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Reacting to the Past: A High Impact Practice as a Tool for Retaining Honors Students

Hannah B. McClelland

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REACTING TO THE PAST: A HIGH IMPACT PRACTICE AS A TOOL FOR

RETAINING HONORS STUDENTS

by

Hannah McClelland

A thesis submitted in partial fulfillment
of the requirements for the
University Honors Program

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Department of Psychology
The University of South Dakota
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The members of the Honors Thesis Committee appointed
to examine the thesis of Hannah McClelland
find it satisfactory and recommend that it be accepted.

Doug Peterson, Ph.D.
Psychology Department Chair
Director of the Committee

Scott Breuninger, Ph.D.
Honors Program Director

Steve Ward. M.A
Academic and Career Planning Center Director

ABSTRACT

Reacting To The Past: A High Impact Practice As A Tool For Retaining Honors Students

Hannah McClelland

Director: Douglas Peterson, Ph.D.

Reacting to the Past (RTTP) is a roleplaying pedagogy highly regarded as an innovative high-impact practice. RTTP consists of elaborate historical games informed by major texts in the history of ideas and takes place during major historical turning points. The effectiveness of this methodology, in terms of its impact on students' intention to stay in honors, was examined using a nonequivalent groups design composed of first semester students in the Honors Program at the University of South Dakota. Students that took a RTTP course and students that took a different honors course their first semester were given the same survey at two points: after midterm but before the simulation started, and during the last week of class, after the simulation took place. Analysis of results revealed that students in the RTTP course reported a higher intention to stay in the honors program than those students who did not take RTTP. Additionally, the relationships among several measures of engagement were explored and related to student intention to stay in the honors program.

Keywords: Reacting to the Past, High Impact Practices, honors program, student engagement, college retention, honors students

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CHAPTER ONE

Introduction

Background

Understanding and being able to analyze various factors that influence college retention rates are imperative in the world of academia. The purpose of a university is to improve the lives of those in the community by providing a full, meaningful education and creating better citizens of the world. In his 2008 work, George Kuh, founding director of the National Survey of Student Engagement (NSSE), described an excellent education as including "the development of intellectual powers and capacities; ethical and civic preparation; personal growth and self-direction" (p. 2). The process of education and the learning that takes place in higher education brings students on a journey on which they can discover their passions and learn how to utilize their skills to positively impact the lives of others. When college students are not retained, it is harder to help them reach their goals, discover their potential, and enter into a world of opportunity.

In order for a university to retain students, it is necessary to recognize, understand, and implement the factors that predict higher retention rates. Furthermore, it is important to keep in mind the ultimate goal of retention: "[e]ducation, the social and intellectual development of the individuals, rather than just their continued presence on campus, should be the goal of retention efforts" (Tinto, 1993, p. 145). In order to foster a community committed to the growth of continued education, universities can study various support systems and work to establish them into the culture of the campus.

Honors Program and High Impact Practices

Honors programs, such as the one at the University of South Dakota (USD), are exactly the kind of support system that encourages both academic and social growth. Vincent Tinto spoke of honors students and their need for support in his 1993 book, *Leaving College:*

…anecdotal evidence suggests that [honors students], as much as 'nontraditional' students, have special needs which go unattended in most college students. Though those needs may be somewhat different, as these students need greater intellectual stimulation than do most other students, the forces underlying their departure are essentially the same. They may experience the same sense of marginality to the main currents of social and intellectual life of an institution and experience the same degree of isolation as might other nontypical students (p. 189).

In order to encourage such intellectual stimulation and foster a social community, the USD Honors Program employs many High Impact Practices (HIPs).

HIPs, a term first coined by the Association of American Colleges and Universities in George Kuh's 2008 publication *High-Impact Education Practices*, are "purposeful learning experiences that have been shown to deepen student learning and engagement, raise levels of performance, retention and success for students, and that invoke intellectually engaging and effective education practices" (Kuh, qtd. in Lidinsky, 2014, p. 209). Kuh laid out the essential learning outcomes, or goals, of higher education and examined the effectiveness of several educational practices; he then connected each practice to one or multiple learning outcomes, thereby constructing "purposeful

pathways" (p. 7) to meaningful student achievement. The ten practices most consistently characterized as high impact are the following: first-year seminars and experiences; common intellectual experiences; learning communities; writing-intensive courses; collaborative assignments and projects; undergraduate research; diversity/global learning; service learning and community based learning; internships; and capstone courses and projects (Kezae, 2017; Kilgo, 2015; Kuh, 2008; Lidinsky, 2014).

The USD Honors Program incorporates most, if not all, of these HIPs. Those HIPs that do not come directly from the honors program, such as undergraduate research, are more broadly available at USD and are often encouraged by honors faculty. Several times a year, the honors program hosts presentations on how to get involved in research, and a large portion of honors theses – senior capstones required of all honors students – are research manuscripts. Honors theses also require close interactions with one or several faculty members, which "can positively influence the cognitive growth, development, and persistence of college students" (NSSE, *Engagement Indicators*).

In addition to honors theses, another key element of the USD Honors Program is the Honors Living-Learning Community, which gives first year honors students the opportunity to live on the same floor in student dormitories. This program has just recently expanded to include an honors wing in the student housing facility more commonly housing upperclassmen, giving students the opportunity to continue making connections throughout their undergraduate experience. Additionally, students partake in the honors core curriculum, which is structured for students to take, on average, one honors class per semester. This way, students have a group of peers with whom they take a class each semester, while also experiencing classes outside of the honors program.

This design allows students the opportunity to form a tight knit group of peers while also building relationships and making connections outside of the honors program.

One particular class included in the honors core curriculum at USD is Honors Ideas in History. All honors students take this class their first year as a way to engage in common intellectual experiences, which is in itself a HIP. The class, composed of several sections, employs common lectures throughout the semester, in which all sections come together for a class period. These common lectures encourage discussion between students outside of their class, as peers in separate sections have the opportunity come together. Throughout the last few weeks of the course, students engage in a simulation called Reacting to the Past (RTTP). RTTP is considered a High Impact Practice because it highlights each of the five criteria Kuh outlined as components of HIPs: "they demand considerable time and effort, facilitate learning outside of the classroom, require meaningful interactions with faculty and students, encourage collaboration with diverse others, and provide frequent and substantive feedback" (NSSE, *High Impact Practices)*. Through the analysis of RTTP and its status as a High Impact Practice, we can gain a deeper understanding of the effectiveness of this pedagogy as a retention strategy in the USD Honors Program.

Reacting to the Past

Reacting to the Past is an innovative pedagogy pioneered by Mark C. Carnes, a Professor of History at Barnard College. Reacting courses are elaborate historical games informed by major texts in the history of ideas. Students are assigned roles, which include descriptions and goals of their characters. In his award winning article, "Inciting Speech," Carnes discussed the value of this experience: "[Students] learn big ideas by discussing

and debating them, and they learn about the past by reliving it" (2005, p. 9). While role-playing in the history classroom is not a completely new idea within itself, RTTP is unique in that it places students in significant historical turning points. Their experience builds up to that key point, focusing on the origins of dispute and rebellion, and culminates in a final vote that may change the course of history.

The idea for RTTP was sparked after a disappointing yet typical discussion of Plato's *Republic.* According to Carnes, the students' "occasional remarks showed intelligence and sophistication, yet every gesture and tone of voice conveyed boredom" (2004). The phenomenon of students feeling bored frustrates more than just faculty: Suzanne Fiegelson, an Amherst alumni, wrote that "students stop talking in class about midway through freshman year" (qtd. in Carnes, 2005, p. 9). This phenomenon is not unique to Amherst, rather, it exists in colleges and universities nationwide. Carnes, not understanding why students are keen to discuss certain topics but display such disengagement in classes, decided to talk to some of his students one-on-one the following semester in order to gain insight into the issue.

When talking with students, Carnes soon realized that specific themes continued to appear that interfered with student engagement and participation in class. To begin with, students seemed to feel anxious when discussing ideas with a professor who has spent many years studying the subject. This anxiety did not stem only from fear of speaking in front of professors, but also from fear of negative peer feedback. Students seemed to be afraid of saying something "wrong" so they would simply not speak up at all. Additionally, the more the students were "pushed…to the brink of otherness, the more they clung to familiarity or simply clammed up" (Carnes, 2004). In other words, it

was difficult for students to see things from perspectives that were dissimilar to their own. Finally, students seemed to view their classic texts as too abstract to relate to, and also had trouble making connections to modern day life.

In order to resolve these issues, Carnes worked over the summer of 1996 to create RTTP and implemented three games into his classroom the next fall. At first, students were hesitant, but as the semester progressed, Carnes said that he moved "farther from the table each week," "students effortlessly filled the space [he] had dominated," and "[he] hardly spoke in a class that had become the students' world…" (2014, p. 34). In addition to participation, students also went above and beyond with their assignments, writing papers that "were informed by texts [he] had not assigned" (Carnes, 2014, p. 34). Carnes proposed the program to the Judith Shapiro, President of Barnard College, who enthusiastically accepted the idea. Shapiro noted that "[t]rying on a variety of roles not only teaches students about others, but it also causes them to reflect more deeply on who they are themselves" (Carnes, 2005, pp. 9 - 10). This deep reflection would allow students to examine their thoughts more closely and relate them to important historical perspectives.

While designing this methodology, Carnes wanted to focus on some of the recurring issues of disengagement he discovered when speaking with previous students. To solve the problem of the students' fear of speaking with a professor of superior intellect, Carnes designed RTTP to work as a flipped classroom in which the instructor acts as more of a mentor, guiding rather than leading discussion. In their 2015 article detailing how the RTTP pedagogy impacts engagement, Russell Olwell and Azibo Stevens described how Carnes' methodology goes even beyond a typical flipped

classroom. They emphasized that "a majority of class time is driven and directed by students, working in their factions – speaking, plotting, writing, conferring, and negotiating with their fellow students" (p. 563). Therefore, the class gives students agency over what they are doing, and they feel more inclined to participate. This fits with various research that "has demonstrated that programs which involve students in their learning process increases retention rates" (Dale & Zych, 1996). Olwell and Stevens also addressed Carnes' second issue – fear of negative peer feedback – by discussing students' experiences with the games. One student reported the following:

> Participation was extremely easy because the atmosphere was so relaxed. Speaking up you did not feel like you were being judged. In other classes, kids do not ask a question because it might be a dumb question. Since you are playing another person, you feel freer to ask a question. (2015, p. 564)

Therefore, when taking on the role of another person, students are not as hesitant to ask questions.

