

The Impact of Technology-Based Review Games on the Performance of Millennial Students

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TABLE OF CONTENTS

Chapter		Page
I.	Introduction	1
II.	Literature Review	3
	A. Researching Generation Me	5
	B. Defining Generation Me	6
	C. Developing Generation Me	8
	D. Teaching Generation Me	11
	E. Testing Generation Me	15
	F. Reassessing Generation Me	17
III.	Methodology	18
	A. Context	20
	B. Participants	20
	C. Questions	21
	D. Procedures	22
	E. Instruments for Data Collection	26
	F. Analysis	27
IV.	Results and Discussion	29
	A. Summative Tests	30
	B. Reflective Questionnaire – <i>Into Thin Air</i>	31
	C. Reflective Questionnaire – <i>Night</i>	33
	D. Reflection Questionnaire – Overall Score	34
	E. Reflective Questionnaire – Characteristics of the Millennial Generation	35

A.	Recommendations and Conclusions	40
	A. Conclusions	40
	B. Limitations	41
	C. Recommendations	42
	D. Implications	43
References		46
Appendix		
	A. Student Information Acceptance Letter	
	B. <i>Night Study Guide Questions</i>	
	C. <i>Into Thin Air Summative Test (60 questions)</i>	
	D. <i>Into Thin Air Post-Test Questionnaire</i>	
	E. <i>Into Thin Air Jeopardy</i>	
	F. <i>Night Summative Test (55 questions)</i>	
	G. <i>Night Post-Test Questionnaire</i>	

LIST OF TABLES

Table	Page
3.1 Timeline of Events	26

ABSTRACT

Today's student is a member of the Millennial Generation, a social grouping that technology has surrounded since birth. As technology continues to change at a rapid pace, the gap between the generations is becoming ever more noticeable in public education. Using two classes of Sophomore English students in a suburban high school in the Midwest, I instructed the students using two different review strategies. Although both featured similar types of questions and prompts, the delivery methods were drastically different in that one utilized direct instruction and the other a PowerPoint-based Jeopardy game. After the review strategies and summative unit assessments, I determined the students' academic performance by comparing mean scores and the student's opinions using the Likert-scale results on a post-test questionnaire. These comparisons showed that the overall scores of the assessment following the interactive review strategy were higher than those with a direct instruction review method. Relating the questionnaire results to research-determined characteristics of the Millennial Generation, I evaluated the accuracy of the pre-defined attributes in comparison to my own findings. I found that students in the Millennial Generation show an appreciation for interactive classroom strategies that incorporate competition, manipulation, and a team constructions. This appreciation positively impacts the student's confidence and self-assurance when approaching a concluding summative assessment.

Chapter One

Introduction

Operating in the mid-nineties, mobile phone users could perform two communicative options, a text message or verbal phone call. No more than one decade later in 2007, Apple released the first-generation iPhone bringing together several features of the revolutionary iPod, digital camera, and mobile computer through an innovative touch screen format (Honan, 2007). In his book *Physics of the Future*, Michio Kaku (2011) points out some impressive truths.

Today, your cell phone has more computer power than all of NASA back in 1969 when it sent two astronauts to the moon. Video games, which consume enormous amounts of computer power to simulate 3D situations, use more computer power than main frame computers of the previous decade. The Sony Playstation of today, which costs \$300, has the power of a military supercomputer of 1997, which cost millions of dollars. (p. 21)

Technology is growing exponentially, and the readily available devices that companies have released in the past decade have significantly changed the everyday lives of toddlers, teens, and adults. Now becoming an ever-present social expectation for high school students, the smartphone has seemingly become an attachment both inside and outside school. Because of the new communicative abilities, the ways that students interact and converse are drastically different from one decade ago. Unfortunately, with all of the present growth, the archaic organization of public education and outdated expectations of teachers are falling behind the trends. By continuing to dust off textbooks while using direct instruction as the main form of classroom interaction, many teachers today are out of touch with the current generation of students. If teachers fail to simultaneously reflect and improve their practices, the motivations and academic scores of their students will begin to fall as fast as the speed of technology.

To determine whether or not these technology-based strategies positively impacted the academic performance of Millennial students, I began by using my two classes of Sophomore English students in a suburban high school in the Midwest. As my main method, I instructed the students using two visibly dissimilar review strategies over the course of a two month period. Although featuring similar types of questions and prompts, the delivery method of the review strategies drastically differed in that the first unit utilized a Power-Point-based Jeopardy game while the second employed a direct instruction approach. After each review strategy, I assessed the students' academic knowledge through similar summative assessments and determined their opinions with post-test Likert-scale questionnaires. To analyze the data, I compared the mean scores of both the tests and questionnaires results to the research-determined characteristics of the Millennial Generation (individuals born between 1982 and 2004). Through these comparisons, I evaluated the accuracy of the pre-defined attributes to establish what learning strategy Millennial students prefer most. Through this analysis, I sought to better educate today's teacher on preferred learning strategies and avenues for academic success in regard to the current generation of Millennial students. Others have made attempts to prove the effectiveness of specific strategies and technological tools, but I attempted to bridge the connection to generational studies while filling holes in past research methods.

Chapter Two

Literature Review

For centuries, researchers have labeled eras consisting of various groups of people in hopes of educating future generations on the abilities, disabilities, and characteristics of those that came before. Generations follow observable historical patterns and thus offer a very powerful tool for predicting future trends in the home, workplace, and overall society (Howe & Strauss, 2007). Coined by Howe and Strauss (2007) as Millennials, today's generation of students have come of age in the era of the quantified self where using technology to record their daily steps, hourly whereabouts, and even genetic data is commonplace. The information revolution has further empowered today's student by handing them advanced technology to compete against fulltime employees and huge organizations (Stein, 2013), and because of this, it seems as if Millennials don't need school. This is one reason why the adults working for, against, and along-side of them are intimidated; they are becoming irrelevant and now looking for answers (Stein, 2013). Though research defines the exact range of the Millennial Generation differently, one claim researchers have agreed on is that students in school today qualify as Millennials if they are born between 1982 and 2004 (Howe & Strauss, 2007, Wilson & Gerber, 2008).

With vague definitions, researchers attempt to determine what exactly breeds success within this cohort, and at the forefront are the effects of technology on academic performance. The exponential growth of technology has not only augmented the daily choices, motivations, and self-esteem levels of Millennials, but it has also affected the classroom where teachers must now adjust to maintain success. Gone are the days where rote memorization and lectures forcibly ruled the classroom. Now, student motivations determine material as teachers assign lessons and

projects that feature emotional and personal appeals geared toward connecting with the literature on a personal level (Bauleke & Herrmann, 2010). Alongside personal connections, the teachers still hold a responsibility “to teach students how to be careful, analytical, and attentive to significant details” (Secreast, 2013, p. 32). Due to the diverse and ever-changing lifestyles of Millennial students, teachers must re-educate themselves on the current generation while also establishing and reflecting on technology-based teaching practices that have shown success with today’s generation. Howe and Strauss theorize that whether “in business as in government, family life, and other areas, the people who succeed in navigating this future will be those who understand how history creates generations, and generations create history” (2007, p. 12). In order to better understand how to teach this generation, Wilson and Gerber (2008) further theorize in their article, *How Generational Theory Can Improve Teaching: Strategies for Working with the ‘Millennials’*, that instructors of Millennial students must 1) strive for greater clarity; 2) provide opportunity for student participation and choice; and 3) incorporate stress-reduction mechanisms to engage students. In my own action research, I strive to show Howe and Strauss (2007) and Wilson and Gerber’s (2008) theories on generational education are deeply necessary to effectively educate the current generation of students.

After briefly reviewing and summarizing my utilized sources in *Researching Generation Me*, my first overall goal for this study is to delineate the generalized characteristics of the Millennial Generation in regard to their educational motivations and social competencies in the section *Defining Generation Me*. Becoming more focused, I then better define the Millennial student’s affinities to educational technology usage in the classroom in *Developing Generation Me*. Finally, I use *Teaching Generation Me* to hone in on specific results from action research studies that utilize technology-based review strategies with Millennial students. My own theory

is that if teachers strive to understand the ever-changing technological motivations of the current generation of students, and structure their delivery in an organized, open, stress-free manner, classroom performance and enthusiasm will increase.

Researching Generation Me

Before teachers can begin to teach a group of technologically-literate Millennials, they must establish exactly how differently “Generation Me” thinks from the generations prior. Howe and Strauss (2007) define Generation X (born 1961-1981) as a group set at defying the norm and learning early to distrust institutions. Also, they stated that this group of students were seemingly unteachable, and these rebels were fine with that. Conversely, Millennials are said to be more confident, trusting, and teachable, yet more pampered, risk averse, and dependent (Howe & Strauss, 2007). Trzesniewski and Donnellan (2010) explore this idea in their study on cohort effects when comparing the current generation to those previous. In doing so, they feel the teacher can tap into the characteristics of the Millennial Generation by enhancing his or her curriculum to meet the specific wants and needs of the students. Vance (2012) investigates the truth behind the Millennials’ assumed technological wants in his survey of students on the implementation of Web 2.0 tools, web-based programs that encourage collaboration and real-time creation. When a teacher does choose to utilize technological tools, Savoy, Proctor, and Salvendy (2009) compare specific academic results between PowerPoint lectures versus traditional “chalk talks.” Similarly, Grady, Vest, and Todd (2013) seek to determine the effectiveness technology-based games have on the opinions of Millennial students. In all, the researchers attempt to define the wants, needs, and most effective tools when educating the new expectations of the Millennial Generation.

Defining Generation Me

In recent years, researchers have collected data through a variety of means in hopes of characterizing the current generation of students. Through surveys, pre and post-test data, and nationwide academic scores, many feel they have this group figured out. The positive Millennial attributes that would assist today's teacher are their optimism, ability to embrace the system, and imaginative means by which they complete tasks and create media (Stein, 2013). Their "no-holds-barred approach" to openness online forces them to collaboratively study, socialize, and travel in groups in order to lower the social pressures (Ricketts, 2009). With ever-increasing varieties of technology, Millennials must navigate an increasingly difficult and complex environment often without many rules or guidance (Considine, Horton, & Moorman, 2009).

These new creative boundaries and pressures to stand out socially and academically amongst the billions of people now readily available online have created negative qualities associated with this so-called Net Generation. Wilson and Gerber (2008) see this group as students under too much social stress who crave intense order when in classroom settings. Clarity in course structure, assignments, and grading expectations are necessary as the teacher is now also responsible for course-long conversations on why the class is necessary (Wilson & Gerber, 2008). At the same time, Millennial students hold unrealistic and narcissistic expectations concerning their academic abilities while also expecting to receive more praise for less work (Twenge, 2013). Stress levels are becoming even more intensified as parents of Millennials struggle to compete in a world where their parental success or failure can be broadcast for the world to see with one simple click. A more-educated parent and the increased speed of information have created "the enrichment culture," a world where parents want anything and everything for their child, and gaining an edge is never too early (McGrath, 2007).

Unfortunately, this has created scheduling conflicts, and the Millennials must be convinced that the time they are spending on anything is worth it.

