 8 9 10

10. I feel ________ in using evidence to support a point of view.
    1 2 3 4 5 6 7 8 9 10

**Academic Questions:**

5. I feel ________ in researching for a paper.
   1 2 3 4 5 6 7 8 9 10

6. I feel ________ in writing papers.
   1 2 3 4 5 6 7 8 9 10

7. I feel ________ in understanding readings.
   1 2 3 4 5 6 7 8 9 10

8. I feel ________ in managing time.
   1 2 3 4 5 6 7 8 9 10
Social Questions

4. I feel __________ in making friends.
   1 2 3 4 5 6 7 8 9 10

5. I feel __________ in working well in a group.
   1 2 3 4 5 6 7 8 9 10

6. I feel __________ in joining a class discussion.
   1 2 3 4 5 6 7 8 9 10

Open-ended Response:

In what area or skill do you believe you have gained the most confidence through your experience with Reacting to the Past?

Adapted from “Strengthening Students’ Self-Efficacy Through Reacting to the Past.” By Carolyn A. Schult, April Lidinsky, Lisa Fetheringill Zwicker, and Elizabeth Dunn
APPENDIX C: CLASS OBSERVATION MAPS

Summary

Womem 5 - 33% of class, Response Rate 10 - 84%
Men 10 - 57% of class, Response Rate 25

# of class instances where answer was provided or answered a question.

# of class instances where answer was not provided or answered a question.

Student 1: 75% of responses
Student 2: 25% of responses

Professor

Wennesday, February 7, 2018

KEY:
- Green: Answered
- Yellow: Not Answered
- Blue: Direction of flow