In addition, taking on the persona of a historical character allows one to see from different perspectives. Professor April Lidinsky gave an example of this phenomenon in terms of gender roles: "male students who play female characters are often frustrated by having to wait for others to take the lead in discussion, and female students or students from underrepresented populations have mentioned more than once that playing a boisterous male character leads them to speak over others, and not to listen well" (2014, p. 210). Furthermore, when students are pushed, as Carnes said, "to the brink of otherness," they not only begin to understand diverse perspectives, but they also begin to embrace and defend that new perspective as if it were their own rather than someone

else's. Professor Mulligan discussed this after experiencing RTTP in his Latin classroom: "Liberated by the act of adopting a persona, modern students are able to delve into debates, arguing persuasively and assertively about topics or texts that they might otherwise feel are too alien, complicated, or risky" (2014, p. 120). Taking on the identity of a historical character helps students understand diverse perspectives and persuade others to see their side of an issue.

Finally, students understand the relevance of classic texts when they are motivated to use them to defend their character's views and ideologies. One past student of RTTP at Barnard College, Amanda Houle, wrote that "many of the texts rest as close to my heart as the personal secrets disclosed by my teammates and newfound friends, the lessons within them as applicable to my life as the wisdom of my mentors" (2006, p. 53). Without the drive to defend her character's perspective, she may not have found the texts to be relevant to her personal life. The relevance of classical texts also becomes more clear to students when they are able to make connections to material learned in other classes. Olwell and Stevens discussed how RTTP facilitates these connections: "[s]tudents who could make a connection between what happened in the Reacting class and their other courses in the first semester of college reported that these experiences reinforced each other, and strengthened performance in both courses." For example, "several students taking an introductory philosophy class suggested that the two classes be linked, as the Athens game tied to the ancient Greek unit in philosophy" (2015, p. 567). Other classes that commonly relate to Reacting simulations include women and gender studies, political science, religious studies, and even fine arts.

After implementing RTTP into his classroom, Carnes' pedagogy expanded into a highly regarded program, used at hundreds of colleges and universities across the nation. In fact, by 2013, "faculty at over 350 colleges and universities were teaching with dozens of Reacting games" (Carnes, 2014, p. 35). The Reacting Consortium has continued to progress: there are now over 200 games in various stages of development (Barnard College, *Games Under Review)*, and over 400 colleges and universities utilize the various simulations (Barnard College, *The Dana Johnson Gorlin Fellowship*). RTTP's impact on higher education was recognized when Barnard College received the 2004 Hesburgh Award for excellence in undergraduate teaching (Barnard College, *Awards and Special Initiatives*). It has also been extensively discussed in various educational journals, widely regarded for its pedagogical innovation, and been highly successful as a retention strategy.

RTTP's success as a retention strategy is due in part to its ability to create an environment filled with different perspectives and cultural ideologies, as well as developing high student engagement levels by making connections to other classes. At Eastern Michigan University, for example, a study by Olwell and Stevens (2015) found that students who participated in Reacting to the Past their first semester of college had a retention rate of 77.31%, while those in a comparable cohort who did not take RTTP had a retention rate of 67.49%, and the overall retention rate at the university was 73.2% (pp. 569-570). This data illustrated that "RTTP students outperformed both their matched peers and the overall University population for retention" (p. 570). Improved retention rates are just one of the advantages of RTTP: the pedagogy also encourages intellectual and social growth – the hallmarks of higher education.

Research Questions

      The primary purpose of this study was to examine the relationship between RTTP and students' intention to stay in the USD Honors Program. Additionally, this study attempted to determine the relationships among several measures that are generally thought to improve after RTTP, such as in-class participation, metacognition, and ability to understand diverse perspectives.

CHAPTER TWO

Materials and Methods

Participants

Sixty (60) first year undergraduate students enrolled in the Honors Program at the University of South Dakota. Of the 60 participants, 23 were enrolled in Honors English while 37 were enrolled in Honors Ideas in History. There was one student missing from Honors Ideas in History during the second round of surveys.

Procedure

Participants were divided in two groups – the different groups being the independent variable. Group 1 consisted of first year students enrolled in Honors English their first semester, while Group 2 consisted of first year students enrolled in Honors Ideas in History their first semester. Each group took a 12 question survey around week 10, which was right before students in Group 2 started Reacting to the Past, and again during the last week of class. Students in Group 2 had 5 additional questions on their second survey that asked questions specific to their Reacting to the Past experience.

Materials

Items used included: a 12 question survey and a 17 question survey. The 17 question survey included the original 12 questions and an additional 5 questions. Surveys include questions regarding retention measures, such as their confidence that they will graduate and their ability to understand diverse perspectives.

Survey Rationale

Retention Intention: Q1, 2, 3

Retention Intention is defined here as questions 1, 2, and 3, which asked about the likelihood that a student will be enrolled at USD next semester, enrolled in honors next semester, and enrolled in honors through graduation, respectively. Question 1 functioned as a control, in that those who are leaving USD are also going to be leaving the honors program. As this was just a study of retention within the honors program, low scores on question 1 were filtered out. From here on out, "Retention Intention" will refer to the combined scores from questions 2 and 3 only.

Participation in Extracurriculars: Q4

Question 4 was based on Vincent Tinto's theory of social involvement. In his 1993 book, *Leaving College,* Tinto discussed how social isolation or lack of integration can lead to higher rates of attrition. He explicitly stated the effects of social integration on retention in a 2006 report: "The more students are academically and socially involved, the more likely they are to persist and graduate" (p. 7). Social involvement, such as participation in an extracurricular activity, has historically been studied in relation to retention.

Concern about Thesis and Seminars: Q5, 6

Question 5 asked about the honors thesis and attempted to gauge how the concern one feels about the eventual writing of their thesis may impact intention to stay in honors. It may be that many first year students' concern about their thesis may cause them to consider leaving the honors program. Similar to question 5, question 6 was designed to

measure whether student concern about the unique aspects of the USD Honors Program, such as upper level seminar courses, affect retention intention.

Discussion of Ideas Outside of Class Time: Q7

Question 7 was taken directly from the NSSE deep/integrative learning scale (Kuh, 2008) and is something that past students of Reacting to the Past have discussed as increasing after taking the class (Carnes, 2014). An increase in outside discussion may reflect decreased anxiety about negative peer feedback, which is one of the goals of Reacting to the Past. Again, this positive effect of RTTP may occur due to decreasing social isolation and how social involvement leads to higher retention rates.

Diverse Perspectives: Q8, 11

Questions 8 and 11, which asked about confidence in one's ability to persuade somebody to see their side of an issue and confidence in understanding diverse perspectives, were developed together. Understanding diverse perspectives was one of the main hurdles that Carnes noticed before creating RTTP. Students had a hard time seeing things from a perspective dissimilar to their own. Taking on the role of certain characters pushes students "to the brink of otherness" and has them defend ideas with which they may not agree (Carnes, 2004). This process causes students to examine ideas from perspectives different from their own – an essential aspect of education. This study aimed to see this in action at USD. RTTP also includes giving speeches to persuade others to vote in the speaker's favor, hence the aspect of persuasion in question 8.

Discussing Difficult or Controversial Ideas: Q9

Mark Carnes' 2005 article "Inciting Speech" inspired question 9, regarding student comfort with discussing difficult ideas. In his article, Carnes discussed a problem

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that arises when students become too comfortable in homogenous peer groups: "[w]ithin companionable peer groups there is plenty of talk but little conflict that generates thought or the intellectual friction that stimulates learning" (p. 9). Discussing ideas and learning from others' perspectives is crucial to an enriched academic environment, however, "most students said that they would not discuss sensitive issues with someone with whom they strongly disagreed" (Carnes, 2005, p.9). RTTP generates serious discussion by placing students at turning points in history, and therefore encourages this type of intellectual stimulation.

Metacognition: Q10

Metacognition, or thinking about where one's own thoughts come from, was studied in relation to retention in 2019 by Ward and Butler. Their findings "suggest that metacognitive awareness training could potentially serve as a mediator to help improve college freshmen academic performance and retention in higher education settings" (p. 125). Student self-reports also indicate that RTTP stimulates metacognition. A student in Olwell and Stevens' 2015 study reported "I had to double check my thoughts – are they my thoughts or my character thoughts?" (p. 568). NSSE also places "examining the strengths and weaknesses of your own views" on the deep/integrative learning scale (Kuh, 2008, p. 23). These factors made it clear that metacognition is an interesting topic to further study in relation to retention, and particularly in combination with RTTP.

Participation: Q12

In his 2014 book, *Minds on Fire*, Carnes extensively discussed the increased participation from students in his class and other RTTP classes. The rationale behind

question 12 was not only to see if participation increased with RTTP but also to discover if students that did not participate had decreased effects on other measures.

Simulation Specific Questions: Q13, 14, 15, 16, 17

Questions 13 and 14 both came from student responses from an informal interview given before creating the survey used in this study: students responded that character limitations and lack of historical context were two factors that caused them to feel less engaged than others.

Question 15 came from Olwell and Stevens' 2015 study in which they discuss connections between classes: "[s]tudents who could make a connection between what happened in the Reacting class and their other courses in the first semester of college reported that these experiences reinforced each other, and strengthened performance in both courses" (p. 567). Connections between material learned in several classes can also cause students to understand the relevance of the concepts they are learning. Questions 16 and 17, asking if students enjoyed and would recommend the simulation, were included to see whether student perception of the class would lead to higher retention intention.

CHAPTER THREE

Results

Data Handling

The data was measured using a 7 point Likert scale, collected using paper and pencil surveys, transferred onto google sheets, and analyzed using JMOVI, which is an R system (The jamovi project). Because the purpose of this project was to measure student intention to stay in the honors program specifically, participants who responded 1, 2, or 3 to question 1, asking about their intention to stay at USD, were excluded. Student attrition, for the purposes of this study, only involve those students who leave the Honors Program while continuing their studies at USD.

Honors Retention Intention

Retention Intention, which refers to the combined scores for questions 2 and 3, show the likelihood that a student will stay in the honors program through the semester and through graduation, respectively. To examine differences between classes as well as between Time 1 and Time 2, we used ANOVA to test their retention intention scores. Analysis revealed a statistically significant difference between the classes, $F(1,110)=4.075$, $p=0.46$. As shown in Figure 1, the RTTP group reported higher rates of retention intention than the non-RTTP group.