Seemingly, generational differences can breed negative opinions and wrongly assumed stereotypes. The goal of Trzesniewski and Donnellan's (2010) cohort study was to evaluate evidence between changes in student feelings using a 30-year study of American high school seniors. They hoped that their post-test indications would in-turn solidify generational characteristics that schools or businesses could use to better understand their students or employees. By examining the millennial differences, they claim to be the first study to "examine secular changes across a large number of psychological constructs to directly evaluate the broad scope of claims made about Generation Me" (Trzesniewski, Donnellan, 2010, p. 62). This focused research methodology provides a more realistic definition of Millennial characteristics.

To assess the level of psychological attitudes, Trzesniewski and Donnellan (2010) select and score a small fraction of total questions that reflect specific characteristics. For example, a question such as "How intelligent do you think you are compared with others your age?" would measure the construct of *egotism*. With over 31 different constructs, Trzesniewski and Donnellan (2010) organize the data in a table to determine the zero-order correlation between each construct and birth cohort as well as average scores between generations.

Although Trzesniewski and Donnellan (2010) do not make significant correlation to the Millennials' feelings about technology, they do correlate the generational change in students' expectations, feelings about work, and cynicism of school. With a *d* score comparing the 2001-2006 mean to the 1976-1980 mean, the expectation to *Graduate college* recorded an average generational difference of $d=.64$ and was determined by questions pertaining to predictions of future education. The construct *Do not want to work hard* scored a difference of $d=.30$, and was

measured by questions on the subject of scores in school and cutting class. *Cynicism of school* scored a $d=.26$ and was measured by questions concerning the usefulness of school material both now and in the future. I theorize that the increase in cynicism and the negative feelings toward work is not a generational malfunction, but rather the inability of the educational system to keep up with the correct tools to motivate students in the 21st century.

Making generalizations about an entire group of people takes careful research and well-supported evidence. Often, people allow their limited perceptions and memorable exemplars to create availability bias when labeling generations. Trzesniewski and Donnellan state, “technology itself may also facilitate the impression that more recent generations are more self-absorbed or self-aggrandizing than previous generations” (2010, p. 70). By using raw individual data and a more concise sampling method, Trzesniewski and Donnellan (2010) believe that these scores are more statistically significant when determining who the Millennial student truly is. Unfortunately, the results are limited with no concrete examples and a small utilized section of the MTF questionnaire, but their results do paint a picture of a negative and needy student as seen in their high expectations to graduate without the need for sufficient work. With many teachers continuing to implement the same methods that were taught to the previous generation, there is no surprise that cynicism was high and motivation was low. Today’s teachers must strive to reverse the growing pessimistic trend with more constructive lessons and activities that are in tune with student motivations and expectations. For Millennials, time is precious, and entertainment is easy to come by; therefore, teachers must focus their attention on whatever they can do to motivate and connect with a difficult audience.

Developing Generation Me

With the advancement of technology comes a multitude of positive and negative results. Abounding are recommendations administrators give teachers to improve student motivation and overall classroom structure, and Web 2.0 is the latest life ring. According to Vance (2012) there is no standard definition for Web 2.0, but it can be loosely defined as technologies that reposition user-generated materials that are shared and discussed with other users or professionals. Web 1.0 on the other hand would be simple data transmission to the user or audience through a means of technology (Vance, 2012). Hoskins (2010) believes that learning is best when it is a social activity enhanced through the use of collaborative efforts, and Web 2.0 helps to accomplish just that. By offering a variety of free interactive learning opportunities to a community of creators, Web 2.0 tools allow for more practicality, efficiency, and overall creativity with media creation. With these ever-changing formats of technology, Millennials now “expect non-stop interaction with their peers in forms that would have been unimaginable to prior generations (Howe & Strauss, 2007, p. 10). These new behaviors are practiced and developed at home, but too often the skills are underdeveloped in school. Schools must strive to bridge the gap between home and school technology use through meaningful and constructive applications.

Also known as the Digital Generation, many Millennials have grown up surrounded by and interacting with technology since birth. Gone are the days of cursive writing and penmanship practice. Instead, “they are far more comfortable using a keyboard than writing in a notebook and happier reading from a computer screen than from paper they can hold” (Black, 2010, p. 94). Along with the simple transmission of text to a screen, Millennials multitask with media using resources, tools, and programs to assist as they learn. They use the technology as an extension of their brains as if they are fluently acquiring knowledge and intuitively understand digital language (Black, 2010).

As the classroom attempts to catch up to technology, the learning focus in academia remains the same, but the vehicles to access it have changed fundamentally (Black, 2010). The price of powerful technologies has dropped considerably, and students now can access seemingly unlimited amounts information with the simple power of their fingertips. With this advantage, an overall cynicism for school increases as the phones and computers of Millennials can, in their eyes, accomplish the same or more than the teacher. Technology now plays dual roles in the classroom, simultaneously aiding the students' ability to access information, but also distracting student performance if they feel unmotivated by the teacher (Blackburn, LeFebvre, & Richardson, 2013).

Vance's quantitative study aims at answering whether or not the Millennial student's inherent preparation and familiarity with technology in their personal lives translates into wanting to use the same forms in an academic setting. This study provides an excellent transition from Trzesniewski and Donnellan's (2010) where the research reported low motivation scores, but Trzesniewski and Donnellan did not provide any actual concrete examples to determine exactly what students were looking for in a review strategy. Vance seeks to answer the question that amidst all of the hype in the administrative realms about Web 2.0, do Millennial students even find it useful?

Although several researchers have previously framed studies around Web 2.0, Vance (2012) feels that others often incorrectly target their audience by studying students ages 8-10, a group that cannot fully utilize Web 2.0 tools. Also, many past reports focus on technology usage rates with students, not their perceptions of the technology. When opinions are recorded, teachers and administrators can reflect and make pedagogical changes accordingly.

Unlike Trzesniewski and Donnellan's (2010) systematic participant selection, Vance (2012) utilized convenience sampling of 1,874 college freshmen at UC Riverside. These freshmen were given the opportunity over a two-week period to complete an anonymous survey on which they answered questions regarding Web 2.0. The question sets in the study focus generally on the delivery, and not the vocabulary or grammar used in the lesson. Specifically, the questions featured on the survey focused on the participatory nature of Web 2.0 activities and the teacher delivery of Web 1.0 materials during class. Other questions pertained to the students' access to Web 2.0 and 1.0 tools, feedback on instruments used in the course, and their usage preferences for online tools.

Vance (2012) conducted a one-way ANOVA on the students' usage, preference, and suggestions. The between-groups calculations were not significant and showed a very close parallel among the courses. Using the Trzesniewski and Donnellan (2010) findings on the Millennial's lack of work response and increased level of cynicism, Vance's student preferences and suggestions data builds on the hypothesis that presentation format affects student motivations. An average of 68.5% shows that students have a preference for activities requiring social interaction while online. This includes the use of Facebook or other community building sites to share ideas and materials. Also, the use of PowerPoint to supplement instruction was favored up to 28% more than any other Web 1.0 tool. These results show that educators cannot compromise on the materials they are teaching, and a focus on short bits of socially-focused electronic communications better motivates Millennial students to succeed (Twenge, 2013).

Teaching Generation Me

With all of the new opportunities for distractions, today's teachers must instruct Millennial students to balance the instant gratification with deeper technological engagement

(Herman, 2012). The advancement of new, free educational technologies has opened the door for teachable moments and learning opportunities, but the influx of entertainment and non-educational games has blemished Millennials perceptions of technology usage. Students understand that technology can assist learning, but they need a sense of order and direction on how to correctly use it (McMahon & Pospisil, 2005). With technology-based standards in school, Millennials strive for greater clarity in structure, assignments, and expectations (Wilson & Gerber, 2008). Working with technology but without clarity may still motivate student usage, but the technological distractions are often too strong of a temptation to overcome. Bebell and Kay (2010) concluded in their study on 1:1 computer usage in schools that students are more likely to be engaged and motivated with technology, but that motivation does not necessarily return better scores. Likewise, Shapley, Sheehan, Maloney, and Caranikas-Walker (2010) discovered that overall academic success is possible only if technology becomes a cultural change on a school or district level.

With all of the studies that analyze the attitudes of Millennials, characterize their habits, and make generalized conclusions about the impact of technology, today's teachers crave research that focuses on content-specific practices. Building on Vance's conclusions of the need for both Web 2.0 and 1.0 tools in the classroom, Savoy, Proctor, and Salvendy (2009) as well as Grady, Vest, and Todd (2013) research actual technological tools to assess both the opinions and academic outcomes of Millennial students. Although Savoy, Proctor, and Salvendy (2009) focus their study entirely on Microsoft PowerPoint and information retention when compared to traditional lectures, Grady, Vest, and Todd (2013) study PowerPoint in a game format versus traditional lectures to record student opinions.

Both studies conducted by Savoy, Proctor, and Salvendy (2009) and Grady, Vest, and Todd (2013) use participants enrolled in universities. Due to the fact the ages of the participants fall into the Millennial category, basic generalizations are still possible. These generalizations could be even stronger if the sample size for both studies were larger. Savoy, Proctor, and Salvendy (2009) conducted their study with only 62 engineering students from Purdue University by providing both traditional “chalk talk” lectures and PowerPoint-based lectures in hopes of comparing posttest results on a quiz and questionnaire. Grady, Vest, and Todd (2013) design their three session study using 160 total students from one nursing course at Midwestern University Chicago College of Pharmacy. Their study focused on the employment of games using PowerPoint in lieu of traditional lectures to record student feedback.

Savoy, Proctor, and Salvendy’s (2009) experimental study featured a factorial design with two independent variables, the lecture content and the lecture delivery styles. The dependent variables were the scores the students achieved on the posttest quiz and their opinionated responses on the questionnaire. Grady, Vest, and Todd’s (2013) experimental study used three independent variables, Who Wants to be a Millionaire, Jeopardy, and Survivor. The dependent variable was the student opinions recorded on a questionnaire.

Grady, Vest, and Todd (2013) believed that active learning strategies worked best with Millennials. By analyzing the attitudes of Millennial students, they hypothesized that PowerPoint-constructed games would solicit positive direct student feedback. While both studies compared the opinions of students to the independent variables, Savoy, Proctor, and Salvendy (2009) analyzed the results with a multiple choice posttest to assess academic performance. This extra step better validates their hypothesis that the usage of PowerPoint activities will have a

higher perceived importance than traditional lectures simply because they have more quantitative data.

In Savoy, Proctor, and Salvendy's (2009) study, the professor followed the same detailed outline with the exact examples, figures, and order of delivery in both the PowerPoint class and the traditional lecture. To examine the effect of presentation style on information recall, a One-way ANOVA was used for each lecture and after a 2 x 2 mixed ANOVA was used for the combined result. After examining the results, it appeared that the mean differences in all variables between the PowerPoint and traditional lectures were relatively insignificant. One of the four hypotheses stated that students would overall perform better on assessments in a traditional setting, and the resulting difference was only 3% greater, an insignificant amount. Although learning was moderately lower than traditional lectures, students still preferred the use of PowerPoint through their responses to the post-quiz questionnaire, an expected result.