Figure 1
Retention Intention Between Classes

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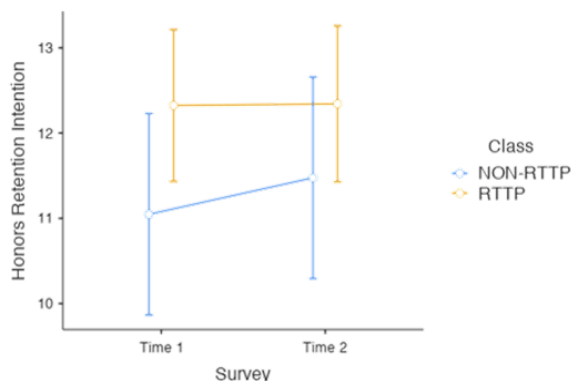
Discussing Ideas Outside of Class Time

When low responses of 1 and 2 were filtered out from Metacognition(Q10), Q7 produced a statistically significant interaction between class and time, $F_{(1,88)}=5.4013$, p=0.022. This filter was used because results from Time 1 revealed a correlation between the two measures (r=.042), showing that students with lower metacognition scores were already less likely to discuss class ideas with others. The resulting interaction, seen in Figure 2, illustrates that RTTP students improved on reports of Outside Discussion(Q7) between Time 1 and Time 2, while student scores in the Non-RTTP group decreased.

Figure 2
Discussing Ideas Outside of Class, Interaction Between Class and Time
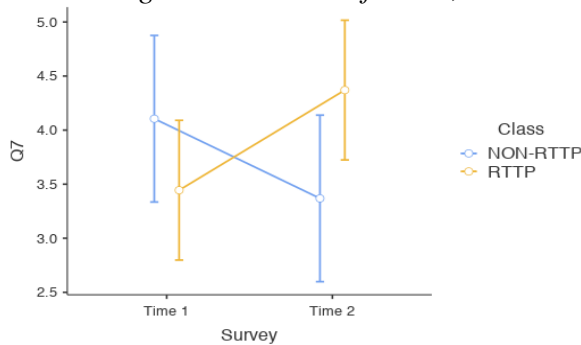
Metacognition

As shown in Figure 3, students in the Non-RTTP group, Honors English, scored higher on scores of metacognition than students in the RTTP group, $F_{(1,110)}=4.811$, p=0.030. Although not significant, students in both groups improved on scores of metacognition between Time 1 and Time 2.

Figure 3
Metacognition Between Classes

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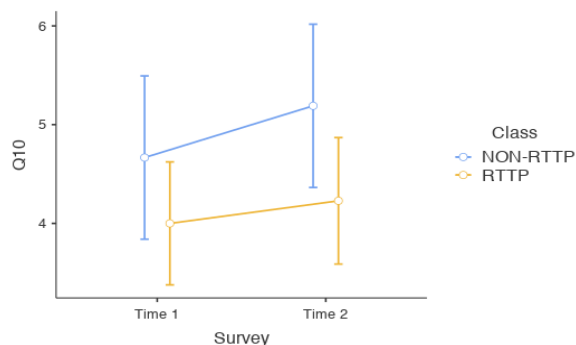
Engagement Confidence and Behavior

A composite measure called Engagement Confidence was calculated by adding scores from questions 8, 9, and 11, which ask about the student's level of confidence in persuading someone unlike themselves to see their side of an issue, how comfortable they are discussing difficult or controversial ideas with other students, and their level of confidence in their ability to understand diverse perspectives. Similarly, a composite measure called Engagement Behavior was calculated by adding scores for questions 7, 10, and 12, which ask about how often students discuss ideas from class with other students outside of class time, how often students engage in metacognition, and how often students participate in class. These two composite measures were tested using ANOVA and there was no statistically significant effect of class, time, or an interaction between the two for either measure. However, the RTTP group did slightly improve on reported measures of Engagement Behavior, as shown in Figure 4, although it was not significant.

Figure 4
Engagement Behavior Between Classes
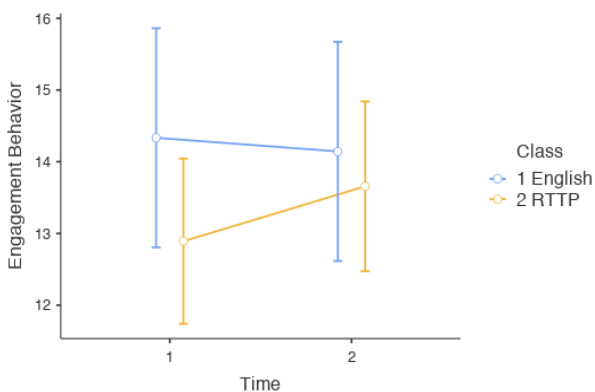
Figure 5

Engagement Confidence Between Classes
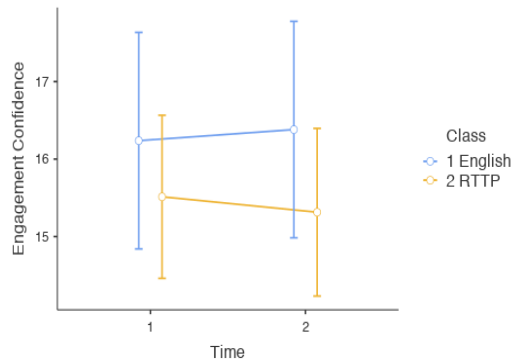
Relationships Between Survey Questions

> **Relationships with USD Retention(Q1).** It is not surprising to find that USD Retention(Q1) was highly correlated with Honors Retention-Semester(Q2; r=0.328) and Honors Retention(Q3; r=0.210). USD Retention(Q1) also had a correlation with Persuasion(Q8; r=0.245), meaning that those who were more likely to stay at USD were more confident in their ability to persuade somebody unlike themselves to see their side of an issue.

> It is important to note that there were no correlations with USD Retention(Q1) for the RTTP group in Time 2 or the non-RTTP group overall. This is because all student responses – after filtering out low responses of 1, 2, or 3 – were 7. When all responses are the same, correlations cannot appear. Q

Table 1

Pearson's r Correlation Matrix for Combined Results: USD Retention(Q1)

Question	1	2	3	8
1. Retention at USD	-			
2. Honors Retention-Sem	0.328	-		
3. Honors Retention-Grad	0.210	0.682	-	
8. Persuasion	0.245	0.044	0.029	-

Relationships with Honors Retention-Semester (Q2). In addition to the relationship with USD Retention(Q1), analysis of the combined survey results showed a correlation between Honors Retention-Semester(Q2) and Honors Retention(Q3; r=0.682), which was expected. Further analysis of results by class showed that Honors Retention-Semester(Q2) was also correlated with Extracurriculars(Q4; r=0.255) and Participation(Q12; r=0.296) in the RTTP group. Therefore, the more likely RTTP students were to report participation in class and participation in extracurriculars, the higher their intention was to stay in the honors program during the next semester.

Additionally, the correlation with Participation(Q12) was present during Time 1(r=0.348) but not during Time 2, while the correlation with Extracurriculars(Q4) was not present during Time 1 and only appeared during Time 2 (r=0.539).

Table 2
Pearson's r Correlation Matrix for Combined Results: Honors Retention-Semester(Q2)

Question	1	2	3
1. Retention at USD	-		
2. Honors Retention-Sem	0.328	-	
3. Honors Retention-Grad	0.210	0.682	-

Table 3
Pearson's r Correlation Matrix for Results by Class: Honors Retention-Semester(Q2)

Question	Class	1	2	3	4	12
1. Retention at USD	RTTP	-				
	Non-RTTP	-				
2. Honors Retention-Sem	RTTP	0.614	-			
	Non-RTTP	-	-			
3. Honors Retention-Grad	RTTP	0.330	0.578	-		
	Non-RTTP	-	0.756	-		
4. Extracurriculars	RTTP	0.104	0.255	0.189	-	
	Non-RTTP	-	0.028	0.020	-	
12. Participation	RTTP	0.174	0.296	0.311	0.164	-
	Non-RTTP	-	0.017	0.087	0.291	-

Table 4

Pearson's r Correlation Matrix for RTTP Results by Time: Honors Retention-Semester(Q2)

Question	Time	1	2	3	4	12
1. Retention at USD	Time 1	-				
	Time 2	-				
2. Honors Retention-Sem	Time 1	**0.744**	-			
	Time 2	-	-			
3. Honors Retention-Grad	Time 1	**0.513**	**0.577**	-		
	Time 2	-	**0.627**	-		
4. Extracurriculars	Time 1	0.132	0.076	0.068	-	
	Time 2	-	**0.539**	0.308	-	
12. Participation	Time 1	0.254	**0.348**	**0.428**	0.11	-
	Time 2	-	0.228	0.198	0.234	-

Relationships with Retention in Honors Through Graduation(Q3). Honors Retention(Q3), which asks about intention to stay in honors through graduation, was correlated with Outside Discussion(Q7; r=0.206) and Participation(Q12; r=.184) in addition to USD Retention(Q1) and Honors Retention-Semester(Q2) as noted above. Therefore, the more students participated in class and discussed ideas with students outside of class time, the more likely they were to plan on staying in the honors program through graduation.

That being said, the correlation with Outside Discussion(Q7) was only present in the non-RTTP group (r=0.306) and the correlation with Participation(Q12) was only present in the RTTP group (r=0.311). Furthermore, this correlation with Participation(Q12) was only present during Time 1 in the RTTP group.

Whereas the combined scores revealed no correlation between Honors Retention(Q3) and Discuss Difficult Issues(Q9), RTTP alone did have a significant correlation between the two (r=0.320). This correlation was not present during Time 1, but it did appear during Time 2 (r=0.377). The more comfortable RTTP students were

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discussing difficult ideas with other students, the more likely they were to report an

intention to stay in honors through graduation.

Table 5

Pearson's r Correlation Matrix for Combined Results: Honors Retention(Q3)

Question	1	2	3	7	12
1. Retention at USD	-				
2. Honors Retention-Sem	**0.328**	-			
3. Honors Retention-Grad	**0.21**	0.682	-		
7. Outside Discussion	0.086	0.156	**0.206**	-	
12. Participation	0.132	0.115	**0.184**	**0.203**	-

Table 6

Pearson's r Correlation Matrix for Results by Class: Honors Retention(Q3)

Question	Class	1	2	3	7	9	12
1. Retention at USD	RTTP	-					
	Non-RTTP	-					
2. Honors Retention-Sem	RTTP	**0.614**	-				
	Non-RTTP	-	-				
3. Honors Retention-Grad	RTTP	**0.330**	**0.578**	-			
	Non-RTTP	-	**0.756**	-			
7. Outside Discussion	RTTP	0.104	0.100	0.153	-		
	Non-RTTP	-	0.248	**0.306**	-		
9. Discuss Difficult Issues	RTTP	0.053	0.178	**0.320**	0.188	-	
	Non-RTTP	-	-0.078	-0.265	-0.087	-	
12. Participation	RTTP	0.174	**0.296**	**0.311**	**0.287**	**0.287**	-
	Non-RTTP	-	0.017	0.087	0.084	**0.084**	-

Table 7

Pearson's r Correlation Matrix for RTTP Results by Time: Honors Retention(Q3)

Question	Time	1	2	3	9	12
1. Retention at USD	Time 1	-				
	Time 2	-				
2. Honors Retention-Sem	Time 1	**0.744**	-			
	Time 2	-	-			
3. Honors Retention-Grad	Time 1	**0.513**	**0.577**	-		
	Time 2	-	**0.627**	-		
9. Discuss Difficult Issues	Time 1	0.112	0.247	0.245	-	
	Time 2	-	0.120	**0.377**	-	
12. Participation	Time 1	0.254	**0.348**	**0.428**	0.263	-
	Time 2	-	0.228	0.198	0.277	-

Relationships with Extracurriculars(Q4). Fitting with Tinto's theory of social

involvement playing a role in student retention (Tinto, 1993; 2006), Extracurriculars(Q4)

was correlated with several measures relating to retention: Outside Discussion(Q7;

r=0.324), Discuss Difficult Issues(Q9; r=0.197), Metacognition(Q10; r=0.346), and

Participation(Q12; r=0.210). Students who were more likely to participate in extracurricular activities were also more likely to discuss ideas with students outside of class time, feel comfortable discussing difficult or controversial ideas with other students, engage in metacognition, and participate in class.

When looking at results by class, Metacognition(Q10) was the only measure correlated in both the RTTP(r=0.306) and non-RTTP(r=0.402) groups – for the RTTP group, the measures were only correlated during Time 1(r=0.399). The correlation with Outside Discussion(Q7) was present only in the RTTP group(r=0.360) and when analyzed by time, only present during Time 1(r=0.465). The previously noted correlations with Discuss Difficult Issues(Q9) and Participation(Q12) that were present in the combined results did not appear in either group when analyzed separately.

Table 8
Pearson's r Correlation Matrix for Combined Results: Extracurriculars(Q4)

Question	4	7	9	10	12
4. Extracurriculars	-				
7.Outside Discussion	0.324	-			
9. Discuss Difficult Issues	0.197	0.097	-		
10. Metacognition	0.346	0.190	0.263	-	
12. Participation	0.210	0.203	0.338	0.192	-

Table 9
Pearson's r Correlation Matrix for Results by Class: Extracurriculars(Q4)

Question	Class	2	4	7	10
2. Honors Retention-Sem	RTTP	-			
	Non-RTTP	-			
4. Extracurriculars	RTTP	0.255	-		
	Non-RTTP	0.028	-		
7. Outside Discussion	RTTP	0.100	0.360	-	
	Non-RTTP	0.248	0.241	-	
10. Metacognition	RTTP	-0.005	0.306	0.221	-
	Non-RTTP	-0.071	0.402	0.149	-

Table 10

Pearson's r Correlation Matrix for Results by Time: Extracurriculars(Q4)

Question	Time	2	4	7	10
2. Honors Retention-Sem	Time 1	-			
	Time 2	-			
4. Extracurriculars	Time 1	0.076	-		
	Time 2	**0.539**	-		
7. Outside Discussion	Time 1	0.082	**0.465**	-	
	Time 2	0.111	0.239	-	
10. Metacognition	Time 1	-0.209	**0.399**	0.310	-
	Time 2	0.302	0.197	0.111	-

Relationships with Thesis Concern(Q5). It is not surprising that Thesis Concern(Q5) was highly correlated with Seminar Concern(Q6; r=0.562). Interestingly, Thesis Concern(Q5) was negatively correlated with Discuss Difficult Issues(Q9; r=0-.213) — the more comfortable students felt discussing controversial ideas, the less concerned they were about writing their thesis. Moreover, this correlation shows up only in the RTTP group (r=-0.258). In the non-RTTP group, a correlation that did not appear in the combined results between Thesis Concern(Q5) and Outside Discussion(Q7; r=0.317) was revealed. The more likely students in the English class were to discuss ideas with students outside of class time, the more likely they were to be concerned about their theses.

Table 11

Pearson's r Correlation Matrix for Combined Results: Thesis Concern(Q5)

Question	5	6	9
5. Thesis Concern	-		
6. Seminar Concern	**0.562**	-	
9. Discuss Difficult Issues	**-0.213**	-0.111	-

Table 12

Pearson's r Correlation Matrix for Results by Class: Thesis Concern(Q5)

Question	Class	5	6	7	9
5. Thesis Concern	RTTP	-			
	Non-RTTP	-			
6. Seminar Concern	RTTP	0.532	-		
	Non-RTTP	0.599	-		
7. Outside Discussion	RTTP	0.051	0.045	-	
	Non-RTTP	0.317	-0.079	-	
9. Discuss Difficult Issues	RTTP	-0.258	-0.215	0.188	-
	Non-RTTP	-0.178	0.007	-0.087	-

Relationships with Seminar Concern(Q6). When looking at the combined results, the only correlation to appear was with Thesis Concern(Q5) as discussed above. However, when looking at results by class, a correlation between Metacognition(Q10) and Seminar Concern(Q6; r=0.241) appeared in the RTTP class: the more likely RTTP students were to engage in metacognition, the more likely they were to be concerned about completing their seminars.

Table 13

Pearson's r Correlation Matrix for Combined Results: Seminar Concern(Q6)

Question	5	6
5. Thesis Concern	-	
6. Seminar Concern	0.562	-

Table 14

Pearson's r Correlation Matrix for Results by Class: Seminar Concern(Q6)

Question	Class	5	6	10
5. Thesis Concern	RTTP	-		
	Non-RTTP	-		
6. Seminar Concern	RTTP	0.532	-	
	Non-RTTP	0.599	-	
10. Metacognition	RTTP	0.111	0.241	-
	Non-RTTP	-0.118	-0.014	-

Relationships with Outside Discussion(Q7). In addition to Honors

Retention(Q3) and Extracurriculars(Q4), Outside Discussion(Q7) was also correlated

with Metacognition(Q10; r=0.190) and Participation(Q12; r=0.203): the more likely a

student was to report participating in outside discussion, the more likely they were to

report planning on staying in the honors program, participating in extracurriculars,

engaging in metacognition, and participating in class.

When examining results separately by class, Participation(Q12) was only present

in the RTTP group(r=0.287) while Metacognition(Q10) was not present in either group.

Further, the correlation with Participation(Q12) was only present during Time 2 for the

RTTP group(r=0.341). Both class participation and outside discussion are regarded to be

a part of the RTTP experience, so this is an interesting finding.

When looking at simulation specific questions, Outside Discussion(Q7) was

correlated with Connections(Q15; r=0.374) and Recommend Simulation(Q17; r=0.375).

The more likely students were to discuss ideas with students outside of class time, the

more likely they were to report making connections to material learned in other classes.

Additionally, those who said they were more likely to discuss ideas with students outside

of class also reported higher likelihood to recommend RTTP to other students.

Table 15
Pearson's r Correlation Matrix for Combined Results: Outside Discussion(Q7)

Question	3	4	7	10	12
3. Honors Retention-Grad	-				
4. Extracurriculars	0.102	-			
7. Outside Discussion	0.206	0.324	-		
10. Metacognition	0.030	0.346	0.190	-	
12. Participation	0.184	0.21	0.203	0.192	-

Table 16

Pearson's r Correlation Matrix for Results by Class: Outside Discussion(Q7)

Question	Class	3	4	5	7	12
3. Honors Retention-Grad	RTTP	-				
	Non-RTTP	-				
4. Extracurriculars	RTTP	0.189	-			
	Non-RTTP	0.020	-			
5. Thesis Concern	RTTP	0.080	0.113	-		
	Non-RTTP	0.088	-0.042	-		
7. Outside Discussion	RTTP	0.153	**0.360**	0.051	-	
	Non-RTTP	**0.306**	0.241	**0.317**	-	
12. Participation	RTTP	**0.311**	0.164	-0.109	**0.287**	-
	Non-RTTP	0.087	0.291	-0.133	0.084	-

Table 17

Pearson's r Correlation Matrix for Results by Time: Outside Discussion(Q7)

Question	Time	4	7	12
4. Extracurriculars	Time 1	-		
	Time 2	-		
7. Outside Discussion	Time 1	**0.465**	-	
	Time 2	0.239	-	
12. Participation	Time 1	0.11	0.269	-
	Time 2	0.234	**0.341**	-

Table 18

Pearson's r Correlation Matrix for Simulation Specific Results: Outside Discussion(Q7)

Question	7	15	17
7. Outside Discussion	-		
15. Connections	0.374	-	
17. Recommend Simulation	0.375	0.347	-

Relationships with Persuasion(Q8). Persuasion(Q8) was correlated with Discuss Difficult Issues(Q9; r=0.622), Diverse Perspectives(Q11; r=0.308), and Participation(Q12; r=0.268) in addition to the previously noted correlation with USD Retention(Q1). Therefore, the more likely students were to report being confident in persuading those unlike themselves to see their side of an issue, the more likely they were to report comfort with discussing difficult ideas, the ability to understand diverse perspectives, and participation in class.

While the correlations with Difficult Issues(Q9) and Diverse Perspectives(Q11) were present in both groups, analyzing the surveys by class revealed the correlation with

Participation(Q12) to be present only in the non-RTTP group(r=0.423). However, it did appear in Time 2 for the RTTP group(r=0.345), meaning that for students in RTTP that have experienced the simulation, as well as students in the non-RTTP group, the more likely one was to report having participated, the more likely they were to report confidence persuading somebody unlike themselves to see their side of an issue. Also appearing during Time 2 that were not present in Time 1 in the RTTP group were the correlations with Metacognition(Q10; r=0.368) and Diverse Perspectives(Q11; r=0.360).