By teaching three different lectures with three different games, Grady, Vest, and Todd (2013) use the technology in a variety of functions. The researchers created *Who Wants to Be a Millionaire* in a pretest format, gauging student knowledge of a concept prior to lecturing. They also used a *Survivor* game that functioned as a one-time discussion technique mid-unit. Finally, they selected *Jeopardy* as a review format at the unit's end. Following the game-based classes, the students received a questionnaire where they answered constructed and open comment questions. Grady, Vest, and Todd (2013) used a one-sample Wilcoxon signed rank test to assess the Likert-type variables with the p value set at 0.05 and a one-way ANOVA to show the relationship between age and the ten opinion variables. With a variety of survey items, the most eye-opening results came when only 34.3% of students agreed that *I learn better in a game format than a didactic lecture* even though 84.9% enjoyed *Who Wants to Be a Millionaire* and

82.3% thought it *was an effective way to introduce a topic*. These results conflict with Savoy, Proctor, and Salvendy's (2009) in how they expose that students prefer PowerPoint-based lessons over traditional lectures even though the technologically enhanced lessons resulted in slightly lower scores on post-test quizzes.

Centered on the results from both PowerPoint-based studies, Millennials show a preference for all forms of technology in education, but those lessons must feature traditional constructs to generate academic results. If teachers seek demonstrable learning gains, the results of *Jeopardy* may not yield anything of significance. Instead, these games can be used for student satisfaction or a welcomed use of class time (Simken, 2013). Likewise, Millennials preferred the organized PowerPoint lecture versus a traditional direct instruction type in Savoy, Proctor, and Salvendy's (2009) study, but unfortunately the results on the assessment showed a three percent better academic results with those taught traditionally. Savoy, Proctor, and Salvendy (2009) conclude that there is a clear disconnect between the students perception of learning and their resulting academic performance.

Testing Generation Me

Attempting to determine generalized characteristics for an entire generation born over a twenty year span is a limited process, and many of the previous studies show flaws in one way or another. Trzesniewski and Donnellan's (2010) thirty-year generational characteristic study shows holes in their pro-Caucasian sample and low correlation effect. Likewise, Vance's groomed participants also show drastic limitations in regards to size and population. Although surveying almost 50% of the entire UC Riverside freshman class, the three chosen classes featured at least 58% and up to 83% English as a Second Language (ESL) students with up to 21% of the students learning English while growing up in a foreign country. Not one student passed the

Analytical Writing Placement Examination for the University of California system, and all three courses focus on instruction for reading, grammar, and syntax issues due to the students' below average fluency levels in English. Like Trzesniewski and Donnellan's (2010) 84% usage of Caucasian students, Vance (2012) creates potential bias that further affects reliability by limiting his participants to an ESL majority.

With the commonplace nature of technology in the lives of Millennials, they have become accustomed to seemingly seeing it in every walk of life. Trzesniewski and Donnellan (2010) showed that Millennials host high expectations while also displaying cynicism and low levels of determination with school work. Unfortunately, they did not research actual classroom examples. Vance (2012) did come closer to researching actual examples by attempting to answer Millennial opinions about Web 2.0 tools. Opposing the hypothesis that Millennials prefer modern technology over traditional formats, Vance (2012) showed that although Millennials use Web 2.0 in their personal lives, they also prefer Web 1.0 lessons that feature Microsoft PowerPoint. Savoy, Proctor, and Salvendy (2008) and Grady, Vest, and Todd (2013) tested the use of PowerPoint in two very different formats. In the end, students displayed mixed responses to the use of PowerPoint. It appears that a traditional-type lecture using PowerPoint was more preferred than a laid-back enjoyable game. The lack of seriousness attached to the game coupled with the disorganization was enough to lead to poor opinions. This shows that Millennial students, while appreciative of technology use, are still motivated by scores and traditional methods free from confusion or concern. Adhering to Wilson and Gerber's (2008) theory, it is clear that students crave an organized format that allows them to directly participate and interact in a low-stress setting. A purpose for learning and deeper meaning is clearly required, and the

Millennials appreciate the academically better yet spoon-fed materials accompanied by a low amount of work (Twenge, 2013).

Reassessing Generation Me

Vance's study took Trzesniewski and Donnellan one step further by focusing on specific tools that educators can use to improve student motivation, but it does not delve deep enough to include results for specific activities within those Web 2.0 programs. Further mixed-method studies should be deployed to determine specific student preferences and academically tested results.

Based on the research that I studied thus far on the Millennial Generation, I have taken Grady, Vest, and Todd's (2013) study one step further to answer the question, "How do technology-based review games affect overall qualitative and quantitative assessment scores of Millennial students?" Centered on Grady, Vest, and Todd's (2013) conclusions that students enjoy the games but do not see them as academically more valuable when compared to a traditional lecture, I show that an implementation of games versus traditional methods positively affects both the opinions and actual learning outcomes. The gaps and holes in Grady, Vest, and Todd's (2013) study include the use of three different games, on three different topics, during three different times of the one unit. Coupled with a small sample size and a variety of rules, the students' opinions of the games' teaching ability could have easily differed simply because of the rule and format confusions. In my study, I apply an equally organized format that produces an interactive and stress-free environment where, according to Wilson and Gerber (2008), Millennial students are able to thrive. By seeing the quantitative results on the summative assessments and comparing them to the qualitative feedback on the questionnaire, I determine how to better educate my Millennial students through the use of technology.

Chapter Three

Methodology

With the exponential growth of technology, the gap between the lifestyles of students and the practices of teachers is ever growing. In order to better teach a diverse cohort, teachers need to educate themselves on the characteristics of the current generation while also introducing technology-based teaching practices that mimic the everyday lifestyles of their students.

Based on the conclusions of recent published studies, students do enjoy technology-based review games but do not see them as academically more valuable when compared to traditional direct-instruction lectures (Grady, Vest, & Todd, 2013). I believe that the conclusions determined by Grady, Vest, and Todd (2013) meet some learning characteristics of the Millennial student, but due to the disorganization and lack of clarity in their study design, their results do not achieve the theory Wilson and Gerber (2008) present that Millennial students require organization and transparency.

In my study, I focused my attention on the usage of one specific type of technology-based review game, creating identical types of questions within two examples of this game, and administering the tools in two large unit review situations. With this consistent organization, I estimated more accurate results; therefore, my test and questionnaire data was able to better assist teachers' in understanding how Millennial students perceive the learning process and perform on assessments. I was able to make teachers more aware of the importance of technology in its connection to the academic success and opinions of Millennial students.

In this mixed-method action research project, the dependent variables featured a summative unit test and post-test questionnaire. By using the quantitative results on the summative assessments and comparing them to the qualitative feedback on the questionnaire, I

make wider and more accurate generalizations about the Millennial students in my classroom; therefore, I determine which technological review methods work best for them.

I first directed a unit review session of Jon Krakauer's *Into Thin Air* using a PowerPoint-based review game followed by a summative unit test. I compared the test results to the results of a similar unit, Elie Wiesel's *Night*, where I used a more direct-instruction method for the review strategy. Both review options featured the same types of questions, but only differed in presentation. After both summative tests, the students completed the same post-test questionnaire to assess their opinions on the review strategies. In all, the process took approximately two months from the beginning of the first review to the end of the second test.

I collected and recorded data using the summative test answer keys and the Likert-scale questionnaire results, and I stored the physical results until the 2015-16 school year. Regardless of the participation in the study, the students test results were privately posted to Infinite Campus for individual viewing.

The contents of this chapter feature the direct background details of this action research project. The *Context* heading introduces the specific information about the general location of the study. The *Participants* heading features the total number of participating members and other pertinent information regarding selection. The *Questions* section provides my pertinent goals of the study and hypotheses. *Procedures* and *Instruments for Data Collection* both detail the methods by which I conducted the study and the devices that I used. Finally, in the *Analysis* section I will address the hypotheses and questions in regard to the data, but I will report the actual data results in chapter four.

Context

The location for this action research project is a suburban high school located in the Midwest. The school is the sole high school in a large district that services more than 4,993 students, kindergarten through twelfth grade, with six elementary schools, one middle school, and one high school. The student population at this high school is made up of 92% Caucasian, 4% Hispanic, 1% Black, 0.8% American Indian, and 0.8% Asian. A total of 89% of the students attending are not economically disadvantaged while 10% are enrolled with disabilities. The high school itself serves over 1,734 students-ninth through twelfth graders with over 78% of students attending college after graduation.

Participants

Employed as a secondary level English teacher, I selected my 44 study participants from my 2014-15 Sophomore English classes. Prior to the school year, the guidance department in cooperation with the special education department determined the mental and physical health of my participants in order to correctly place them in my class. The school required any students taking Sophomore English to meet academic criteria during ninth grade as a prerequisite for the class. Students involved in augmented programs featured individualized education plan instructing the teacher on how to differentiate learning.

The participants in my study were considered minors between the ages of 14 and 16 without any significant cognitive disabilities. The rationale for selecting this group was that they were readily available participants for a secondary teacher conducting a research study. The opportunity to formulate an expected outcome, introduce curricular changes, and monitor results is a situation that was freely available in a teacher-student relationship.

To begin, I notified the parents and students of the study via email and written letter (see Appendix A). The classes received these recruitment letters at least two weeks prior to the first review session to ensure their willingness to participate in this study and time to collect permission slips. The development of the recruitment letter is necessary in order to legally make students aware of the research in progress. Parents had the opportunity to opt their son or daughter out of the study by checking a specific box, signing, and returning the letter. The students and parents were allowed to see their son or daughter's results individually on the specific summative assessments, but they did not receive the results of the entire study (unless requested). Any student names or specific distinctions remained unused, and I strove for complete anonymity.

I anonymously included only those enrolled in my two Sophomore English classes as the participants in the study. Students excluded from the study were those who declined participation, received an augmented assessment due to academic modifications, or were absent for both the review and assessment sessions. Out of a total of 48 students, four students were not included. Two of the four did not return a consent letter, and the other two chose to decline participation in the study. None of the students were absent during the review strategies, and I did not have to augment any assessments for special education purposes.

Questions

Going into this study, my major hypothesis was that after receiving two different forms of review, both in a clearly organized manner, the students would demonstrate a greater proficiency in overall academic performance after using the technology-based game. I tested this hypothesis using both qualitative and quantitative means of assessment in the form of summative tests and questionnaires. My first question was: Does the inclusion of an interactive PowerPoint-

based technology in one of the review strategies positively affect the quantitative test performance of students? This was addressed using the comparison between the summative test results of both literature units. My second question was: Will student opinions appear more favorable for the technology-based game or the direct instruction review strategy in regard to direct academic success? Unlike Grady, Vest, and Todd's (2013) students who had negative opinions on the organization of the technology-based review strategies, my consistent construction between units and clarity of instructions positively impacted student opinion of the technology-based game as determined by the results of my questionnaires. Finally, my third question was: Do the qualitative opinions and quantitative results reflect the overall characteristics of Millennial students as determined by academic research? I used the questions and responses on the post-test questionnaire to gauge the determined positive Millennial traits of optimism (Stein, 2013), adaptability (Stein, 2013), and collaborative thinking (Ricketts, 2009) while also looking at the determined negative traits such as their tendency for intense structure (Wilson & Gerber, 2008), narcissism (Twenge, 2013), and unrealistic academic expectations (Twenge, 2013).