Table 19

Pearson's r Correlation Matrix for Combined Results: Persuasion(Q8)

Question	1	8	9	11	12
1. Retention at USD	-				
8. Persuasion	0.245	-			
9. Discuss Difficult Issues	0.059	0.622	-		
11. Diverse Perspectives	0.115	0.308	0.361	-	
12. Participation	0.132	0.268	0.338	0.136	-

Table 20

Pearson's r Correlation Matrix for Results by Class: Persuasion(Q8)

Question	Class	1	8	9	11	12
1. Retention at USD	RTTP	-				
	Non-RTTP	-				
8. Persuasion	RTTP	0.287	-			
	Non-RTTP	-	-			
9. Discuss Difficult Issues	RTTP	0.053	0.567	-		
	Non-RTTP	-	0.731	-		
11. Diverse Perspectives	RTTP	0.125	0.282	0.346	-	
	Non-RTTP	-	0.353	0.364	-	
12. Participation	RTTP	0.174	0.170	0.272	0.192	-
	Non-RTTP	-	0.423	0.418	0.039	-

Table 21

Pearson's r Correlation Matrix for Results by Time: Persuasion(Q8)

Question	Time	1	8	9	10	11	12
1. Retention at USD	Time 1	-					
	Time 2	-					
8. Persuasion	Time 1	0.389	-				
	Time 2	-	-				
9. Discuss Difficult Issues	Time 1	0.112	0.595	-			
	Time 2	-	0.560	-			
10. Metacognition	Time 1	-0.142	0.069	0.239	-		
	Time 2	-	0.368	0.449	-		
11. Diverse Perspectives	Time 1	0.160	0.226	0.387	0.118	-	
	Time 2	-	0.360	0.320	0.379	-	
12. Participation	Time 1	0.254	0.028	0.263	0.156	0.201	-
	Time 2	-	0.345	0.277	0.329	0.183	-

Relationships with Discuss Difficult Issues(Q9). Discuss Difficult Ideas(Q9) was correlated with several measures: Extracurriculars(Q4), Thesis Concern(Q5), and Persuasion(Q8) as discussed above, as well as Metacognition(Q10; r=0.263), Diverse Perspectives(Q11; r=0.361), and Participation(Q12; r=0.338). The more comfortable a student was with discussing difficult ideas, the more likely they were to report participating in extracurriculars, having less concern about their thesis, being more confident in their ability to persuade someone unlike themselves to see their side of an issue, engage in metacognition, understand diverse perspectives, and participate in class.

When analyzing results by class, both the RTTP group and the non-RTTP had correlations with Persuasion(Q8), Diverse Perspectives(Q11), and Participation(Q12). However, only the RTTP group showed correlations with Metacognition(Q10; r=0.340).

When looking at the RTTP group's results by time, Discuss Difficult Issues(Q9)'s correlation with Diverse Perspectives(Q11; r=0.387) was only present at Time 1 and the correlations with Metacognition(Q10; r=0.449) were only present at Time 2.

Table 22
Pearson's r Correlation Matrix for Combined Results: Discuss Difficult Issues(Q9)

Question	4	5	8	9	10	11	12
4. Extracurriculars	-						
5. Thesis Concern	0.070	-					
8. Persuasion	0.093	-0.126	-				
9. Discuss Difficult Issues	**0.197**	**-0.213**	**0.622**	-			
10. Metacognition	**0.346**	0.043	0.174	**0.263**	-		
11. Diverse Perspectives	0.092	-0.073	**0.308**	**0.361**	**0.255**	-	
12. Participation	**0.210**	-0.112	**0.268**	**0.338**	**0.192**	0.136	-

Table 23

Pearson's r Correlation Matrix for Results by Class: Discuss Difficult Issues(Q9)

Question	Class	3	5	8	9	10	11	12
3. Honors Retention-Grad	RTTP	-						
	Non-RTTP	-						
5. Thesis Concern	RTTP	0.080	-					
	Non-RTTP	0.088	-					
8. Persuasion	RTTP	0.180	-0.134	-				
	Non-RTTP	-0.171	-0.130	-				
9. Discuss Difficult Issues	RTTP	**0.320**	**-0.258**	**0.567**	-			
	Non-RTTP	**-0.265**	**-0.178**	**0.731**	-			
10. Metacognition	RTTP	0.095	0.111	0.210	**0.340**	-		
	Non-RTTP	0.027	-0.118	0.063	0.053	-		
11. Diverse Perspectives	RTTP	0.128	-0.064	**0.282**	**0.346**	0.230	-	
	Non-RTTP	-0.054	-0.114	**0.353**	**0.364**	0.264	-	
12. Participation	RTTP	**0.311**	-0.109	0.170	**0.272**	**0.232**	0.192	-
	Non-RTTP	0.087	-0.133	**0.423**	**0.418**	0.112	0.039	-

Table 24

Pearson's r Correlation Matrix for Results by Time: Discuss Difficult Issues(Q9)

Question	Time	3	8	9	10	11
3. Honors Retention-Grad	Time 1	-				
	Time 2	-				
8. Persuasion	Time 1	0.192	-			
	Time 2	0.173	-			
9. Discuss Difficult Issues	Time 1	0.245	**0.595**	-		
	Time 2	**0.377**	**0.560**	-		
10. Metacognition	Time 1	-0.133	0.069	0.239	-	
	Time 2	0.311	**0.368**	**0.449**	-	
11. Diverse Perspectives	Time 1	0.113	0.226	**0.387**	0.118	-
	Time 2	0.149	**0.360**	0.320	**0.379**	-

Relationships with Metacognition(Q10). Metacognition(Q10) was correlated with several measures: Extracurriculars(Q4), Outside Discussion(Q7), and Discuss Difficult Issues(Q9) as noted previously, as well as Diverse Perspectives(Q11; r=0.255), and Participation(Q12; r=0.192). The more often a student reported engaging in metacognition, their self-reported measures of participating in class as well as in extracurriculars increased, their confidence in understanding diverse perspectives and discussing difficult issues with other students increased, and their frequency in discussing ideas with students outside of class time increased.

When examining results by class, the correlation with Metacognition(Q10) and Participation(Q12) that appeared in the combined scores only appeared in the RTTP group (r=0.232). Therefore, the more likely RTTP students were to engage in metacognition, the more likely they were to participate in class. Interestingly, Metacognition(Q10) was correlated with Diverse Perspectives(Q11) in the combined scores, but when separated, it was not correlated for either class.

At Time 1, the only significant correlation was with Extracurriculars(Q4). At Time 2, Metacognition(Q10) was correlated with Persuasion(Q8), Discuss Difficult Issues(Q9), and Diverse Perspectives(Q11; r=0.379). Therefore, after the simulation, the more students engaged in metacognition, the more confident they felt at persuading those unlike themselves to see their side of an issue, discussing difficult ideas with students, and understanding diverse perspectives.

When looking at measures that were specific to the simulation, Metacognition(Q10) was correlated with Connections(Q15; r=.0438). The more often one engaged in metacognition, the more likely they were to make connections to material learned in other classes. Metacognition(Q10) was also correlated with Recommend Simulation(Q17; r=0.370). Those students who engaged in metacognition were more likely to recommend RTTP, or a class like it, to others.

Table 25
Pearson's r Correlation Matrix for Combined Results: Metacognition(Q10)

Question	4	7	9	10	11	12
4. Extracurriculars	-					
7. Outside Discussion	0.324	-				
9. Discuss Difficult Issues	0.197	0.097	-			
10. Metacognition	0.346	0.190	0.263	-		
11. Diverse Perspectives	0.092	0.016	0.361	0.255	-	
12. Participation	0.21	0.203	0.338	0.192	0.136	-

Table 26

Pearson's r Correlation Matrix for Results by Class: Metacognition(Q10)

Question	Class	4	6	9	10	12
4. Extracurriculars	RTTP	-				
	Non-RTTP	-				
6. Seminar Concern	RTTP	0.203	-			
	Non-RTTP	-0.139	-			
9. Discuss Difficult Issues	RTTP	0.143	-0.215	-		
	Non-RTTP	0.281	0.007	-		
10. Metacognition	RTTP	0.306	0.241	0.340	-	
	Non-RTTP	0.402	-0.014	0.053	-	
12. Participation	RTTP	0.164	-0.075	0.272	0.232	-
	Non-RTTP	0.291	-0.166	0.418	0.112	-

Table 27

Pearson's r Correlation Matrix for RTTP Results by Time: Metacognition(Q10)

Question	Time	4	8	9	10	11
4. Extracurriculars	Time 1	-				
	Time 2	-				
8. Persuasion	Time 1	0.084	-			
	Time 2	0.062	-			
9. Discuss Difficult Issues	Time 1	0.100	0.595	-		
	Time 2	0.196	0.560	-		
10. Metacognition	Time 1	0.399	0.069	0.239	-	
	Time 2	0.197	0.368	0.449	-	
11. Diverse Perspectives	Time 1	0.076	0.226	0.387	0.118	-
	Time 2	0.124	0.360	0.320	0.379	-

Table 28

Pearson's r Correlation Matrix for RTTP Results Time 2: Metacognition(Q10)

Question	10	15	17
10. Metacognition	-		
15. Connections	0.438	-	
17. Recommend Simulation	0.370	0.347	-

Relationships with Diverse Perspectives(Q11). As previously noted, Diverse Perspectives(Q11) was correlated with Persuasion(Q8), Discuss Difficult Issues(Q9), and Metacognition(Q10) when looking at combined scores.

Table 29

Pearson's r Correlation Matrix for Combined Results: Diverse Perspectives(Q11)

Question	8	9	10	11
8. Persuasion	-			
9. Discuss Difficult Issues	0.622	-		
10. Metacognition	0.174	0.263	-	
11. Diverse Perspectives	0.308	0.361	0.255	-

Relationships with Participation(Q12). As noted before, Participation(Q12) was

correlated with Honors Retention(Q3), Outside Discussion (Q7), Persuasion(Q8), Discuss

Difficult Issues(Q9), and Metacognition(Q10).

Table 30
Pearson's r Correlation Matrix for Combined Results: Participation(Q12)

Question	3	4	7	8	9	10	12
3. Honors Retention-Grad	-						
4. Extracurriculars	0.102	-					
7.Outside Discussion	**0.206**	**0.324**	-				
8. Persuasion	0.029	0.093	0.029	-			
9. Discuss Difficult Issues	0.043	**0.197**	0.097	**0.622**	-		
10. Metacognition	0.030	**0.346**	**0.190**	0.174	**0.263**	-	
12. Participation	**0.184**	**0.210**	**0.203**	**0.268**	**0.338**	**0.192**	-

Simulation Specific(Q13-17) Relationships.

Relationships with Limitations(Q13). There were no correlations with this

measure.

Relationships with Historical Context(Q14). Historical Context(Q14) was highly

correlated with Connections(Q15; r=0.537). Therefore, the more one understood the

historical context of the game, the more they were able to make connections to material

learned in other classes. Historical Context(Q14) was also correlated to Enjoy

Simulation(Q16; r=0.413) – the more one understood the historical context, the more

likely they were to enjoy the simulation.

Table 31
Pearson's r Correlation Matrix for RTTP Results Time 2: Historical Context(Q14)

Question	14	15	16
14. Historical Context	-		
15. Connections	**0.537**	-	
16. Enjoyed Simulation	**0.413**	**0.502**	-

Relationships with Connections(Q15). In addition to previously noted

correlations with Outside Discussion(Q7) and Metacognition(Q10), Connections(Q15)

was correlated with both Enjoy Simulation(Q16; r=0.502) and Recommend

Simulation(Q17; r=0.347): students who were able to make connections to material in

other classes were more likely to enjoy and recommend RTTP.

Table 32
Pearson's r Correlation Matrix for RTTP Results Time 2: Connections(Q15)

Question	7	10	15	16	17
7. Outside Discussion	-				
10. Metacognition	0.111	-			
15. Connections	0.374	0.438	-		
16. Enjoyed Simulation	0.198	0.179	0.502	-	
17. Recommend Simulation	0.375	0.370	0.347	0.680	-

Relationships with Enjoy Simulation(Q16). Enjoy Simulation(Q16) was correlated with

Historical Context(Q14) and Connections(Q15) as previously noted, as well as

Recommend Simulation(Q17; r=0.680). Therefore, the more a student enjoyed the

simulation, the more likely it was that they understood the historical context, made

connections to material learned in other classes, and the more likely they were to say that

they would recommend the simulation to others.

Table 33
Pearson's r Correlation Matrix for RTTP Results Time 2: Enjoy Simulation(Q16)

Question	14	15	16	17
14. Historical Context	-			
15. Connections	0.537	-		
16. Enjoyed Simulation	0.413	0.502	-	
17. Recommend Simulation	0.304	0.347	0.680	-

Relationships with Recommend Simulation(Q17). As previously noted,

Recommend Simulation(17) was correlated with Outside Discussion(Q7),

Metacognition(Q10), Connections(Q15), and Enjoy Simulation(Q16).

Table 34
Pearson's r Correlation Matrix for RTTP Results Time 2: Enjoy Simulation(Q16)

Question	7	10	15	16	17
7. Outside Discussion	-				
10. Metacognition	0.111	-			
15. Connections	**0.374**	**0.438**	-		
16. Enjoyed Simulation	0.198	0.179	**0.502**	-	
17. Recommend Simulation	**0.375**	**0.370**	**0.347**	**0.680**	-

CHAPTER FOUR

Discussion

Retention Intention

Because ANOVA results showed that the RTTP group had statistically significantly higher scores on this measure than the non-RTTP group, we know that RTTP students had more intention to stay in the honors program than those that were in the non-RTTP group. However, the RTTP group's scores did not actually change significantly from Time 1 to Time 2, meaning that the higher intention to stay was present before the simulation started. This could be because of the engaging nature of the class itself: Honors Ideas in History, similar to RTTP, is run as a flipped classroom by having instructors guide rather than lead discussion. It also engages students in common lectures, encouraging discussion from students outside their particular class section. Additionally, student measures of retention intention were already high during Time 1. Students that are already quite confident they are going to stay in the honors program don't have much room to improve on this measure, which may account for the lack of increased scores on the measure of retention intention.

Discussing Ideas Outside of Class

The interaction between class and time present with Outside Discussion(Q7) shows that students in the RTTP group improved on scores of the measure between Time 1 and Time 2 while the non-RTTP group's scores decreased. This fits with the literature describing the effect that RTTP has on outside discussion (Carnes, 2014; Houle, 2006; Lightcap, 2009). The decrease in scores for the non-RTTP group may reflect the problem Carnes discussed in which students "stop talking in class about midway through freshman

year" (Fiegelson, qtd in Carnes, 2005, p. 9). Students that are less motivated to talk in class are certainly less motivated to discuss ideas outside of class.

Metacognition

Analysis of variance revealed that students in the non-RTTP group scored statistically significantly higher on scores of metacognition than students in the RTTP group. This finding was unexpected, as RTTP allows students to take on the role of another and examine the origin of their thoughts. However, RTTP students did indeed improve, the improvement was just not statistically significant. The non-RTTP group took Honors English, and the process of examining literature and character perspectives involves the use of metacognition. Honors English also consists of writing a thesis-driven analysis of a novel: the research done to accomplish this task certainly involves metacognition. This analysis of literature that takes place in Honors English may well have been a contributing factor to the non-RTTP group's higher rates of metacognition compared to the RTTP group.

Engagement Confidence and Behavior

Because the ANOVA results showed no statistically significant difference in either engagement confidence or engagement behavior, it cannot be said from these results that Honors Ideas in History is overall a more engaging class than Honors English. However, this may due to the limitations of the survey questions – the six questions included in these composite measures are in no way a complete representation of engagement.

Relationships Between Survey Questions

USD Retention(Q1). The relationship between the three retention measures –
USD Retention(Q1), Honors Retention-Semester(Q2), and Honors Retention(Q3) – was
expected. If a student is staying in the USD Honors Program, they must also plan on
staying at USD. The correlation with Persuasion(Q8) may simply reflect a characteristic
of the general college student population.

Honors Retention-Semester(Q2). As with USD Retention(Q1), it was not
surprising to find that Honors Retention-Semester(Q2) was highly correlated with Honors
Retention(Q3): those that plan on staying in honors through graduation must also plan on
staying through the next semester. The correlation with Participation(Q12) was only
present in the RTTP group, and furthermore, only present during Time 1. This could
represent the problem that Carnes, along with numerous other professors, have noticed in
their classes – that students stop talking in class as the semester progresses (Carnes, 2005,
p. 9). In fact, both the RTTP group and the non-RTTP group showed declines in self-
reported scores of participation between Time 1 and Time 2, although not statistically
significant. This may suggest that although RTTP offers favorable advantages, it may not
improve participation in all classes for all students. The appearance of the correlation
with Extracurriculars(Q4) at Time 2 for the RTTP group may be due to the common
factor of decreased social isolation that comes with both RTTP and participation in
extracurriculars.

Honors Retention(Q3). When all survey results were combined, Honors
Retention(Q3) was correlated with Outside Discussion(Q7) and Participation(Q12).
However, when separating results by class, the correlation with Outside Discussion(Q7)

was only present in the non-RTTP group. However, this does not imply that there is no relationship between the two measures in the RTTP group. We know that Outside Discussion(Q7) did in fact increase in the RTTP group: because the measure of retention intention stayed steady at a high score in both Time 1 and Time 2, and their Outside Discussion scores significantly increased, it makes sense that there was not a correlation.

Similar to the correlation between Honors Retention-Semester(Q2) and Participation(Q12), the correlation between Honors Retention(Q3) and Participation(Q12) that appeared in the RTTP group at Time 1 is likely due to the general problem in which students stop talking in class, as discussed previously.

Additionally, a correlation with Discuss Difficult Issues(Q9) appeared in the RTTP group. When RTTP results were analyzed by time, we saw that the correlation with Discuss Difficult Ideas(Q9) was only present in Time 2, meaning it came about during the simulation. This makes sense, as students in RTTP are often confronted with difficult and/or controversial issues, and have to debate them from their character's point of view as if it was their own view.

Extracurriculars(Q4). Combined survey results showed correlations with Outside Discussion(Q7), Discuss Difficult Issues(Q9), Metacognition(Q10), and Participation(Q12). The correlation with Outside Discussion(Q7) was not surprising, as those involved in extracurriculars are surrounded by classmates outside of class time, and are given ample opportunity to discuss ideas. Additionally, it may be that increased exposure to students and intellectual conversation leads to increased comfort with difficult discussions, which would explain the correlation with Discuss Difficult Issues(Q9). These factors may also explain why Extracurriculars(Q4) was correlated with

Metacognition(Q10): the more intellectual conversations one engages in with peers, the more they may have to examine where their thoughts and ideas come from. Finally, in relation to Participation(Q12), it makes sense that the more one is inclined to participate in extracurriculars, the more likely they are to participate in class – participation may just be a characteristic of the person, or perhaps their exposure to extracurriculars allows them to feel more comfortable participating in class.

When breaking down analysis by class, the correlation with Outside Discussion(Q7) only appears in the RTTP group, and additionally, only at Time 1. RTTP has been known to encourage outside discussion in students, so perhaps the simulation encourages discussion with students in class more so than with peers involved in the same extracurriculars. Similar to Outside Discussion(Q7), the correlation with Metacognition(Q10) appears only at Time 1, although it did appear for both classes. One possible reason behind this could be the problem of homogenous peer groups, as Carnes noted (2005, pg. 9). When one gets more comfortable in their peer group, they may examine the origin of their thoughts less frequently.

While the correlations with Discuss Difficult Issues(Q9) and Participation(Q12) appeared in the combined results, they did not appear for either group when analyzing results by class.

Thesis Concern(Q5). When looking at combined results, Thesis Concern(Q5) was correlated with Seminar Concern(Q6) and negatively correlated with Discuss Difficult Issues(Q9). The correlation with Seminar Concern(Q6) was not surprising, as both the thesis and seminar classes are two additional requirements to undergraduate studies at USD that are unique to the honors program. The correlation with Discuss

Difficult Issues(Q9) means that the more comfortable students felt discussing controversial ideas, the less concerned they felt about writing their thesis. The intellectual friction created by discussing difficult topics can spark curiosity and increase confidence in one's academic abilities. Furthermore, this correlation was only present in the RTTP group when results were analyzed by class; this suggests that the intellectual friction encouraged by RTTP simulations specifically may play a role in decreased thesis concern.

Although not present in the combined results, when analyzed by class, a positive correlation with Outside Discussion(Q7) appeared in the non-RTTP group only. Therefore, the more students taking Honors English discussed ideas with students outside of class, the more concern they felt about writing their thesis. One possible explanation is that students in Honors English have to write a significant research paper longer than the papers assigned for the RTTP group. Perhaps the writing process gave them a taste of what it would be like to write a thesis, and the more they talked about it with others and realized their peers had similar concerns, the more justified their own concerns seemed.

Seminar Concern (Q6). As discussed previously, the correlation with Thesis Concern(Q5) was expected. However, an unexpected correlation between Seminar Concern(Q6) and Metacognition(Q10) in the RTTP group was seen when examining results by class. Perhaps the increased accountability and discussion based aspects of the RTTP simulation exposed students to what an honors seminar may be like, and their concern increased.

Outside Discussion(Q7). As previously discussed, Outside Discussion(Q7) was correlated with Honors Retention(Q3) and Extracurriculars(Q4). Additionally, Outside

Discussion(Q7) also showed a correlation with Metacognition(Q10) when looking at all survey results. This may be because the more one thinks about their own thoughts and where they come from, the more likely it is that they will discuss those thoughts with others. Alternatively, discussions with other students may spark the drive to consider where their thoughts and ideas come from. However, the correlation was not seen in either group when looking at the results by class.

Furthermore, a correlation between Outside Discussion(Q7) and Participation(Q12) was seen when looking at the results of all surveys gathered. When broken down into classes and even further into Time 1 and Time 2, the correlation between the two is seen specifically in Time 2 with the RTTP group, meaning that after the simulation, students increased in both participation and outside discussion at a similar rate. It is not surprising that the more one participates in class, the more they will continue discussions with classmates outside of class. Additionally, the increased demand of the RTTP pedagogy encourages more meaningful participation both in and out of class.

Interestingly, Discuss Ideas(Q7) was also correlated with both Connections(Q15) and Recommend Simulation(Q17). As far as the relationship with Connections(Q15), students that discuss ideas with others outside of class time may gain insight into how material connects to other classes from their peers. The outside discussion may also indicate an interest in the material, leading to deeper thinking about how it connects to other material being learned. This idea of increased interest would also fit with the correlation with Recommend Simulation(Q17).

Persuasion(Q8). In addition to the correlation with USD Retention(Q1), Persuasion(Q8) was correlated with Discuss Difficult Issues(Q9), Diverse Perspectives(Q11), and Participation(Q12). The correlation with Discuss Difficult Issues(Q9) is not surprising: if one is more comfortable discussing controversial issues, they are probably more likely to participate in those discussions, and gain confidence in persuading others to see their side of an issue.

While the combined results showed no correlation with Metacognition(Q10), analyzing results by time showed that there was a correlation for the RTTP group during Time 2. Because RTTP requires giving speeches from the perspective of a student's assigned character, and the goal of these speeches are to persuade other students to vote for that character's faction, the students get practice persuading others to see their side of an issue. Additionally, in order to give a persuasive speech from another's perspective, it is often necessary to engage in metacognition in order to separate one's thoughts from their character's thoughts.

The correlation with Diverse Perspectives(Q11) appeared in both classes, and specifically at Time 2 for the RTTP group. For Diverse Perspectives(Q11), it makes sense that in order for a student to persuade someone unlike themselves to see their side of an issue, they would first have to understand the diverse perspectives of those individuals. Similar to the trend noted when discussing Metacognition, students that engage in literature and character analysis gain practice experiencing ideas from others' perspectives: this would explain why the two measures are correlated for the non-RTTP group. For the RTTP group, specifically at Time 2, the simulation encourages understanding diverse perspectives by taking on the persona of a historical character.

Additionally, the correlation with Participation(Q12) appeared in the non-RTTP group as well as at Time 2 for the RTTP group. It seems that participation in class may make students more comfortable discussing ideas with diverse others, and therefore persuading those unlike themselves to see their side of an issue. The correlation in the non-RTTP group may again reflect the benefits of character analysis. The more one participated in class discussions and understood different character perspectives, the more confident they felt persuading others. For the RTTP group, again, participating in faction discussions may lead to increased confidence in their ability to be persuasive.

Discuss Difficult Issues(Q9). In addition to previously noted correlations with Extracurriculars(Q4), Thesis Concern(Q5), and Persuasion(Q8), Discuss Difficult Issues(Q9) was correlated with Metacognition(Q10), Diverse Perspectives(Q11), and Participation(Q12). In regards to Metacognition(Q10), the more practiced one is discussing difficult ideas, the more practice they have had examining their own thoughts and where their ideas come from. The relationship with Diverse Perspectives(Q11) makes sense because it would be much more difficult to discuss controversial ideas if one is unable to understand others' points of view. Finally, the correlation with Participation(Q12) was not surprising, as participation in class seems to lead to more comfort with discussing ideas, difficult or otherwise.

When looking at results by class, the correlations with Diverse Perspectives(Q11), and Participation(Q12) appeared in both the RTTP and non-RTTP groups. This makes sense, as both Honors English and Honors Ideas in History involve the discussion of difficult ideas – whether it be taking on the persona of a historical character or engaging in literary and character analysis – that require both participation and the understanding

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of others' perspectives. That being said, the correlation with Diverse Perspectives(Q11) was only present at Time 1 for the RTTP group. Interestingly, the scores for Discuss Difficult Ideas(Q9) slightly decreased from Time 1 to Time 2 for the RTTP group: it may be that the increased exposure to difficult ideas through the simulations lead to increased student understanding of the complexity of such ideas, and less comfort discussing them. The correlation with Metacognition(Q10) was only present for the RTTP group when analyzed by class, and furthermore, only appeared at Time 2. This suggests that after the simulation, students that engaged in metacognition more frequently felt comfortable discussing difficult ideas. Again, it makes sense that when taking on the role of another, one must examine the origin of their thoughts when discussing difficult issues.

Metacognition(Q10). Metacognition(Q10) was correlated with Extracurriculars(Q4), Outside Discussion(Q7), and Discuss Difficult Issues(Q9) as discussed above. Additionally, it was correlated with Diverse Perspectives(Q11) and Participation(Q12). This suggests that the more students engage in metacognition and think about the origins of their thoughts, the more confident they are in their understanding of diverse perspectives. This may be due to the fact that discovering the basis of one's own ideas may lead to an awareness of strengths and weaknesses of one's perspective, and therefore bring on an appreciation of others' thoughts as well. In terms of class participation, class discussion may lead one to examine their thoughts and the opinions of their classmates, therefore increasing metacognition.

When examining results by class, Diverse Perspectives(Q11) was not correlated for either individual group, but it did appear at Time 2 for the RTTP group. Indeed, while not statistically significant, scores on both Metacognition(Q10) and Diverse

Perspectives(Q11) increased from Time 1 to Time 2 for the RTTP group. This suggests that the simulation encouraged students to engage in metacognition and dive deeper into diverse perspectives. Again, this seems to be characteristic of taking on the role of another. Additionally, the correlation with Participation(Q12) appeared only in the RTTP group, but not individually at either Time 1 or Time 2.

When looking at survey questions specific to the simulation, Metacognition(Q10) was correlated with Connections(Q15) and Recommend Simulation(Q17). The correlation with Connections(Q15) was expected: when a student frequently examines the origin of their thoughts and ideas, it seems natural that they would see connections between material learned in various classes. Additionally, students that examine their thoughts are likely to understand the benefits of their classes, so it makes sense that they would be more likely to recommend harder yet more rewarding classes – hence the correlation with Recommend Simulation(Q17).

Diverse Perspectives(Q11). As previously discussed, Diverse Perspectives(Q11) was correlated with Persuasion(Q8), Discuss Difficult Issues(Q9), and Metacognition(Q10). Therefore, the more confident one was in their understanding of diverse perspectives, the more likely they were to engage in metacognition, feel comfortable discussing difficult issues with others, and feel confident in their ability to persuade somebody unlike themselves to see their side of an issue.

Participation(Q12). Participation(Q12) was correlated with Honors Retention(Q3), Extracurriculars(Q4), Outside Discussion(Q7), Persuasion(Q8), Discuss Difficult Issues(Q9), and Metacognition(Q10). Therefore, when a student was more likely to participate in class, their intention to stay in the honors program through

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graduation increased, they were more likely to discuss ideas with students outside of class time, their confidence to persuade somebody unlike themselves to see their side of an issue increased, they felt more comfortable discussing difficult issues with others, and finally, they improved on self-reported measures of metacognition.

Simulation Specific(Q13-17).

Relationships with Limitations(Q13). There were no correlations with this measure. This was unexpected, as a preliminary, informal interview suggested that frustrations with character limitations led to decreased enjoyment of the simulation. When looking at data from the RTTP Time 2 surveys, there was at least one instance where a student that scored 7 on Limitations(Q13) (indicating high frustration) scored a 1 on Enjoy Simulation(Q16) (indicating low enjoyment), and at least one instance where a student that scored 7 on Q13 (indicating high frustration) scored a 7 on enjoyment (indicating high enjoyment). Interestingly, both of those students also scored a 7 on Honors Retention(Q3). Therefore, it seems that while high frustration with character limitations may lead to decreased enjoyment of the simulation, that is not generally the case. Additionally, it can even lead to increased enjoyment in some instances.

Relationships with Historical Context(Q14). This measure was correlated with Connections(Q15) and Enjoy Simulation(Q16). These relationships were both expected: if one does not understand the material they are learning in a class, it is less likely they would make connections to material learned in another class. Additionally, if one does not understand what is going on, it would be quite hard for them to enjoy the class.

Relationships with Connections(Q15). As previously discussed, Connections(Q15) was correlated with Outside Discussion(Q7) and Metacognition(Q10).

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Additionally, it was correlated with Enjoy Simulation(Q16) and Recommend Simulation(Q17). The correlation with Enjoy Simulation(Q16) fits with the literature that suggests making connections to material learned in other classes reinforces the relevance of such material (Olwell & Stevens, 2015). Additionally, understanding the relevance and importance of a course seems to increase student likelihood to recommend the course to other students.

Relationships with Enjoy Simulation(Q16). In addition to the previously noted correlations with Historical Context(Q14) and Connections(Q15), Enjoy Simulation(Q16) was also correlated with Recommend Simulation(Q17). This relationship was expected: students want their friends to experience courses that are enjoyable and rewarding.

Relationships with Recommend Simulation(Q17). Again, Recommend Simulation(Q17) was correlated with Outside Discussion(Q7), Metacognition(Q10), Connections(Q15), and Enjoy Simulation(Q16). Therefore, the more likely students were to engage in outside discussion and metacognition, make connections to material learned in other classes, and enjoy the simulation, the more likely they were to recommend the class, or another class involving simulations, to other students.

Limitations

While several interesting results came about during this study, there were, unfortunately, some limitations. The survey given to students in no way encapsulates all indicators of engagement or retention. Such a survey would have taken up far too much class time and was not feasible for a study of this size. Additionally, due to time constraints, it would have been ideal to administer the survey during the first week of the semester as well as directly before and after the simulation took place. This method

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would have been better able to account for the benefits that came about as a result of the first weeks of class and general college experience versus the simulation itself. Furthermore, because surveys were anonymous, individual student progress made between Time 1 and Time 2 was not measured. Finally, the scope of the project and time constraints only allowed for measure of retention intention, and not actual retention rates. Being able to follow up with retention rates of the students in these classes, even throughout their first year of college, would have been tremendously impactful.

Suggestions for Further Research

The implications of this project lead to several questions that would be fascinating to study. In addition to correcting for the above limitations, there are various ways to expand upon this research, in terms of honors retention and college retention in general. One possible study could compare the benefits of RTTP for honors students who take the course during their first semester and honors students who take the class during their second semester. Another could follow up with actual retention rates of students who took RTTP: including both their status as an honors student and a USD student. Additionally, it would be beneficial to look at retention rates from a comparable cohort – students that would have qualified to be in the honors program but chose not to be involved.

Research that includes more student involvement would also be beneficial to conduct. The effects of metacognitive training on honors students, either as part of Honors Ideas in History or perhaps as an extra credit opportunity would show more specifically how metacognition relates to engagement and retention. Furthermore, a study

involving EEG systems to acquire a measure of engagement would, perhaps, lead to

remarkable insights, particularly if devices were worn throughout the RTTP simulation.

Conclusion

The purpose of this study was to examine how student intention to stay in the Honors Program at the University of South Dakota was impacted by Reacting to the Past, an innovative roleplaying methodology. Results showed that honors students who took a class utilizing RTTP their first semester had a higher retention intention than did honors students who took a class that did not involve RTTP, indicating that the reacting pedagogy may encourage students to continue seeking out active learning situations.

Students who engaged in RTTP also significantly improved on the measure of discussion outside of class time, while students who did not take RTTP decreased on the same measure. Those students that did not take RTTP did, however, improve on scores of metacognition throughout the semester. Further research on the effects of metacognitive training may lead to valuable insights.

The results of this study, as well as future studies, could very well provide implications regarding the effectiveness and further implementation of RTTP. For example, using several RTTP simulations as the basis for first year seminars has been a retention strategy employed at several universities and may be advantageous for numerous students at USD. Other classes, whether upper level or introductory, could benefit from incorporating RTTP into their curriculum: history, philosophy, international studies, and gender studies classes being prime examples. The effects that RTTP has on students, as shown through the results of this study and several others, offer honors students several intellectual and social advantages that would be highly beneficial to all students at USD and in other universities.

APPENDICES

APPENDIX A

1) How likely is it that you will be enrolled at USD next semester?

2) How likely is it that you will be enrolled in honors next semester?

3) How likely is it that you will be enrolled in honors through graduation?

4) How likely is it that you will participate in extracurricular activities while at USD?

5) How concerned are you about writing your thesis?

6) How concerned are you about completing your honors seminars?

7) How often do you discuss ideas from class with students outside of class time?

8) How confident are you in your ability to persuade somebody unlike yourself to see your side of an issue?

9) How comfortable are you discussing difficult or controversial issues with other students?

10) How often do you engage in metacognition? (Thinking about where your thoughts come from)

11) How confident are you in your ability to understand diverse perspectives?

12) How often do you participate in classes?

13) How often did the limitations of your character cause you to feel frustrated?

14) How great was your understanding of the historical context surrounding your game?

15) How often, throughout the simulation, did you make connections to material learned in other classes?

16) How much did you enjoy the simulation?

17) How likely would you be to recommend this class, or other classes involving simulations, to another student?

*All questions had a Likert scale below with the appropriate labels (i.e. very likely, very comfortable, very often, etc.)

Very Unlikely 1 2 3 4 5 6 7 Very Likely

Pearson's r Correlation Matrix for Combined Results

Question	1	2	3	4	5	6	7	8	9	10	11	12
1. Retention at USD	-											
2. Honors Retention-Sem	0.328	-										
3. Honors Retention-Grad	0.210	0.682	-									
4. Extracurriculars	0.102	0.116	0.102	-								
5. Thesis Concern	0.012	0.004	0.069	0.070	-							
6. Seminar Concern	-0.082	-0.108	-0.112	0.111	0.562	-						
7. Outside Discussion	0.086	0.156	0.206	0.324	0.137	0.002	-					
8. Persuasion	0.245	0.044	0.029	0.093	-0.126	-0.044	0.029	-				
9. Discuss Difficult Issues	0.059	0.017	0.043	0.197	-0.213	-0.111	0.097	0.622	-			
10. Metacognition	-0.047	-0.071	0.030	0.346	0.043	0.176	0.190	0.174	0.263	-		
11. Diverse Perspectives	0.115	0.031	0.037	0.092	-0.073	-0.029	0.016	0.308	0.361	0.255	-	
12. Participation	0.132	0.115	0.184	0.21	-0.112	-0.101	0.203	0.268	0.338	0.192	0.136	-

APPENDIX C
Pearson's r Correlation Matrix for Results by Class

Question	Class	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
1. Retention at USD	RTTP	·											
	Non-RTTP	·											
2. Honors Retention-Sem	RTTP	0.614	·										
	Non-RTTP		·										
3. Honors Retention-Grad	RTTP	0.330	0.578	·									
	Non-RTTP	·	0.756	·									
4. Extracurriculars	RTTP	0.104	0.255	0.189	·								
	Non-RTTP	·	0.028	0.020	·								
5. Thesis Concern	RTTP	0.004	-0.065	0.080	0.113	·							
	Non-RTTP	·	0.094	0.088	-0.042	·							
6. Seminar Concern	RTTP	-0.126	-0.179	-0.165	0.203	0.532	·						
	Non-RTTP	·	-0.003	0.004	-0.139	0.599	·						
7. Outside Discussion	RTTP	0.104	0.100	0.153	0.360	0.051	0.045	·					
	Non-RTTP	·	0.248	0.306	0.241	0.317	-0.079	·					
8. Persuasion	RTTP	0.287	0.198	0.180	0.075	-0.134	-0.081	0.090	·				
	Non-RTTP	·	-0.086	-0.171	0.116	-0.130	0.000	-0.117	·				
9. Discuss Difficult Issues	RTTP	0.053	0.178	0.320	0.143	-0.258	-0.215	0.188	0.567	·			
	Non-RTTP	·	-0.078	-0.265	0.281	-0.178	0.007	-0.087	0.731	·			
10. Metacognition	RTTP	-0.090	-0.005	0.095	0.306	0.111	0.241	0.221	0.210	0.340	·		
	Non-RTTP	·	-0.071	0.027	0.402	-0.118	-0.014	0.149	0.063	0.053	·		
11. Diverse Perspectives	RTTP	0.125	0.082	0.128	0.097	-0.064	-0.065	0.059	0.282	0.346	0.230	·	
	Non-RTTP	·	0.024	-0.054	0.043	-0.114	-0.004	-0.082	0.353	0.364	0.264	·	
12. Participation	RTTP	0.174	0.296	0.311	0.164	-0.109	-0.075	0.287	0.170	0.272	0.232	0.192	·
	Non-RTTP	·	0.017	0.087	0.291	-0.133	-0.166	0.084	0.423	0.418	0.112	0.039	·

APPENDIX D

Pearson's r Correlation Matrix for RTTP Results by Time

Question	Time	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
1. Retention at USD	Time 1	-											
	Time 2	-											
2. Honors Retention-Sem	Time 1	**0.744**	-										
	Time 2	-	-										
3. Honors Retention-Grad	Time 1	**0.513**	**0.577**	-									
	Time 2	-	**0.627**	-									
4. Extracurriculars	Time 1	0.132	0.076	0.068	-								
	Time 2	-	**0.539**	0.308	-								
5. Thesis Concern	Time 1	-0.027	-0.208	0.249	0.012	-							
	Time 2	-	0.090	-0.040	0.195	-							
6. Seminar Concern	Time 1	-0.181	-0.283	-0.096	0.165	**0.552**	-						
	Time 2	-	-0.048	-0.222	0.245	**0.532**	-						
7. Outside Discussion	Time 1	0.102	0.082	0.121	**0.465**	0.045	0.028	-					
	Time 2	-	0.111	0.196	0.239	0.021	0.074	-					
8. Persuasion	Time 1	**0.389**	0.279	0.192	0.084	-0.145	-0.038	0.082	-				
	Time 2	-	0.071	0.173	0.062	-0.134	-0.123	0.091	-				
9. Discuss Difficult Issues	Time 1	0.112	0.247	0.245	0.100	-0.258	-0.158	0.118	**0.595**	-			
	Time 2	-	0.120	**0.377**	0.196	-0.245	-0.269	0.293	**0.560**	-			
10. Metacognition	Time 1	-0.142	-0.209	-0.133	**0.399**	0.085	0.322	0.310	0.069	0.239	-		
	Time 2	-	0.302	0.311	0.197	0.124	0.170	0.111	**0.368**	**0.449**	-		
11. Diverse Perspectives	Time 1	0.160	0.049	0.113	0.076	-0.132	-0.136	-0.088	0.226	**0.387**	0.118	-	
	Time 2	-	0.143	0.149	0.124	0.000	0.017	0.245	**0.360**	0.320	**0.379**	-	
12. Participation	Time 1	0.254	**0.348**	**0.428**	0.11	-0.197	-0.185	0.269	0.028	0.263	0.156	0.201	-
	Time 2	-	0.228	0.198	0.234	-0.020	0.030	**0.341**	**0.345**	0.277	0.329	0.183	-

Pearson's r Correlation Matrix for RTTP Time 2

Question	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17
1. Retention at USD	-																
2. Honors Retention-Sem	0.627	-															
3. Honors Retention-Grad	0.539	0.308	-														
4. Extracurriculars	0.090	-0.040	0.195	-													
5. Thesis Concern	-0.048	-0.222	0.245	0.532	-												
6. Seminar Concern	0.111	0.196	0.239	0.021	0.074	-											
7. Outside Discussion	0.071	0.173	0.062	-0.134	-0.123	0.091	-										
8. Persuasion	0.120	0.377	0.196	-0.245	-0.269	0.293	0.560	-									
9. Discuss Difficult Issues	0.302	0.311	0.197	0.124	0.170	0.111	0.368	0.449	-								
10. Metacognition	0.143	0.149	0.124	0.000	0.017	0.245	0.360	0.320	0.379	-							
11. Diverse Perspectives	0.228	0.198	0.234	-0.020	0.030	0.341	0.345	0.277	0.329	0.183	-						
12. Participation	-0.193	-0.088	0.138	0.295	0.261	-0.024	0.144	-0.044	0.268	-0.120	0.083	-					
13. Character Limitations	0.115	0.204	-0.026	0.036	-0.069	0.143	-0.192	-0.002	0.179	0.195	0.062	-0.109	-				
14. Historical Context	0.273	0.154	0.085	0.004	0.018	0.374	-0.003	0.098	0.438	0.289	0.308	-0.030	0.537	-			
15. Connections	-0.110	-0.021	-0.038	0.118	0.153	0.198	0.025	0.003	0.179	0.054	0.038	0.003	0.413	0.502	-		
16. Enjoyed Simulation	-0.033	0.169	-0.033	0.192	0.037	0.375	0.204	0.214	0.370	0.231	0.104	0.105	0.304	0.003	0.413	-	
17. Recommend Simulation	-0.033	0.169	-0.033	0.192	0.037	0.375	0.204	0.214	0.370	0.231	0.104	0.105	0.304	0.347	0.502	0.680	-

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