Procedures

I conducted my first unit review session of Jon Krakauer's *Into Thin Air* using one self-created PowerPoint-based Jeopardy review game on November 10, 2014 and summative test on November 11, 2014 (see Table 3.1). I then compared the test results to a different unit, Elie Wiesel's *Night*, where I used a Smart Notebook-based outline study guide on January 13, 2015 and similarly constructed summative unit test on January 14, 2015 (see Table 3.1).

The two review sessions for both Sophomore English classes took one full class period (52 minutes) to complete. Similarly, the students completed the resulting summative assessments

and questionnaires together in one full class period. The first review session and summative test occurred at the end of the *Into Thin Air* unit and the second after the *Night* unit. I completed the data analysis and reporting of results by June of 2015.

The first review procedure in this study was the interactive, PowerPoint-based review Jeopardy game at the end of the *Into Thin Air* unit (see Appendix E). This process involved the usage of Microsoft PowerPoint to display the events, characters, vocabulary, and terms associated with the book in an interactive and collaborative manner. I divided the class into three teams using a random-group-generator. Afterwards, each student was made responsible for walking up the front of the class to participate in answering a question while competing against two other contestants. The questions were organized into categories, and varied in difficulty according to their point value. During this time, the students themselves were selecting which questions to attempt versus having me the teacher directly instruct them in a set order.

On the following day, the students completed a 60 question summative assessment on *Into Thin Air* (see Appendix C). This assessment featured a variety of multiple-choice question-types that tested the student's overall understanding of the events, characters, settings, quotes, vocabulary, terms, and universal themes associated with the book and unit.

Following the summative *Into Thin Air* test, the students completed a Likert-based questionnaire (see Appendix D) regarding their opinions on the format of yesterday's review method, their assessment preparedness, and the effectiveness of the review method in regard to their perceived successes on the test.

The second procedure in this study is the direct instruction review method at the end of the *Night* unit. This process involved the usage of Smart Notebook to display a study guide (see Appendix B) featuring a series of events, characters, settings, vocabulary, and terms associated

with the book. For each name or term, I openly called on both random students to describe any associated details or answers. If students were unwilling to answer, I directly instructed them with verbal assistance. With each prompt, I answered specific concerns that students pose before moving on to the next question.

On the following day, the students completed a 55 point summative assessment of *Night* (see Appendix F). This assessment featured the same variety of categories and types of questions when compared to the *Into Thin Air* test. The test assessed the students' understanding of the events, characters, settings, quotes, vocabulary, terms, and universal themes associated with the book and unit. The number of questions on the *Night* test was smaller due to departmental requirements on common unit assessments.

Following the summative *Night* test, the students completed a similar Likert-based questionnaire (see Appendix G) regarding their opinions on the format of the review method, their assessment preparedness, and the effectiveness of the review method in regard to their perceived successes on the test.

On the next page is a table for the timeline of major events involving data collection in this study.

Table 3.1 Timeline of Events

Dates	Description
October 27, 2014	Delivered recruitment letters to students and parents both via handout and email. Ensured the students read the instructions and return a parent-signed copy prior to the November 10 review session.
November 10, 2014	Delivered an interactive, collaborative review game using PowerPoint for the major unit involving Krakauer's <i>Into Thin Air</i> .
November 11, 2014	Delivered a summative assessment and post-test questionnaire to the students in regards to the review methods and summative assessment for <i>Into Thin Air</i> .
January 13, 2015	Delivered traditional, direct-instruction outline review method using PowerPoint for the major unit involving Wiesel's <i>Night</i> .
January 14, 2015	Delivered a summative assessment and post-test questionnaire to the students in regards to current and former review methods and summative assessment for <i>Night</i> .
March 10, 2015	Assessed test and questionnaire results to determine the academic effectiveness of the review strategy and comparisons to the Millennial characteristics.

Instruments for Data Collection

The instruments used for this study were two similarly constructed summative tests and two similarly constructed Likert-based questionnaires (Appendix D, G). The similarities between these tools were important in order to maintain more accurate results while also assisting in my post-test hypothesis analysis. The student scores on the summative tests were assessed using a Scantron answer key. All of the questions for both assessments were objective and have only one correct answer. Using Likert scales and constructed responses on the post-test questionnaires, I evaluated the students' optimism prior to taking the test, adaptability during the review session, post-test expectations, and opinions on the level of collaboration and review structure. With these data points, I compared the results to the characteristics that Rickes (2009), Wilson and Gerber (2008), and Twenge (2013) established in their research on the Millennial Generation.

The construction of both the *Into Thin Air* Jeopardy and *Night* review questions were based on similar unit topics and expectations. For both units, the students were reviewing their knowledge of events, characters, settings, quotes, vocabulary, terms, and universal themes associated with the books for one class period (52 minutes). I created a difference between the review techniques to test my hypothesis that the usage of an interactive PowerPoint-based game has a greater positive affect on test performance when compared to direct instruction. The summative assessments for both units occurred for one full class period one day after the implementation of the review strategy. Administered on the same day following the summative assessments, I expected the students to complete the Likert-based questionnaires prior to leaving the classroom. The subjective results that these questionnaires produced allowed me to answer my sub-questions regarding student opinions of review methods and their connection to the research-determined characteristics of Millennials.

Analysis

After I collected the data from the two sets of summative assessments through the use of the answer key, the class means for both tests were compared to determine whether or not the inclusion of an interactive PowerPoint-based technology in one review strategy positively affected the quantitative test performance of students.

For my qualitative data collected from the questionnaires, I focused on six major Millennial themes in the creation and analysis: optimism (Stein, 2013), adaptability (Stein, 2013), collaborative thinking (Ricketts, 2009), a tendency for intense structure (Wilson & Gerber, 2008), narcissism (Twenge, 2013), and unrealistic academic expectations (Twenge, 2013). The questions numbers for both questionnaires matched in characteristic focus. Question number one and two focused on visual organization and the structure of the review strategies. Question three focused on the analysis of collaborative thinking. I used question four for the adaptability assessment. And questions five and six were used to assess optimism, narcissism, and unrealistic academic expectations.

I compiled these results using the total numbers of the Likert scale items associated with each characteristic. When assessing these strength themes, I compared the student feedback to the research-determined characteristics of the Millennial Generation. This comparison determined the accuracy of the generalized characteristics of Millennial students.

Throughout the process, the only identification information provided regarding the students are the neutral gender and demographic data on the combined classes. The unnamed numeric data collected from the *Into Thin Air* summative assessment came in the form of an average score that I compared with the data I collected from the *Night* summative assessment. I safeguarded all numeric and name data within my classroom and granted access to individual

scores online only with proper student/parent log-in. The data was not used beyond this study, but the results of the hypothesis allowed for adjustments or modifications of future curricula in my classroom.

Chapter Four

Results and Discussion

To serve as evidential support for my hypothesis that Millennial students are positively affected by technologically-based review practices, I collected both quantitative and qualitative data in form of a multiple choice summative assessment and a Likert-scale questionnaire. Both tests consisted of objective questions that focused on the events, characters, vocabulary, and terms associated with the book. I administered both the *Into Thin Air* and *Night* unit tests in the same time frame and to the same number of students. Following the assessment, the students answered questions that I developed with specific Millennial characteristics in mind. Using nearly identical questions on a four-point scale from “strongly agree” to “strongly disagree,” I asked the students to rate their opinions on the review process. The analyses of data show that with the implementation of the technology-based review strategy, students both performed better on the summative assessment and responded more favorably to the social and competitive structure of the game environment.

The target population for this research consisted of two Sophomore English classes with a total of 48 students. From the original total, four students did not participate. Two of the four did not return the consent forms and two chose to abstain from participation. For both of summative unit tests, I compiled the scores and found the overall mean for all 44 participating students. To test the hypothesis that students academically perform better when engaged in technology-based review strategies, I compared the mean score results of the test with the *Jeopardy* game review versus the test with a direct instruction review discussion.

The review strategies were both made of objective questions with one direct answer. The delivery of the questions for both were randomly chosen as were the students answering, but the

interactivity of the *Jeopardy* game allowed for a visual display and competitive edge. The combination of manipulation, visual display, and competition were significant influences in the performances of the study participants as represented by the average test scores and questionnaire results.

Summative Tests

The *Into Thin Air* test consisted of 60 multiple choice questions and the *Night* test had 55 multiple choice questions. In regards to *Into Thin Air* results, the first class (22 students) reported a mean score of 78.3 percent and the second class (22 students) reported a mean of 81.6 percent. The combined mean for all 44 participating students on the *Into Thin Air* test was 80.0 percent. Reviewing the *Night* test, the first class recorded a mean of 76.0 percent and the second class averaged 74.5 percent. The combined mean for the *Night* test was 75.3 percent.

I had a primary reason for my coordination of the *Jeopardy* game with *Into Thin Air* versus the *Night* unit. Historically, I have experienced difficulty getting students to score high on the *Into Thin Air* unit due to the book's difficult vocabulary, character names, and situations. Oppositely, the *Night* unit tends to be a beacon of hope for sophomores. A seemingly more personal account, easier readability score, and smaller amount of characters are reasons why *Night* draws students in. When assessing the mean results from all of the summative assessments, whether it was class to class or overall, the averages of the *Into Thin Air* test were higher than the scores on the *Night* test. A 4.7 percent overall mean difference between the two assessments is a considerable gap, but an even more noticed improvement was the 7.1 percent gap for the second class of students. The major difference between the test preparation for *Into Thin Air* and the preparation for *Night* solely exists with the inclusion of a technology-based game. These statistics and overall observations fully support the hypothesis that an interactive and

manipulative review game positively affects the academic performance of Millennial students when compared to a direct instruction technique.

Reflective Questionnaire – *Into Thin Air*

Grady, Vest, and Todd (2013) displayed that students did not feel that they learned better using technology-based strategies as a serious means of review for summative testing. With consistent organization, clear rules, and a team approach, my *Jeopardy* game was not only an academically successful strategy, but it was a widely popular approach. Using a six-question Likert-scale questionnaire after the summative test for the respective units, each participating student had an opportunity to voice his or her opinion on several areas of the review process.

Prior to the start of the Jeopardy review game, I ensured the rules were clearly and quickly defined through verbal instruction and minimal gestures. Specific gameplay rules included:

1. Each student on a team must participate once before repeat participants.
2. Each participation requires three students (one from each team) to stand in the front of the classroom.
3. Students will choose questions from a prearranged digital display of four categories per two rounds.
4. The question value ranges in points from 100 to 500 in round one and 200 to 1000 in round two.
5. Students are not required to answer, and one incorrect response disqualifies them, but the response does not count against the team's points.
6. Students that choose to answer must be the first to grab a roll of tape to begin his or her opportunity.

7. Fellow teammates cannot assist in the answering of individual questions.
8. After rounds one and two, a *Final Jeopardy* round will be played which required each team to collaboratively discuss a point wager and an answer to one overall question.
9. The winning team is determined by the overall number of points at the end of *Final Jeopardy*. During this game, 41 questions were covered and 48 students participated (including the four students who declined participation in the summative test results).

Targeting the confusion that resulted with the wide variety of games and rules in Grady, Vest, and Todd's research, I aimed instead to keep the rules simple and effective. Question four on the *Into Thin Air* reflective questionnaire states, "The speed of the *Jeopardy* game was hard to adapt to because the rules were unknown or confusing." Of the 44 participating students, only one student either agreed or strongly agreed with that statement. Instead, 98 percent of the students overall disagreed with any rule confusion and 45 percent strongly disagreed with the rules impeding with their ability to participate or learn. Due to the clear expectations, students did not appear distracted.

With clear rules comes fewer questions and better attention. Question two of the *Into Thin Air* reflection questionnaire states, "The interactivity of the *Jeopardy* game was too distracting, and I found myself losing focus." Although the game had several moving parts, and I required each respective student to participate according to the quickly discussed rules, the students did not feel as if the game itself distracted them from the learning process. Of the 44 participants, only two agreed, and felt their focus was not consistent. Oppositely, 95.5 percent of students disagreed and felt that during the game they were able to remain focused amidst the interactivity and new rules.

Reflective Questionnaire - *Night*

On the contrary to the *Into Thin Air* review, the rules for the *Night* review strategy were simple. A student was randomly selected to answer a question that was verbally stated by the teacher. Each student participated before repeating. During the answering of the question, others were not permitted to assist unless the randomly-selected student could not produce an answer. The rules were clear, the room was overall quiet, and the students were still responsible for giving a (seated) response out loud. When the answer was given or determined, it was revealed on the screen for the class to see and record. None of the 41 questions were repeated, and all of the students in attendance (48) were required to participate.

Observing the results from a straightforward and organized lecture in Savoy, Proctor, and Salvendy's (2009) research, their students performed better with a more traditional, simplistic approach, although they preferred a PowerPoint-based game. When observing question two from my *Night* questionnaire, my participating students showed mixed results. Of the 44 participants, 36.4 percent disagreed with the statement, "The simplicity of the *Night* review strategy was clear and not distracting; therefore, I found myself more focused and prepared." With the remaining 63.6 percent of students appreciating the straight-forwardness of a lecture by agreeing and strongly agreeing with the simplicity focused question, it is clear that the more focused methodology was beneficial. One student said in the comment section, "It was simple and easy and I could focus on my own mistakes. I think this helped my overall test score." Another said, "I felt like this helped me more because it was more descriptive and focused." Although a majority exists in favor for the simplicity of the strategy, the number that did not appreciate the straightforwardness (36.4 percent) is much larger when compared to the one lone student who disliked the confusion caused by the detailed construction of the *Jeopardy* game (2.3 percent).

Electing to read the questions to the students without an interactive visual display appeared problematic for some during the *Night* review. Question one of the *Night* review questionnaire states, “Because I saw the answers on paper and heard them being discussed verbally, I was able to visualize the answers more easily on the test.” Of the total population of participants, zero students strongly disagreed, but 31.8 percent disagreed and felt that they were not able to visualize the answers more easily on the test. In the comment section of the questionnaire, one individual student wrote the following response, “I like the Jeopardy more because everyone is involved and when people get stuff, the image sticks in your head. For *Night*, it wasn’t as interactive and exciting so it didn’t stick in my mind as well.” Another student wrote, “I think it was helpful to verbally review; however, it does lose some interest and isn’t as helpful as Jeopardy.” From the results, it is clear the majority of students did appreciate the review strategy before the test, but even though I presented essentially the same type of questions, it was the means by which I presented that played the biggest factor in student focus and perceived success. By comparing the one student who believed the *Jeopardy* game did not allow him or her to visualize answers on the test to the fourteen students who did not feel the *Night* direct instruction improved their test scores, it is apparent that the students heavily favored the interactive method. The results were still displayed on the screen following a correctly or incorrectly answered question during both reviews, but the students craved the interactivity and manipulation of the game to create lasting memories and subsequently better test scores.

Reflective Questionnaire – Overall Score

Reviewing the responses from the questionnaires for both units showed that overall students do appreciate review strategies for the last second comprehensive discussion prior to the summative test. To quantify this opinion, question six on both of the questionnaires focuses on

the overall perceived improvement in test scores based on the presented review strategy. With *Into Thin Air*, the students received the following question, “After taking the test, I know that the *Jeopardy* game helped my overall score.” To that question, the total overall number of students simply in agreement was 86.4 percent with eight total students strongly agreeing. The percentage of students who felt that the *Jeopardy* game did not improve their test scores was 13.6 percent, and only one student in that group strongly disagreed. Instead, in the comment section seven of the student cited the “fun” that the game brought as the main reason why it allowed them to remember more.

Examining question six for the *Night* questionnaire, the students were asked to answer, “After taking the *Night* test, I know that the review discussion improved my overall score.” To this prompt, 72.7 percent of students were in overall agreement with only four of that total number strongly agreeing. When examining both sets of responses, it is clear that the students do agree that a review strategy is effective in regards to preparation for a summative test. Although, with a higher number of students both strongly agreeing and overall in agreement for the *Jeopardy* game, this research concludes that the usage of a *Jeopardy* review game does achieve favorable reviews in terms of both its interactivity and academic support in review situations. Students still do appreciate and see a benefit in a more traditional verbal question and answer approach, but the involvement with technology and other students in a team situation appears to make a more lasting impression as the comparative results from question six represent.

Reflective Questionnaire – Characteristics of the Millennial Generation

Teaching a class entirely comprised of Millennial Generation students, I sought to determine not only the opinions they hold about the review strategies, but I also wanted to connect those opinions to preconceived notions about the generation as a whole. This study

strongly presents the determined Millennial traits of optimism (Stein, 2013), adaptability (Stein, 2013), and collaborative thinking (Rickes, 2009) through the usage of the reflective questionnaire and overall test scores.

Question number five of both the *Into Thin Air* and *Night* questionnaires focused on the student's academic confidence after the review game and prior to the summative test. Using both of the answer totals combined, there were only eight instances out of a possible 88 where a student did not feel confident going into the test. This result aids in the argument that the Millennial students approach tasks and obstacles with a high level of self-assurance.

When presented with a clear organizational change in the presence of the instructor, the Millennial student is able to quickly adapt to meet the expected needs. As question four of the *Into Thin Air* reflection questionnaire states, "The speed of the *Jeopardy* game was hard to adapt to because the rules were unknown or confusing." When examining the results, only one student (2.3 percent) believed the rules were unknown or confusing, 98 percent of students overall felt that they understood the rules, and 47 percent of those disagreed with the question felt strongly about it. This was this highest number of students selecting either a strongly agree or strongly disagree category. I administered the lengthy list of rules prior to the beginning of the game, and this was the first time that these rules have ever been used before in the classroom. From these observations, I can conclude that the Millennial student does in fact show strong signs of adaptability when presented with a new situation within the classroom. Their ability to adapt to new structures made transitioning easy and unlike Grady, Vest, and Todd's results that were limited by poor organization, my *Jeopardy* game produced stronger positive opinions and subsequently elevated test scores.

It appears that with the Millennial student, two heads are always better than one. Question three of the *Into Thin Air* questionnaire states, “Working as a team in Jeopardy decreased my focus because I knew others would do the work for the team.” Nine out of the 44 students (20.5 percent) agreed that the team aspect detracted from their overall focus and participation. Expectedly, 75 percent of the participating students disagreed and felt the team construction did not hinder their focus, while 4.5 percent strongly disagreed. In support of the team aspect, eight students wrote in the comment section that it helped them pay attention. On the *Night* questionnaire, I asked the students to respond to statement number three, “Working individually allowed me to see my own mistakes and focus on each question one at a time.” Expectedly, the students did see the value in the activity with 70 percent in overall agreement, but 30 percent felt that the individual organization of the *Night* strategy was not helpful and either disagreed or strongly disagreed with the statement. This 30 percent is ten percent higher than those who opposed the team constructions in the *Jeopardy* review questionnaire. Although the Jeopardy game required students to work both individually (answering questions) and collaboratively (*Final Jeopardy*), the overall concept of a team strategy is what lead to an increased feeling of competitiveness and responsibility. With 80 percent of students overall in favor of the team construction in *Jeopardy*, I can confirm my hypothesis that students in the Millennial Generation are more willing to work as a part of a team versus individually.

The perceived negative traits of the Millennial Generation were also on display throughout this study. The answers collected on the questionnaires in combination with the test scores confirm the Millennial’s tendency for intense structure (Wilson & Gerber, 2008), narcissism (Twenge, 2013), and unrealistic academic expectations (Twenge, 2013). One can see all three of these attributes in the students’ inability to follow a strong review session with a

strong assessment grade. Seeing that there were only eight out of a possible 88 situations where a student did not feel confident going into either test, I can assume that the students are optimistic about their results, a trait that is positive for this generation. Unfortunately, this perceived optimism does not always translate into academic success. There were only two students out of the 44 taking the *Into Thin Air* test who listed that they did not feel confident, yet there were seven total students who failed the test (69 percent or lower) and 10 total students who received a grade of D+ (74 percent) or lower. On the *Night* questionnaire, only six total students believed that they were not “better prepared” having gone through the review session. With so many confident in their preparation, it is alarming that 14 students failed the *Night* test and 18 received a grade of D+ or lower. It is perplexing that when combined 86 percent of students felt better prepared, but 40 percent of the same students received below average grades.

This difference between perceived preparation and actual performance is problematic for the Millennial student. Their identification of a positive review session combined with a high level of academic self-confidence did not always translate into realistic results during this study. To me, my numbers support previous research that defines Millennial student’s as academically narcissistic through their misinterpreted estimations of skill. Feeling confident about oneself after the review session is only one-step toward actual academic success. The student must continue to practice outside the class to achieve higher results.

Although both review sessions did display an intense structure in terms of the rules and operation processes, they only provided the students with verbal questioning and instantaneous assessment. I did not provide a worksheet or template to record questions. While recommended, not one student self-directed themselves and attempted to write information down. By replacing a structured, direct instruction note session with a more relaxed and interactive game, the

students who scores were below average lost the usual intense arrangement and floundered in their at-home studies. Without me personally telling the students *exactly* what to study at home via a guide, practice set, or handout, many who initially thought they were prepared received a rude awakening come test time. These unrealistic academic expectations on what a student must put forth outside of school combined with an egotistic perception of preparation eventually lead to failed expectations with a summative unit assessment.

Chapter Five

Recommendations and Conclusions

Conclusions

My observations of various inadequate teaching practices that teachers implement with students today guided the organization of this action research project. After I noticed the success that I have had historically when using technology-based games over traditional review lectures, I sought to determine if the connection between the game itself and the overall characteristics of the students in my class created the success. Being an early member of the Millennial Generation myself, I have seen both worlds in the realm of academia. The advent and mass availability of personal computers, the internet, and eventually the smart phone changed my personal education and my teaching practices. I have always been one to adapt to the cultural habitat in which I found myself, and I questioned why others were hesitant to take the leap into the “brave new world” of technology.

In several areas of my collected data, I saw support for my hypothesis that an interactive review strategy would improve the academic performance of the Millennial student on a summative unit test. In the end, the *Into Thin Air* unit with the *Jeopardy* game averaged an 80 percent final score while the *Night* unit with a non-interactive approach only averaged a 75.3 percent score. Even when separating the data points by class, the interactive review proved to be more successful. I constructed the review sessions to provide the traditionally more difficult *Into Thin Air* unit with the perceived more-favorable strategy, and it produced positive results. Unfortunately, the fact that I tested two widely different books over two extensive periods limited my results.

With the use of the post-test questionnaire, I sought to demonstrate that my Millennial students truly do express the personal characteristics that other researchers have used to define the culture. By asking questions I framed according to the characteristics of optimism, adaptability, collaborative thinking, a tendency for intense structure, narcissism, and unrealistic academic expectation; I found that the results supported all of the characteristics. A poignant finding was the Millennial's display of egotistic pre-test confidence combined with their unrealistic academic expectations beyond the classroom. The most compelling statistic to prove this was when 86 percent of the participating students felt the review strategy better prepared them for the test, but in the end, 40 percent of those in the study received a below average score. Unrealistically assessing their preparation and feeling potentially too confident in the review strategies, those students did not do what it took outside of class to personally prepare.

Limitations

In the construction of my action research, the comparison between the two units of study has its limitations. Because the units are both approximately one month long, and I am assessing them on a lengthy piece of literature, the margin of error is much greater. Had I assessed the students using smaller pieces or selections that they read as a class, the number of students actually reading the selections would be expectedly greater. Working with large pieces of non-fiction, *Into Thin Air* being almost 500 pages, there is a good chance that some students simply did not read, and therefore did not perform well on the assessments. Their reason for not reading could have been due to absences, illnesses, disinterest, or schedule conflicts. In addition, the sheer fact that the two units were entirely different topics and books could have led some students to simply find one more entertaining or easier than the other hence the improvement in the scores.

In order to combat this limitation, I purposely chose to incorporate the *Jeopardy* game with *Into Thin Air*, a book that traditionally my students have a much more difficult time with. I have come to expect higher scores with *Night*, so when I saw the glaring differences between assessment scores, even though I taught it the same as years past, I was surprised to see the drastic improvement with *Into Thin Air*, and the struggles with *Night*.

When investigating generational studies, the major limitation is the generalization and apparent stereotyping that occurs when putting every person in an age range into a list of characteristics. By considering all of my students Millennials, I am assigning characteristics and traits that not all students show. In addition, by focusing on those who answered differently or received poor grades on the assessments, I am making blanket assumptions about all of the participants. Although very subjective, what give the findings ground and support are the repeated instances of behavior trends that other researchers and I have found. The students displayed Stein's generational assessment of optimism and adaptability (2013), as well as Ricke's findings of collaborative thinking (2009) through the positive *Jeopardy* experience. Unfortunately, negative traits such as Wilson and Gerber's Millennial requirement for intense structure (2008) and Twenge's establishment of narcissism coupled with and unrealistic academic expectations (2013) led to what could have been higher summative test results.

Recommendations

These findings from my research have given me validation and insight into how my students learn, but if I were to conduct this study again, I would want to alter a few areas of weakness. In a perfect environment, I would like to give differing review strategies to differing classes within the same unit. This would require me to teach an *Into Thin Air Jeopardy* review for one class, and a basic instructional *Into Thin Air* review for another class. Both sections

would take the same final assessment, and I would be able to better gauge whether or not the review truly had an impact on how they performed on the final test.

In regards to the post-test questionnaire, I regret not including a question that simply asks the students which review method they preferred overall. I would like to expand the question set to make each shorter and more objective in their results versus my subjective analysis of a longer question. For example, when asking students to respond to the statement, “Working as a team in Jeopardy decreased my focus because I knew others would do the work for the team,” students could have been distracted for other reasons not specifically relative to teamwork. In addition, an inclusion of a post-review questionnaire and a post-test questionnaire would be useful to assess the student’s feelings of preparation both after the review day and after the final assessment. With that design, I would be able to make a more accurate analysis of the student’s preparedness, motivations, and reflections both before the test and after the test.

Implications

Adults say, “Kids today have no initiative.” Teachers complain, “These kids just don’t get it.” Parents argue that their child is from a different planet. Truthfully, they are all figuratively correct. Although society has given today’s generation of children higher expectations than ever before, those very same children are now turning the tides and demanding the same high expectations from those in charge. Working with children living in a society focused on showing, telling, and playing it does not surprise me that the review interactions that did not include manipulation or entertainment did not excite them. The adult is wrong. The child today does not lack independent initiative, but instead they are better suited to find that initiative when working collaboratively or collectively. The teacher may complain that the student just does not show a motivation to understand, but many teaching practices still implemented today

were suited for a different generation of kids with vastly different interests, expectations, and goals. With more and more on the plates of children today, teachers need to manipulate their lessons to meet the motivational needs of students when they are both in the classrooms and doing work at home.

From the 1980s to today, this planet is drastically different. I am working with lifeforms that did not exist mere decades ago. With this entirely new product of child, all who come into contact need to find out what makes the Millennial Generation work before they can expect exceptional results. One cannot expect a machine to dig, compute, or succeed without first knowing how it operates. Knowing how in this case specific human beings work requires a brief read in the Generation Me Instruction Manual. Unfortunately, like any other machine, there are areas where repairs are necessary, and the Millennial Generation is not void its problematic flaws. Because the speed of technology has created distinct generational differences unlike any before, the demand to assimilate these generations has its drawbacks. The now high expectations that Millennials require from prior generations gives the changes a narcissistic air that screams, “my way or the highway.” Teachers are changing for the students, parents are caving, and companies are changing infrastructure to accommodate wants versus needs. Now with a dependency on others, the needs of the Millennial generation require clear and direct objectives that spell out exact demands. However, even when there are apparent outcomes and consequences, the future goals and expectations lack a realistic focus and appreciation.

In order to produce the best product, generations must work together instead of apart. With my student’s overall positive opinions on the *Night* review session, it was clear that teachers still need to include direct methods somewhere in their lesson designs. On the other hand, with stronger opinions and noticed summative test improvements when using *Jeopardy*,

teachers must begin to overall emphasize a more interactive and collaborative approach to instruction. Both the direct instruction of the *Night* review and the team-based technique of *Jeopardy* produced overall positive responses, but an interactive approach will lead to fewer complaints and as a result greater communications and congratulations. The fault for this rift between apparent cultures is not on the Millennial Generation, for they are simply living the technologically driven life they have always known. The fault instead lies in those who are unwilling to adapt to an ever-changing world.

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Dear Parent or Guardian:

Identification of Investigator and Purpose of Study

Your son or daughter is invited to participate in the data collection entitled “The Impact of Technology-Based Review Games on the Performance of Millennial Students.” The study is being conducted by Mr. Zach Schneider of The University of Wisconsin-Whitewater with both sections of Sophomore English during the 2014-15 school year.

The purpose of this research study is to examine how the usages of technology-based review strategies affect overall student opinion and performance on unit tests. Students’ participation in the study will contribute to a better understanding of how students born in the Millennial Generation learn in hopes of improving the overall curriculum-usage and teaching strategies of Mr. Zach Schneider. You are free to contact him at the provided email address or phone number to discuss the study further.

If you agree to give your permission:

- Your son or daughter’s achieved scores on two unit tests will be totaled and analyzed anonymously.
- Your son or daughter’s name/s will not be features in any report.
- No identification markers will be included to determine the results of a specific student.

Risks/Benefits/Confidentiality of Data

There are no known or expected risks for participating in this study. There will be no costs for participating, nor will academic success be guaranteed. Your son or daughter’s name will not be used during the data collection phase, and all identification will remain entirely neutral and confidential. Participating or not, you will of course have access to your son or daughter’s test data during collection through the use of Infinite Campus.

Participation or Withdrawal

Students’ participation in this study is voluntary. You may decline to be included in the collection of student data, but the usage of the review strategies will occur regardless as a part of the regular course curriculum. Withdrawal will not affect your relationship with course in anyway. If you do not want to participate, please check the appropriate box below.

Contacts

If you have any questions about the study, contact the researcher **Zach Schneider**. This study has been reviewed by The University of Wisconsin-Whitewater.

If you agree to allow your son/daughter to participate, check the box to the right.

If you wish to decline this anonymous participation, check the box to the right.

SIGNATURE OF PARENT/LEGAL GUARDIAN: _____

Thank you.

Mr. Zach Schneider
English Teacher

NIGHT REVIEW QUESTIONS

1. **The camp Elie was sent to**
 - a. Auschwitz
2. **The place where all Jews were forced to live before being sent to concentration camps**
 - a. Ghettos
3. **The reason why Elie was sent to the dentist**
 - a. Gold Tooth
4. **The woman who yells about a large fire in the train**
 - a. Mrs. Schacter
5. **What happens to the sick prisoners who stay behind in the infirmary when the camp is evacuated**
 - a. Liberated
6. **The man who tutors Elie**
 - a. Moishe the Beadle
7. **The reason why Elie is sent to the infirmary**
 - a. Foot infection
8. **What Elie realizes when looking at the dying pipel.**
 - a. God is dead
9. **The name of the Jewish mysticism that Elie studies**
 - a. Kabballah
10. **Elie's tattooed number**
 - a. A-7713
11. **The person who stays with Elie during the entire incarceration.**
 - a. Father
12. **His warnings are ignored at the beginning of the story**
 - a. Moishe the Beadle
13. **He is the doctor of Auschwitz, famous for his murderous "selections" and horrific experiments.**
 - a. Dr. Mengele
14. **The cruel Kapo who whips Elie**
 - a. Idek
15. **The violin player who plays before he dies**
 - a. Juliek
16. **A club; bludgeon; baton.**
 - a. truncheon
17. **Producing disease or pestilence.**
 - a. pestilential
18. **Relating to beasts. Lacking intelligence. Inhumane instincts.**
 - a. bestial
19. **A container used for melting**
 - a. crucible
20. **The act of being awake, alert, watchful**
 - a. vigilance
21. **A sixteen-year-old boy who survived several concentration camps during World War II**
 - a. Elie Wiesel
22. **The man responsible for the organization of the NAZI party and the concentration camps**
 - a. Adolph Hitler
23. **The name of the Kapo who wanted Elie's golden crown**
 - a. Franek
24. **The country where the woman was from who Elie later meets in a train station**

- a. France
- 25. The Rabbi whose son abandoned him**
 - a. Rabbi Eliahou
- 26. Fill in the blanks:**
- 27. “_____ that smoke.
_____ the small faces...
_____ those flames...”**
 - a. Never shall I forget
- 28. “Disinfection. Everybody soaked in it. Then came a hot shower. All very fast.”**
 - a. Fragments make it feel fast
- 29. How does Elie compare when he says:**
- 30. “I concurred with Job.”**
 - a. Both suffered great loss
 - b. Both doubted God
- 31. Why are these two situations different:**
- 32. “...the soup tasted better than ever...”**
- 33. “...the soup tasted of corpses.”**
 - a. The death of the first was nothing compared to the death of the child
- 34. What does Elie say is staring at him in the mirror at the end?**
 - a. a corpse
- 35. The country where the NAZI party rises to power**
 - a. Germany
- 36. The city where Elie grows up**
 - a. Sighet
- 37. The name of the camp that was specifically designed for mass exterminations**
 - a. Birkenau
- 38. The last camp that Elie is at**
 - a. Buchenwald
- 39. The country in which the Auschwitz camp is located**
 - a. Poland
- 40. How the Jews were transported to Auschwitz**
 - a. cattle cars
- 41. How are the Gestapo different from the SS?**
 - a. Gestapo – secret police, round up Jews SS – concentration camp managers

Examination: *Into Thin Air***60 POINTS**

- Directions: 1. Place all answers neatly on your Scantron and answer sheet. Do not write on this examination copy.
2. Carefully read the directions for each section.
3. Good Luck!

A. Dick Bass	B. Scott Fischer	C. Lopsang Jangbu Sherpa	D. Rob Hall
E. Sandy Hill Pittman	AB. Beck Weathers	AC. Yasuko Namba	AD. Jon Krakauer
AE. Andy Harris	BC. Edmund Hillary	BD. David Breashears	BE. Ed Viesturs
CD. Martin Adams	CE. Bruce Herrod	DE. Goran Kropp	ABC. George Leigh Mallory
BCD. Anatoli Boukreev	BCE. Charlotte Fox	CDE. Ang Dorje	ABCD. Mike Groom

PART I / QUOTATIONS: CHARACTER DESCRIPTIONS

Directions: Using the character bank above, identify the person being described in each passage below. You have **more** names than you need; therefore, **a person may appear more than once.**

- “Regarding Fischer as a mentor and a role model, he even started wearing his hair in a ponytail, as Fischer did.”
- “In bagging Everest, he became the first person to climb all of the Seven Summits, a feat that brought him worldwide renown, spurred a swarm of other weekend climbers to follow in his guided boot prints, and rudely pulled Everest into the postmodern era.”
- “He placed Hansen’s arm around his neck and assisted the weary client up the final forty feet to the summit.”
- “Knighted by the queen, he saw his image reproduced on postage stamps, comic strips, books, movies, magazine covers—overnight, the hatchet-faced beekeeper from Auckland had been transformed into one of the most famous men on earth.”
- “During his long plunge to earth, however, the tubular pick of an ice tool impaled his calf and came out the other side. When the hollow pick was extracted, it removed a core sample of tissue, leaving a hole in his leg big enough to stick a pencil through...[He] would push himself beyond any physical limitation.”
- “Rob Hall’s laid-back junior guide, he was a big, sturdy lad....although he had never been to Everest before, he was no stranger to the Himalaya.”
- “She maintains that Lopsang hauled her up the slope very much against her wishes...why didn’t she simply unfasten the three-foot tether connecting her to Lopsang?”
- “I cried for my lost companions, I cried because I was grateful to be alive, I cried because I felt terrible for having survived while others had died.”
- “While on a lantern-slide lecture tour of the United States, it was he who so notoriously quipped, “Because it is there” when an irritating newspaperman demanded to know why he wanted to climb Everest.”
- “Somebody’s coming into camp.” “The person’s bare right hand, naked to the frigid wind and grotesquely frostbitten, was outstretched in a kind of odd frozen salute. Whoever it was reminded Athans of a mummy in a low-budget horror film. As the mummy lurched into camp, Burleson realized that it was...[this person]...risen from the dead.”

A. Dick Bass **B.** Scott Fischer **C.** Lopsang Jangbu Sherpa **D.** Rob Hall
E. Sandy Hill Pittman **AB.** Beck Weathers **AC.** Yasuko Namba **AD.** Jon Krakauer
AE. Andy Harris **BC.** Edmund Hillary **BD.** David Breashears **BE.** Ed Viesturs
CD. Martin Adams **CE.** Bruce Herrod **DE.** Goran Kropp **ABC.** George Leigh Mallory
BCD. Anatoli Boukreev **BCE.** Charlotte Fox **CDE.** Ang Dorje **ABCD.** Mike Groom

11. "Instead of climbing with the team, he slept late, took a shower, and departed Base Camp some five hours behind the last of the clients."
12. "But I can't help thinking about her...She was so little. I can still feel her fingers sliding across my biceps, and then letting go. I never even turned to look back."
13. "Headed by this award-winning filmmaker and expert climber, who'd guided Dick Bass up Everest in 1985, the IMAX team was shooting a \$5.5 million giant-screen movie about climbing the mountain."
14. Scott Fischer's sister, Lisa Fischer-Luckenbach, wrote, "Based on your written word, YOU certainly seem now to have the uncanny ability to know precisely what was going on in the minds and hearts of every individual on the expedition."
15. "Though he was small-boned and slight in stature, his flashy manner, appetite for hard work, and extraordinary athletic gifts earned him renown as the Deion Sanders of the Khumbu."
16. "She needed to be the center of attention and was always yapping away about herself...But she wasn't a negative person. She didn't bring down the mood of the group. She was energetic and upbeat almost every day."
17. "He paid meticulous attention to detail...It pained him that some celebrated climbers—including but not limited to Sir Edmund Hillary—didn't appreciate how difficult guiding was, or give the profession the respect he felt it deserved....he poured over reams of computer printouts detailing logistical minutiae: menus, spare parts, tools, medicines, communications hardware, load-hauling schedules, yak availability."
18. "Still at the oxygen cache, in the throes of his hypoxic dementia, he overheard the radio calls and broke in to tell Hall, incorrectly, that all the bottles at the South Summit were empty."

PART II / SETTING

Directions: Identify the setting or location for the following quotes. Use only the locations provided in the bank. **Each location may appear more than once.**

A. Base Camp	B. Camp I	C. South Summit	D. Hillary Step
E. Lhotse Face	AB. Lobuje	AC. Khumbu Icefall	AD. South Col
AE. Camp III	BC. Balcony	BD. Summit	BE. Western Cwm

19. "The most technically demanding section on the entire route. The movement of the glacier...has been measured at between three and four feet a day."
20. "I grabbed a handful of small stones from a wind-scoured path of exposed shale, zipped the souvenirs into the pocket of my down suit and hastened down the ridge."
21. "I could see Andy Harris sorting through a pile of orange oxygen bottles. 'Yo, Harold!' I yelled, 'Could you bring me a fresh bottle?'" "There's no oxygen here!"
22. "I was shocked to encounter Beck Weathers, standing alone in the snow, shivering violently."
23. "More than three hundred tents, housing as many climbers and Sherpas from fourteen expeditions, speckled the boulder-strewn ice."
24. "I knew if we kept wandering in the storm, pretty soon we were going to lose somebody...So I screamed at everyone to **huddle** up right there and wait for a break in the storm."
25. "...and the next thing I knew I was sitting on the ice with my face in my hands and tears streaking my cheeks, weeping like I hadn't wept since I was a small boy...I cried because I felt terrible for having survived while others had died."
26. "...a boulder the size of a small television came rocketing down from the cliffs above and smashed into Andy Harris's chest."
27. "As he squatted, he lost his footing on the ice and went hurtling down the Lhotse Face. Incredibly, after falling only 70 feet he plunged headfirst into a crevasse, which arrested his tumble."
28. "By morning my eyes were burning and bloodshot, my nostrils were clogged with black soot, and I'd developed a dry, persistent hack that would stay with me until the end of the expeditions."

PART III / MATCHING

Directions: Match the term on the left with the appropriate description on the right. Only one description is correct for each term.

- | | |
|--------------------------|---|
| 29. yak | A. A medical condition in which there is severe swelling of the brain |
| 30. HAPE | B. What was used to signal the helicopter for the rescue of those injured in 1996. |
| 31. crampons | C. Hillary's Sherpa on the first successful summit of Everest |
| 32. 29,028 feet | D. His West Ridge Route on Everest brought him fame. Climbed with Unsoeld, a family friend of Krakauer. |
| 33. HACE | E. The South Face of Everest is located in this country |
| 34. George Leigh Mallory | AB. A traffic jam |
| 35. 26,000 feet | AC. The accepted height of Mount Everest in 1996. |
| 36. Goran Kropp | AD. The animal most commonly used in Sherpa culture |
| 37. Kool-Aid | AE. The altitude at Base Camp |
| 38. 17,600 feet | BC. The slang term for supplemental oxygen |
| 39. gamow bag | BD. A medical condition in which the lungs fill with fluid |
| 40. serac | BE. The famed English climber of Everest in the early 1920s whose body was found in the late 1990s. |
| 41. Tenzing Norgay | CD. The lead Sherpa of an expedition |
| 42. Sherpa | CE. A device used to create a sense of lower atmospheric pressure |
| 43. sirdar | DE. A huge tottering block of ice |
| 44. bottleneck | ABC. A Swedish bicyclist who rides to and summits Everest in 1996 |
| 45. short-rope | BCD. Ice spiked strapped onto one's boots |
| 46. Nepal | CDE. The climbing technique in which one tows another by rope |
| | ACE. Mountain people who have migrated from Tibet |
| | ABE. At this altitude, one officially enters the Death Zone |

PART IV / MULTIPLE CHOICE

Directions: Answer the following statements by selecting the one correct name or term. You may find it helpful to look elsewhere on this exam for assistance in your selection.

47. Scott Fischer's expedition is known by this name.
- A. Adventure Consultants
 - B. Mountain Madness
 - C. IMAX
 - D. South African
48. This magazine hired the author to write about ascending Everest.
- A. Outsider
 - B. Outside
 - C. Insider
 - D. Sports Illustrated
49. The process of adjusting gradually to higher altitude is known by this term.
- A. climate changing
 - B. acclimatization
 - C. gradualization
 - D. habitization
50. The author felt closest to this paying client on Hall's expedition.
- A. Doug Hansen
 - B. Andy Harris
 - C. Beck Weathers
 - D. Rob Hall
51. This person dies not too long after speaking to his wife.
- A. Scott Fischer
 - B. Doug Hansen
 - C. Andy Harris
 - D. Rob Hall
52. Fill in the blank: "We've got the big E figured out, we've got it totally wired, These days, I'm telling you, we've built a _____ to the summit"
- A. Yellow Brick Road
 - B. ladder
 - C. route
 - D. road
53. The first main reason why Krakauer says he writes *Into Thin Air*.
- A. to make money
 - B. to gain popularity
 - C. to honor those who died
 - D. to rid himself of the pain/guilt
54. Rob Hall's mentioned turn-around time.
- A. 2:00 P.M.
 - B. 2:00 A.M.
 - C. 1:00 A.M.
 - D. 3:00 P.M.

55. This expedition is described as “the least qualified people on Everest.”
- A. Taiwanese
 - B. South African
 - C. Japanese
 - D. IMAX
56. The Sherpa reasoning for why Ngawang eventually died from HAPE.
- A. he angered the mountain
 - B. other clients angered the mountain
 - C. he was not experienced
 - D. he was a Hindu
57. The name for the large rock monuments that are built for the dead at Everest Base Camp.
- A. grave stones
 - B. alters
 - C. rimpoche
 - D. chortens
58. Given to the rimpoche before leaving, the *katas* resemble this piece of clothing.
- A. scarf
 - B. socks
 - C. hat
 - D. shirt
59. The summit date in 1996 that resulted in the highest number of casualties.
- A. May 9th
 - B. May 10th
 - C. May 22nd
 - D. May 25th
60. Where Krakauer is in the first chapter.
- A. Base Camp
 - B. Seattle
 - C. Lobuje
 - D. The Summit

Mr. Schneider
Sophomore English

Name: _____
Hour: _____

Review Strategy Reflection Questionnaire

Into Thin Air Review: We played an interactive Jeopardy game to review material for the *Into Thin Air* Test. Circle the response that best applies to each statement.

1. Because the *Into Thin Air* Jeopardy game had the questions and answers on the screen, I was able to visualize the answers more easily on the test.

strongly agree agree disagree strongly disagree

2. The interactivity of the *Into Thin Air* Jeopardy game was too distracting, and I found myself losing focus.

strongly agree agree disagree strongly disagree

3. Working as a team in Jeopardy decreased my focus because I knew others would do the work for the team.

strongly agree agree disagree strongly disagree

4. The speed of the Jeopardy game was hard to adapt to because the rules were unknown or confusing.

strongly agree agree disagree strongly disagree

5. With the Jeopardy game as a review format the day before, I felt more confident going into the *Into Thin Air* test.

strongly agree agree disagree strongly disagree

6. After taking the test, I know that the Jeopardy game helped my overall score.

strongly agree agree disagree strongly disagree

Please comment on the overall positive and negative outcomes when using Jeopardy to review:

Mr. Schneider
Sophomore English
Night Test 2015

TEST#: _____

PLEASE DO NOT WRITE ON THIS TEST PACKET.

Multiple Choice

Directions: Choose the letter that best answers the question and properly fill in the circle on your Scantron.

1. What word means the planned extermination of an entire national, racial, political, or ethnic group?
A. concentration B. genocide C. holocaust D. fascism
2. What did Elie Wiesel want to study at the beginning of the book?
A. Beadle B. The Old Testament C. Kabbalah D. Christianity
3. Who helped Elie with his studies?
A. his father B. Moshe the Beadle C. Rabbi Eliahu D. his mother
4. Where are the Jews of Sighet **first** sent when the police arrive in their town?
A. Gleiwitz B. Sighet ghettos C. Auschwitz D. Buchenwald
5. Madame Schatcher's visions about fire are a prime example of what?
A. foreshadowing B. simile C. irony D. allusion
6. What age is Elie when he reaches Auschwitz?
A. almost 12 B. 18 C. almost 15 D. 21
7. What occupation does Elie tell the SS officer he is?
A. student B. electrician C. farmer D. philosopher
8. What is Elie's new name at the camp?
A. Eliezer B. A-7713 C. Wiesel D. R2D2
9. What item is taken from Elie at the camp?
A. his inheritance B. a gold key C. a gold tooth D. silver spoon
10. Elie initially prevents the SS from taking this item by...
A. saying he is sick C. saying he has to work
B. saying it was already taken D. hiding it
11. What happened to those who broke the rules?
A. hanged B. beaten C. shot D. all of above E. only B and C
12. After not surviving the selection, what does Akiba Drumer ask Elie and his father to do for him?
A. Stay in the camp C. Eat his rations
B. Tell him how his family is D. Say the Kaddish (death prayer)
13. Why does Elie go to see the doctor in the infirmary?
A. His foot is infected C. His tooth aches
B. His head has been beaten D. He has been whipped 25 times
14. Elie and his father leave the camp with the march because they believe it is the safest choice. Those that remained were actually liberated two days later. This is an example of what term?
A. foreshadowing B. simile C. irony D. metaphor

15. How do the prisoners travel to Gleiwitz?
A. cattle cars B. on foot C. airplane D. "hell vans"
16. What happened to the men who moved slowly when leaving Auschwitz?
A. shot B. trampled C. assisted D. both A. and B.
17. How many men actually get **off** the train alive **after** a long ride to Buchenwald?
A. 12 B. 80 C. 100 D. 120
18. What was the last word Elie's father said?
A. Mercy B. Water C. Eliezer D. Food
19. What do most of the liberated prisoners first think about after being freed?
A. food B. revenge C. their families D. sleeping
20. Which of the following events significantly affects Elie's loss of faith?
A. night C. the hanging of the pipel
B. the babies burning in pits in Auschwitz D. the death march

Literary Terms

Directions: Read the quote and choose the letter that best identifies the term being used.

21. *"My throat was dry and the words were choking me, paralyzing my lips" (15).*
A. simile B. metaphor C. personification D. irony
22. *"Never shall I forget that night...Never shall I forget that smoke...Never shall I forget the small faces of the children...Never shall I forget those flames...Never shall I forget the nocturnal silence..."*
A. irony B. anaphora C. foreshadowing D. symbolism
23. *"It was spring. The sun was shining...It was a beautiful day in May. The fragrances of spring were in the air" (40).*
A. tone B. direct characterization C. metaphor D. situational irony
24. *"Suddenly his eyes would become blank, nothing but two open wounds, two pits of terror" (72).*
A. simile B. metaphor C. parallel structure D. repetition
25. *"If one of us stopped for a second, a quick shot eliminated the filthy dog" (85)*
A. metaphor B. repetition C. anaphora D. foreshadowing
26. *"Death was settling in all around me, silently, gently. It would seize upon a sleeping person, steal into him and devour him bit by bit" (89).*
A. metaphor B. symbolism C. anaphora D. personification
27. *"...a tangle of human shapes, heads sunk deeply between the shoulders, crouching, piled one on top of the other, like a cemetery covered with snow" (98).*
A. simile B. metaphor C. personification D. irony
28. *"We stared at the flames in the darkness. A wretched stench floated in the air." (28).*
A. simile B. parallel structure C. imagery D. anaphora
29. *"Beasts of prey unleashed, animal hate in their eyes" (101).*
A. simile B. metaphor C. anaphora D. irony
30. *"From the depths of the mirror, a corpse was contemplating me" (115).*
A. simile B. symbolism C. parallel structure D. foreshadowing

Terms Matching

Directions: Match the term to the definition. If a term is used, it will only be used once.

A. Kabbalah	AD. synagogue	B. Buchenwald	AE. dysentery
C. Gestapo	BC. Kaddish	D. Birkenau	BD. yellow star
E. Rabbi	BE. Sighet	AB. Buna	CD. Gleiwitz
AC. Sonder-Kommando	CE. Yom Kippur	DE. SS	

31. Jewish mysticism, what Elie wanted to study
32. the Jewish day of atonement, a day devoted to prayer, fasting, and repentance
33. the building where a Jewish congregation meets for religious worship and instruction.
34. an intestinal disorder causing severe stomach aches and blood and mucus in the stool
35. prisoners selected to remain alive to facilitate the killing process and dispose of corpses.
36. the German internal security police (secret police) that were responsible for capturing all of the Jews
37. industrial plant established on the site of Auschwitz III aimed to produce synthetic rubber and fuel
38. the place where Wiesel last saw his mother
39. the place where Wiesel's father died

Character Matching

Directions: Match the character to the correct quote description or clue. Some characters may be used more than once, and other characters may not be used at all.

A. Elie Wiesel	AB. Moshe the Beadle	BD. Chlomo Wiesel (Elie's father)
B. Madame Schachter	AC. Tzipora	BE. Madame Wiesel (Elie's mother)
C. Stein of Antwerp	AD. Dr. Mengele	CD. Akiba Drumer
D. Juliek	AE. Rabbi Eliahou	CE. Meir Katz
E. Franek	BC. Kapo Idek	DE. the angel-faced pipel

40. whips Elie twenty-five times
41. plays the violin to maintain his humanity and to express his soul before he dies
42. often conducts the selection and is well known for conducting medical experiments on Jewish twins
43. "She was about fifty. . . Her husband and two eldest sons had been deported with the first transport by mistake. The separation had completely broken her."
44. The husband of Reizel, who is the niece of Eliezer's mother, who says, "The only thing keeping me alive. . . is that Reizel and the children are still alive. If it wasn't for them, I couldn't keep going."
45. "a cultured, rather sentimental man. There was never any display of emotion. . .The Jewish community in Sighet held him in the greatest esteem. They often used to consult him about public matters and even about private ones."
46. ". . . fair hair well combed, a red coat over her arm, a little girl of seven. The bundle on her back was too heavy for her. She gritted her teeth. She knew by now that it would be useless to complain." Also known as Elie's sister.
47. abandoned by his own son after Elie sees the son running away
48. considered a mere storyteller by the townspeople, a very religious church worker
49. "(He) had changed. There was no longer any joy in his eyes. He no longer sang. He no longer talked...of God or of the Kabbalah, but only of what he had seen."
50. ". . . a cruel face, but not devoid of intelligence, and wearing a monocle; a conductor's baton in his hand...The baton moved unremittingly, sometimes to the right, sometimes to the left."
51. The "strong" man who prevents Elie from being strangled on the train to Buchenwald.
52. He was almost thrown off the train because the prisoners thought he was dead.
53. Seeing him hanged is a major turning point in Elie's loss of faith
54. The man who extracts and keeps Elie's gold tooth, but is later transferred to another camp. Elie lost his tooth for nothing.
55. The boy from Warsaw whose voice Elie recognizes within the stampede of people trampling him while attempting to enter the barracks in Gleiwitz.

Mr. Schneider
Sophomore English

Name: _____
Hour: _____

Review Strategy Reflection Questionnaire

Night Review: We reviewed *Night* by discussing past assessments and problems, and individually answering book-related questions. Circle the response that best applies to each statement.

1. **Because I saw the answers on paper and heard them being discussed verbally, I was able to visualize the answers more easily on the test.**

strongly agree agree disagree strongly disagree

2. **The simplicity of the *Night* review strategy was clear and not distracting; therefore, I found myself more focused and prepared.**

strongly agree agree disagree strongly disagree

3. **Working individually allowed me to see my own mistakes and focus on each questions one at a time.**

strongly agree agree disagree strongly disagree

4. **Not knowing which questions would be asked next made me lose focus and attention.**

strongly agree agree disagree strongly disagree

5. **The verbal discussion of book-related questions and answers made me feel better prepared for the *Night* test.**

strongly agree agree disagree strongly disagree

6. **After taking the *Night* test, I know that the review discussion improved my overall score.**

strongly agree agree disagree strongly disagree

Please comment on the overall positive and negative outcomes when using class discussion to review:
