Johnson N. Aldan Atalig

Technology in the Classroom: The Impact of Technology on Educators

Northern Marianas College

EN202-02 English Composition II

Dr. Kimberly Bunts-Anderson

E-Portfolio

Primary Research Question:

How do forms of modern technology impact educators in the CNMI?

Secondary Research Question:

How does technology impact students and teachers in Saipan Southern High School. Has technology been effectively integrated into both the curriculum and infrastructure?

Brainstorms/Outlines

PROCESS ESSAY OUTLINE

I. Introduction

General Thesis Statement

Various tools are often used in classrooms to either enhance or improve the quality of teaching and learning.

 The student researcher would like to study the impact technology has on educators and their teaching strategies…

This essay will detail the manys steps taken to gather original data on this topic...

II. Body

    1. NMC Student Survey

        a. 36+ NMC Student Surveys

           - Survey links distributed by doc and student researcher

        b. Purpose: Gather information on their thoughts on teaching quality when technology is utilized in the classroom or during lessons.

        c. Questions will focus on their high school education

    2. Letters to Experts

        a. 10 letters to experts

           - PSS Education Technology Department

        c.

    3. SSHS Teacher Surveys & Interviews

        a. 30+ Teacher Surveys

           - Goal: Survey entire SSHS teacher population

           - Administration approval

           - Survey distribution by administration (hard copy)

           - Survey will focus on technology in the classroom and their thoughts on technology integration. lesson plans and teaching strategies

        b. Four(4) Teacher Interviews

           - Interviewees will be selected randomly

           - Interviews will focus on their lesson plans and teaching strategies

III. Conclusion

LITERATURE REVIEW OUTLINE

Huge to Narrow

Introduction:
- General browser search on Google on the topic of "technology integration and teachers" resulted in 299 million hits…
    - Majority of the publications being various…
        - Case studies, government reports
- General browser search on Google on the topic of "technology integration and teachers in the CNMI" resulted in 61,000 hits…
    - Majority of the publications being various…
        - Newspaper articles from local newspaper distributors (Mvariety, Saipan Tribune)
- Explain importance of topic…
    - Technology has been increasingly crucial in today's modern educational system...
- Explain focus of literature found…
    - The articles mainly focus on...
- Detailed Thesis Statement...
    - Much of the literature located by the student researcher is academic resources… This review will focus on three publications that the student researcher believes will play a crucial role in the study… and explain the overall significance of each resource. Both academic and non-academic.

Body 1: Academic Resource 1
- Case study on the educators perception on technology integration
    - Explain its importance/overall significance
    - Explain what it will contribute to the study

Body 2: Academic Resource 2
- Article on computer integration
    - Explain its importance/significance
    - Explain what it will contribute to the study

Body 3: Non-Academic Resources
- Various local news articles regarding educational technology training for students, teachers,librarians, and administrators in the CNMI.
    - How will these non-academic articles benefit the study?

Conclusion:
- In conclusion these sources play a significant role in the study...

Schedules

Data Collection Table

Date	Time	Method	Location
May 06, 2019	12:00 AM - 12:00 PM	Teacher Survey	Administered Online (Principal will distribute survey links)
May 07, 2019	12:00 AM - 12:00 PM	Teacher Survey	Administered Online
May 13, 2019	11:30 AM - 1:00 PM	Teacher Interviews (2)	SSHS Conference Room
May 14, 2019	11:30 AM - 1:00 PM	Teacher Interviews (3)	SSHS Conference Room
Opens May	12:00 AM - 12:00 PM	NMC Student Survey	Administered Online (Dr. Anderson will distribute survey links)

Academic Reading & Writing Schedule

Date	Time	Reading/Writing
May 20-24, 2019	6:00 PM - 8:00 PM	Reading (Academic & Non-Academic Sources)
May 27-31, 2019	6:00 PM - 8:00 PM	Writing Introduction & Body #01
June 03-05, 2019	6:00 PM - 9:30 PM	Writing Body #02 & #03

June 06-08, 2019	6:00 PM - 9:00 PM	Writing (Conclusion)
June 10, 2019	TBD	Peer Review (Project PROA) *See Marchie Fernandez
June 11, 2019	TBD	Edits & Final Touch ups
June 12, 2019	12:00 PM	Submission

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Illustrative Essay

April 19, 2019

EN202-02 English Composition II

Dr. Kimberly Bunts-Anderson

Northern Marianas College

Illustrate the Pros and Cons of Two Research Topics

As an education major the student researcher is generally interested in studying the different factors that either enhance or disrupt student learning and productivity. The student researcher would like to study the effects Super Typhoon Yutu had on the students in the CNMI mainly focusing on high school students (grades 9 -12) in Saipan Southern High School. A huge natural disaster must have a huge impact on students in some way even if a student did not lose a home. Super Typhoon Yutu left many residents with nothing but the clothes on their back and yet students were expected to return to school one short month later. The student researcher would also like to study the effects of technology in the classroom. Not only from the student's perspective but from the teachers as well. In this day and age we rely heavily on technology for almost everything we do. The student researcher would like to dig deeper into the education field and determine if technology is crucial or necessary for teachers to teach and students to learn. The student researcher is passionate towards both of these topics and this essay will illustrate the pros and cons of each research topic as well as determine which topic is more realistic and attainable in a four to five week period.

On October 24, 2018 Super Typhoon Yutu a category five hurricane ravaged the islands of Saipan and Tinian. In doing so, Yutu left many families without homes and many more with daily struggles. One month later students in both Saipan and Tinian were expected to report back to school. Although, going back to school allowed students to gain a sense of normalcy the student researcher would like to study the effects huge natural disasters like Yutu has on student

learning and productivity. There are many pros of this topic and the student researcher believes that the pros do outweigh the cons. Since the study would mainly focus on high school students in Saipan Southern High School the student researcher is confident that he will be able to get access to students in that particular grade levels. The student researcher has also successfully identified academic sources that will be beneficial for the continuation of this study. There are many academic sources that the student researcher has located on Google Scholar giving the student researcher sufficient data to spear head and support the study as a whole. However, the student researcher believes that due to the time constraints of this spring semester the study timeline would be stretched pretty thin. Since this study will include student and teacher interviews the student researcher would first need to get approval from the school administration and counseling department. Yutu hit the CNMI over six months ago but students are still in the process of recovery and it will be hard for some students to open up about this specific topic.

Technology like natural disasters have an impact not only on the way a student learns but the way a teacher teaches. Teachers nowadays have grown dependent on technology in majority if not all of their lesson plans. Printed assignments, digital lectures, and electronic grade books are all prime examples of teachers using technology to manage their classrooms more effectively and efficiently. Similar to the previous topic, the student researcher believes that there are many pros to this topic. There have been multiple studies done on technology in the classroom so there are abundant amounts of resources available. The student researcher has spearheaded a similar study on technology in the past but mainly focused on the student's perspective.

To conclude, there are many unavoidable factors that can both enhance or disrupt student learning and productivity. Natural disasters like Super Typhoon Yutu left many residents without

homes including the student researcher. Which is why the student researcher is passionate towards this particular topic. Technology like natural disasters have an impact on student learning and the student researcher would like to dig deeper into the education field to determine if student learning improves when technology is utilized in the classroom. There are many pros to both research topics, however, only one is more attainable in the given time period specified by the student researcher.Understanding the many factors that can disrupt or enhance student learning is crucial. Situations like Yutu can be very unpredictable and like all things in life, technology is constantly changing. The student researcher would like to conduct a study on the effects technology has on both students and teachers and he is confident that the study can be completed in a four to five week period.

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Northern Marianas College

April 26, 2019

EN202-02 English Composition II

Dr. Kimberly Bunts-Anderson

Essay #02 Proposal

Technology in the Classroom: The Impact of Technology on Educators

This essay will propose a study focusing on the impact technology has on teachers in Saipan Southern High School. Mainly focusing on on how technology impacts their teaching strategies and lesson plans. Today, technology plays a key role in majority of a teacher's lesson plan. Printed Assignments, digitally displayed lectures, and electronic grade books are all prime examples of technology being utilized to improve the quality of education around the globe. The use of technology in classrooms can be categorized as "normal" today. However the student researcher would like to study if technology is crucial for teachers to teach and students to learn. The student researcher is requesting that this six (6) week project be approved. The student researcher has successfully located academic and non-academic sources and has found ways to use the data to better benefit the study. The methodology has been planned and scheduled accordingly pending approval from both the participants and the instructor.

The student researcher has identified three (3) academic and two (2) non-academic sources that will serve as literature for this research paper. One academic source that the student researcher believes will support this study as a whole is an academic journal titled "*The Journal of Science Education and Technology*." This particular source has been peer reviewed by multiple professors at the University of North Dakota and Cleveland State University. The journal details the many challenges of integrating technology on a mass scale and focuses on understanding a teacher's motivation, perception, and overall belief about technology in the classroom. The student researcher has also identified a newspaper article from

one of Saipan's news paper distributor. The article titled *"Preparing NMI Students for the Tech Revolution"* details the efforts of OPEN Reef Innovations and their support in a summer technology program that high school students in Saipan could avail of. The program introduces students to modern technology such as virtual reality (VR) and coding. The student researcher believes that due to the abundant amount of academic and non-academic sources it will be more than likely this study will be completed in the given time frame.

Literature

García, B. A., & Martínez, M. M. (2017). Technology and Science Education: New Challenges. Journal of Technology and Science Education, 7(1), 1–4. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1135130&site=ehost-live

Keengwe, J., Onchwari, G. & Wachira, P. J Sci Educ Technol (2008) 17: 560.

https://doi.org/10.1007/s10956-008-9123-5

Thomas, S., Department of Education, E. O. of E. T., & American Institutes for Research (AIR). (2016). Future Ready Learning: Reimagining the Role of Technology in Education. 2016 National Education Technology Plan. Office of Educational Technology, US Department of Education. Office of Educational Technology, US Department of Education. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED571884&site=ehost-live

Vazquez - Variety Summer Intern, N. (2018, Aug 9). Preparing NMI students for the tech revolution. Marianas Variety (Saipan, Northern Mariana Islands). Retrieved from

https://infoweb.newsbank.com/resources/doc/nb/news/16DAFF9E8C4432A0?p=AWNB

TECHNOLOGY IN THE CLASSROOM

Wakefield, J. (2015, February 02). Technology in schools: Future changes in classrooms.

Retrieved from https://www.bbc.com/news/technology-30814302

In order to gather original data on this topic the student research will begin by conducting surveys on the entire teacher population at Saipan Southern High School. In addition to the teacher surveys, approximately 38 NMC students will be interviewed on their thoughts on the quality of education when technology is heavily utilized in their courses. Surveys for SSHS teachers will be conducted on campus headed by the student researcher pending approval from the administration. Following the completion of both surveys, the student researcher will begin conducting interviews on four to five SSHS teachers. The interview will mainly focus on their perception of technology being utilized in their classrooms and how has technology benefited themselves and their students. The student researcher has planned and scheduled data collection days accordingly. Due to the scheduling problems all dates and times listed are subject to change without notice. However, the student researcher was reassured by the school administration that the schedule is being reviewed and they will be contacting the student researcher as soon as possible.

The student researcher has developed a timely schedule that will determine when data should be collected and when academic research and writing should be completed. The student researcher is confident that with the inclusion of this schedule the study will be completed in the given time frame. If the study is approved it will be completed in six (6) weeks. The student researcher has taken time to contact the school administration to determine times and days teachers will be most likely available. The schedule below reflects both the teachers availability as well as the student researcher.

TECHNOLOGY IN THE CLASSROOM

Tentative Data Collection Table

Date	Time	Method	Location
May 06, 2019	12:00 AM - 12:00 PM	Teacher Survey	Administered Online (Principal will distribute survey links)
May 07, 2019	12:00 AM - 12:00 PM	Teacher Survey	Administered Online
May 13, 2019	11:30 AM - 1:00 PM	Teacher Interviews (2)	SSHS Conference Room
May 14, 2019	11:30 AM - 1:00 PM	Teacher Interviews (3)	SSHS Conference Room
DATES TBD	12:00 AM - 12:00 PM	NMC Student Survey	Administered Online (Dr. Anderson will distribute survey links)

Academic Reading & Writing Schedule

Date	Time	Reading/Writing
May 20-24, 2019	6:00 PM - 8:00 PM	Reading (Academic & Non-Academic Sources)
May 27-31, 2019	6:00 PM - 8:00 PM	Writing Introduction & Body #01
June 03-05, 2019	6:00 PM - 9:30 PM	Writing Body #02 & #03

TECHNOLOGY IN THE CLASSROOM

June 06-08, 2019	6:00 PM - 9:00 PM	Writing (Conclusion)
June 10, 2019	TBD	Peer Review (Project PROA) *See Marchie Fernandez
June 11, 2019	TBD	Edits & Final Touch ups
June 12, 2019	12:00 PM	Submission

      The student researcher is passionate towards this topic and sees this study as a great way to inform readers about not just the way technology impacts students, but educators as well. This study will mainly focus on the educator's perspective and will detail their perception and beliefs on technology in the classroom. The researcher has taken time to review all academic and non-academic sources that is crucial for the completion of this study. All sources, academic and non-academic will play a key role in this study.Times for original data collection, research, and academic writing has been scheduled accordingly. Finally, the student researcher is confident that this study can be completed and submitted in six (6) weeks if the study is approved by the instructor.

References

Keengwe, J., Onchwari, G. & Wachira, P. J Sci Educ Technol (2008) 17: 560.

    https://doi.org/10.1007/s10956-008-9123-5

Vazquez - Variety Summer Intern, N. (2018, Aug 9). Preparing NMI students for the tech

    revolution. Marianas Variety (Saipan, Northern Mariana Islands). Retrieved from

    https://infoweb.newsbank.com/resources/doc/nb/news/16DAFF9E8C4432A0?p=AWNB

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Essay #03 Process

Technology in the Classroom: The Impact of Technology on Educators

Various tools are often used in classrooms to either enhance or improve the quality of teaching and learning. Technology plays a key role in education and is often seen as a "norm" in today's modern classrooms. According to Buabeng-Andoh, "information and communication technology (ICT) is becoming increasingly important in our daily lives and in our educational system." Therefore, the demand for ICT in secondary and post-secondary institutions has increased (Buabeng-Andoh, 2012). The purpose of this essay is to detail the many steps the student researcher has taken to gather original data on this specific topic. As well as, describe the steps taken to determine the most effective and efficient data collection tools and methods.

The student researcher collected data through two surveys that were distributed to approximately 38 Northern Marianas College students. The first survey was a 10 question pilot survey intended to test the student researchers primary data collection tool. The pilot survey comprised of demographic, matrix, short answer, and closed ended questions.The survey was reviewed by english composition II students and the instructor and participants were asked to provide feedback on other student's surveys. Including the student researcher. In total, the student researcher received nine comments and suggestions on the pilot survey. Majority of the suggestions focused on questions that needed clarification from the student researcher. After applying changes to the pilot survey the student researcher distributed the final survey links via a Google document shared with english composition II students and the instructor. After the distribution of links on the shared Google document the student researcher received a total of one suggestion and three responses. As a task for week seven, English Composition II students were required to provide feedback or helpful information on 10 surveys. The final survey link was

posted on May 06, 2019 will remain open for a total of three weeks. The student researcher has

carefully analyzed data collected thus far and will compare results when the alloted time for

responses expires.

In addition to surveys, the student researcher has also sent letters to a total of 10 experts.

Five of which are on island experts and the remaining five live abroad. The experts are made up

of both secondary and postsecondary teachers. Three live abroad and are employed at Cleveland

State University (CSU). Together all three professors authored an article in an academic journal

titled *Education and Science Technology*. As of today, the student researcher has not received

any responses from any of the 10 experts. However, the student researcher has successfully

distributed letters to all five on island experts. Three of which have scheduled a meeting with the

student researcher. Therefore, said experts will also be interviewed on the meeting day.

An informal interview conducted on May 07, 2019 in room Y18 has allowed the student

researcher to collect input from one NMC student. In the short time alloted for the interview the

student researcher was able to record much needed data from a student's perspective.The

interview questions asked mainly composed of open ended questions and demographic

questions. Fernandez the interviewee was interviewed by the student researcher for a total of 16

minutes and the interview was both recorded on a recorder and hand written notes were taken.

According to Fernandez, an education major at the Northern Marianas College, "Access to

modern technology has allowed not only me but my instructors to save time in the classroom"

(Informal Interview, May 07, 2019, 9:30am, NMC Campus). Fernandez also suggested that the

abundance of technology on the NMC campus pairs well with the both the instructors and

students in NMC. In addition to Fernandez's interview, a second interview was conducted on the

NMC campus in room Y5. The interview began at 3:32 pm and lasted for approximately 11 minutes. Calvo, the interviewee was interviewed by the student researcher. After being asked the same questions as Fernandez the student researcher analyzed the similarities between both interview responses and identified key differences between the two. Calvo, a first year college student at the Northern Marianas College suggests that the quality of education at NMC is much better compared to his former high school where technology was limited and seldom used (Personal Interview, May 09, 2019, 3:32pm, NMC Campus). Because of this, the student researcher was able to gather input on the differences of education quality between a secondary and post-secondary institution. In this case the institutions are NMC and Saipan Southern High School.

To conclude, technology plays a key role in not just the lives of students but educators as well. Our education system has grown dependent on technology to satisfy the need for quality education and learning.The student researcher has successfully tried and tested multiple methods for original data collection. A total of two surveys, 10 letters to experts, and two informal interviews have been completed. The student researcher has taken time to analyze and evaluate all original data collected during the process. Additional survey data and expert opinions is expected in the coming weeks. All data collected through these methods will benefit the completion of this study as well as helps the student researcher to answer the question at hand.

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Essay #04 Literature Review

Technology in the Classroom: The Impact of Technology on Educators

A general browser search with Google Scholar on May 23, 2019 on the topic of "technology integration and teachers" resulted in 2,390,000 hits.The majority of the publications being various articles and case studies. The first significant section of the search located various articles focusing on teacher acceptance and perception of technology (Ertmer, 2005). Narrowing the topic further the student researcher did another search on Google on the topic of "technology integration and teachers in the CNMI" which yielded 61,000 hits. The majority of the publications being various newspaper articles from local newspaper distributors and government reports. The first significant section of the search located various newspaper articles that focused on teacher training and professional development (Cabrera, 2018). The student researcher has successfully located academic and non-academic literature both locally and internationally to support this study as a whole. This topic is extremely important to our region and our educational system. Classrooms today have an abundant amount of technology integrated into both the infrastructure and curriculum. Through this study the student researcher hopes to get a general understanding on how technology affects not just students but educators as well. This review will detail the relevance of both academic and non-academic literature located for this study and will focus specifically on three primary literature sources that the student researcher believes will be beneficial to the completion of this study.

The first primary literature source located for this study is an article titled "Teacher Pedagogical Beliefs: The Final Frontier in our Quest for Technology Integration." The article was published by the journal of Educational Technology Research and Development in 2005. The article focuses on teacher training and their overall perception or beliefs of technology in the

classroom. According to the author, "high-level technology use is still surprisingly low. This suggests that additional barriers, specifically related to teachers' pedagogical beliefs, may be at work (Ertmer, 2005)." This article allows the student researcher to get a general understanding of how educators feel about utilizing technology in their curriculum. This source is a credible academic source and in the student researcher's opinion it is vital for the completion of this study.

Another academic literature source is an article titled "Computer Technology Integration and Student Learning: Barriers and Promise." The article was published by the Journal of Science Technology and Education in September 2008. Although the article is 11 years old the student researcher believes it is still relevant to our educational system today. The article questions if technology has been effectively integrated into the curriculum and details concerns over the the impact technology has on student learning. This article serves as a great foundation for this study. Although the article mainly focuses on technology in regards to student learning it also mentions that technology integration would cause a major change in not just students' lives but teachers as well. The article also emphasizes the importance of understanding integration from a teacher perception. According to the article, "technology integration is a complex phenomenon that involves understanding teachers' motivations, perceptions, and beliefs about learning and technology (Woodbridge,http://www.techlearning.com/story/showArticle.php?articleID=17701367)." This article is vital for the completion of this study due to the fact it provides information on technology integration and its impact on teachers and students alike.

The last source for this study is an article from one of Saipan's local news paper distributors. The article titled "PSS embraces 21st century classroom learning" was published in February 2018 by the Saipan Tribune. The article focuses on digital learning and the Distance Education Program. The article also details both the accomplishments and improvements the program has made to supply uninterrupted online education. According to the instructional technology director Dr. Bobby Cruz, "Gone are the days that we see technology as something unknown and intimidating to us," he said. "Technology [is] ever changing, advancing and improving… because people continue to learn and grow and learn and go some more (Cabrera, 2018)." This source proves that the CNMI Public School System is educating and training their teachers to embrace technology in order to keep up with students today who are considered the "tech savvy generation" and allows both teachers and students to maintain an effective online learning environment.

In conclusion, the student researcher has successfully located both academic and non-academic literature relevant to this study. The literature allows the student researcher to get a general understanding on how teachers perceive technology and determines whether or not the CNMI Public School System is aware of this. Majority of the literature located proves that both students and teachers in the CNMI have an appetite for modern technology use in the classroom. In addition, the literature also informs the researcher that technology integration has come a long way since the early 2000s and that educators are more open to learn and grow with the ever changing technology industry.

References

Cabrera, B., & Cabrera, B. (2018, February 25). PSS embraces 21st century classroom learning

Retrieved May 24, 2019, from

https://www.saipantribune.com/index.php/pss-embraces-21st-century-classroom-learning

Ertmer, P.A. ETR&D (2005) 53: 25. https://doi.org/10.1007/BF02504683

Keengwe, J., Onchwari, G. & Wachira, P. J Sci Educ Technol (2008) 17: 560.

https://doi.org/10.1007/s10956-008-9123-5

NAME: Johnson N. Aldan Atalig   COURSE/SECTION: EN202-02

1. **Author's Name:** Bruce Ballenger
2. **Author's Credentials:** Boise State University Professor and Chair
3. **Publisher [or title of organization]:** Pearson
4. **Heading of Section:** Conducting an Interview
5. **Year Written:**2015
6. **Pages:**82-89
7. **Website URL:** n/a

Main Ideas/Points	Important Quotations	Supporting Details	Relevance
Millions of dollars is spent on education computing but said tools are not being correctly integrated into curriculum across the country. Technology integration in the classroom is very complex and difficult to achieve since you would first need to understand it from a teachers standing point.	"Political and institutional support has enabled many institutions of learning to spend millions of dollars to acquire educational computing tools that have not been effectively integrated into the curriculum."	Millions of dollars is spent on educating computing tools. Technology integration can be seen as a complex phenomenon. Integration should start by understanding it from the teacher's perspective and views on technology in the classroom.	This source is relevant to my research because it proves that there is technology widely available across the country and millions of dollars are funneled into the push for technology integration. It also proves that although funding is available it won't work if technology is not effectively integrated into the curriculum.

8. **In this article, is it possible that any of the authors might have a bias about the subject matter? provide examples if needed.**
No.

9. **Is the article timely or a bit outdated?**
Yes. I would agree that this article is a bit outdated. The article was published in 2008 which means the publication is a little over 10 years old.

10. **Was it published in a reputable source?**
Yes. I would say that this article was published by a reputable source. Although the Journal of Science and Technology is a self published journal all articles have been peer reviewed by experts in the field.

NAME: Johnson N. Aldan Atalig   COURSE/SECTION: EN202-02

1. **Author's Name:** Jared Keengwe, Grace Onchwari, Patrick Wachira
2. **Author's Credentials:** Cleveland State University, University of North Dakota
3. **Publisher [or title of organization]:** Journal of Science and Technology
4. **Heading of Section:**Computer Technology Integration and Student Learning: Barriers and Promise
5. **Year Written:**2008
6. **Pages:**560-565
7. **Website URL:** https://link.springer.com/article/10.1007%2Fs10956-008-9123-5

Main Ideas/Points	Important Quotations	Supporting Details	Relevance
Whom to Interview? - Interview people who can provide information or input on what you want to know - You may have encountered names of experts during your search for literature. Consider conducting email interviews or sending them a letter. What Questions to Ask? -Ask questions that you can't otherwise answer through a survey or another data collection tool -Ask questions that will be beneficial towards your research	"Interview people who can provide you with what you want to know" "Interviews are a wonderful tools for clearing up your own confusion and getting specific information that is unavailable anywhere else"	Interviews are tools you can use to better go in depth on your topic and get a better view from your target audience perspective. In interviews try to have the participant be as specific and as detailed as possible. Take field notes to better analyze later.	This source is relevant to my research because I plan on conducting multiple interviews on teachers and students to get input on technology in the classroom and how technology affects their teaching and learning.

8. **In this article, is it possible that any of the authors might have a bias about the subject matter? provide examples if needed.**
No.

9. **Is the article timely or a bit outdated?**
No this source was published in 2015 which was four years ago. I would say this source is timely and is not outdated.

10. **Was it published in a reputable source?**
Yes. This source was published by Pearson and is an academic source.

Reading Notes to fill out when reading course and outside reading materials for assignment

Note Taking Sheet: Reading # __1__

NAME_____COURSE__English Composition II__Section ____En202-02_____

With many sources to read and evaluate, you need a way to keep track of the material you may use in your research paper. You need to record where you have looked, what you have found, and how to find each piece of information again (this is for your bibliography).

Directions: Fill in the information below, and keep with all of your resources. This will help you when it is time to write both your outline, paper, and annotated bibliography.

1. Author'� s Name: Bruce Ballenger
2. Author'� s Credentials (Boise State University)
3. Publisher [or title of organization]: Pearson Education, inc.
4. Heading of Section [title of reading]: Finding Experts Pg. 83 Living Sources: Interviews and Surveys Pg.82-89   5. Year Written: 6. Pages:
7. Website URL:

Main Ideas/Points
Important Quotations
Supporting Details
Relevance to Your Assignment
How do you find experts to your interviews? (psge 83 - 84)
How do you properly quote your source or sources in your essay? (page 112-113)
How arranging interviews is good for your research?

"Most people, no matter who they are, love the attention of an interviewer, no matter who she is, particularly if what's being discussed fascinates them both." (para. 1)
"To quote someone who says something effectively that supports a key point you're trying to make." (para. 5)
"Ultimately, what makes almost any topic compelling is discovering why it matters to people close to the subject - how it affects their lives."(p. 82, para 3)

Checking your sources, ask your friends and your instructors, check phone book, check faculty directory, and check the internet
When you're writing an essay that uses primary sourcees- a literary text, a transcript, and so on- quoted material is essential.
Doing interviews with people close to the subject is the best way to that out.

This gives us options to collecting data from experts that we intend to send letters to.
 Quoting properly is essential to the student researcher's essay. This section helps us to site sources properly within the text.
It will definitely help gaining knowledge about the topic from the source.

Main Ideas/Points

Important Quotations

Supporting Details
Relevance to Your Assignment
 How to find books and articles using the library database? (pg. 73-84)
What are the types of questions used in a survey?

 "You will save time of you know where to look for the book you want, and so you must be familair with how librarians organize books."
"Generally speaking, you shouldd limit the number of open-ended questions you use since they are more demading on respondents"

 Understanding call numbers can help you find the book or article you want.
Using brief responses, essay questions, mutiple choice, true/false, Likert, ranking

 It will help me find books and articles easily.
I used open-ended nad structured questions on my survey to gain an uderstanding of people thought and ideas.

In this article, is it possible that any of the authors might have a bias about the subject matter? No___ provide examples if needed.

Is the article timely or a bit outdated - Timely

Was it published in a reputable source? Yes

It is an academic source. YES

Other important information : The Curious Researcher is a reconized textbook with basic structures applied in academic writing and research at tertiary programs world wide.

Note Taking Sheet: Reading #03

NAME: Johnson N. Aldan Atalig   COURSE/SECTION: EN202-02

1. **Author's Name:** Rhonda Christensen
2. **Author's Credentials:** University of North Texas
3. **Publisher [or title of organization]:** International Society for Technology Integration
4. **Heading of Section:** Effects of Technology Integration Education on the Attitudes of Teachers and Students
5. **Year Written:**2002
6. **Pages:** 23
7.**WebsiteURL:**n/a

Main Ideas/Points	Important Quotations	Supporting Details	Relevance
Technology integration in education is shown to have a rapid, positive effect on teacher attitudes, such as computer anxiety, perceived importance of computers, and computer enjoyment	"The amount of confidence a teacher possesses in using computers and related information technologies (often referred to as simply "technology") may greatly influence his or her effective implementation of technology methods in the classroom." (Loyd, 1986)	Gardner, Discenza, and Dukes (1993) determined that computer anxiety is a major cause of resistance to using computers. This and other research indicates that increased computer experience reduces computer anxiety in many teachers.	Although this source is extremely outdated I still think that this article can serve as a glimpse of the past. Technology integration in 2002 must have been extremely difficult and this article proves that teachers in 2002 were hesitant to use computers. Today, teachers use technology for just about everything which shows that our educational system has come a long way in terms of technology integration.

8. **In this article, is it possible that any of the authors might have a bias about the subject matter? provide examples if needed.**
No.

9. **Is the article timely or a bit outdated?**
Yes. I would agree that this article is a bit outdated. The article was published in 2002 which means the publication is 17 years old. Technology integration over 17 years ago might have posed as a challenge for

teachers and students back then but in today's world technology is widely available in our educational system.

10. **Was it published in a reputable source?**
Yes. I would say that this article was published by a reputable source.

NAME: Johnson N. Aldan Atalig   COURSE/SECTION: EN202-02

1. **Author's Name:** Theodore J. Kopcha
2. **Author's Credentials:** University of Georgia, Department of Educational Psychology and Instructional Technology
3. **Publisher [or title of organization]:** Elsevier Ltd.
4. **Heading of Section:**Teachers' perceptions of the barriers to technology integration and practices with technology under situated professional development
5. **Year Written:**2012
6. **Pages:**13
7.**WebsiteURL:**n/a

Main Ideas/Points	Important Quotations	Supporting Details	Relevance
This source is a case study which examines 18 teachers' perceptions of the barriers to technology integration and instructional practices with technology after two years of situated professional development. Interviews conducted in the case study suggest that the situated professional development activities helped create an environment that supported teachers' decisions to integrate technology.	"There is an apparent gap between the amount of technology available in today's classrooms and teachers' use of that technology for instructional purposes" (Kopcha, 2012) "In a recent study by the National Center for Educational Statistics less than half of the 3000 surveyed teachers reported using technology often during instructional time – it was used more frequently for administrative tasks such as grading and attendance." " Others have similarly found that teachers more often use technology for non-instructional tasks	"In a recent study by the National Center for Educational Statistics (Gray, Thomas, & Lewis, 2010), less than half of the 3000 surveyed teachers reported using technology often during instructional time – it was used more frequently for administrative tasks such as grading and attendance." Researchers have found that mentored teachers effectively resolve technology issues during their instruction with limited additional support.	This case study is relevant to my research because it details teachers perception on technology integration. Included in this study is amazing literature that support the writers claim that educators do not utilize technology during lectures but rather utilize it for administrative tasks, or lesson planning. This study is very similar to mine because instead of focusing on how technology impacts students it focuses on how it impacts educators and gets an in depth account from multiple teachers.

	such as communicating with peers and parents or preparing teaching materials		

8. In this article, is it possible that any of the authors might have a bias about the subject matter? provide examples if needed.
No.

9. Is the article timely or a bit outdated?
No this source was published in 2012 which was seven years ago. I would say this source is timely and is not outdated.

10. Was it published in a reputable source?
Yes. This source was published by Elsevier and is an academic source. Source located on GoogleScholar

Reading Notes to fill out when reading course and outside reading materials for assignment

Note Taking Sheet: Reading # __1__

NAME_____COURSE__English Composition II__Section ____En202-02_____

With many sources to read and evaluate, you need a way to keep track of the material you may use in your research paper. You need to record where you have looked, what you have found, and how to find each piece of information again (this is for your bibliography).

Directions: Fill in the information below, and keep with all of your resources. This will help you when it is time to write both your outline, paper, and annotated bibliography.

1. Author'� s Name: Bruce Ballenger
2. Author'� s Credentials (Boise State University)
3. Publisher [or title of organization]: Pearson Education, inc.
4. Heading of Section [title of reading]: Finding Experts Pg. 83 Living Sources: Interviews and Surveys Pg.82-89   5. Year Written: 6. Pages:
7. Website URL:

Main Ideas/Points
Important Quotations
Supporting Details
Relevance to Your Assignment
How do you find experts to your interviews? (psge 83 - 84)
How do you properly quote your source or sources in your essay? (page 112-113)
How arranging interviews is good for your research?

"Most people, no matter who they are, love the attention of an interviewer, no matter who she is, particularly if what's being discussed fascinates them both." (para. 1)
"To quote someone who says something effectively that supports a key point you're trying to make." (para. 5)
"Ultimately, what makes almost any topic compelling is discovering why it matters to people close to the subject - how it affects their lives."(p. 82, para 3)

Checking your sources, ask your friends and your instructors, check phone book, check faculty directory, and check the internet

When you're writing an essay that uses primary sourcees- a literary text, a transcript, and so on- quoted material is essential.
Doing interviews with people close to the subject is the best way to that out.

This gives us options to collecting data from experts that we intend to send letters to.
 Quoting properly is essential to the student researcher's essay. This section helps us to site sources properly within the text.
It will definitely help gaining knowledge about the topic from the source.

Main Ideas/Points

Important Quotations

Supporting Details
Relevance to Your Assignment
 How to find books and articles using the library database? (pg. 73-84)
What are the types of questions used in a survey?

 "You will save time of you know where to look for the book you want, and so you must be familair with how librarians organize books."
"Generally speaking, you shouldd limit the number of open-ended questions you use since they are more demading on respondents"

Understanding call numbers can help you find the book or article you want.
Using brief responses, essay questions, mutiple choice, true/false, Likert, ranking

It will help me find books and articles easily.
I used open-ended nad structured questions on my survey to gain an uderstanding of people thought and ideas.

In this article, is it possible that any of the authors might have a bias about the subject matter? No___   provide examples if needed.

Is the article timely or a bit outdated - Timely

Was it published in a reputable source? Yes

It is an academic source. YES

Other important information : The Curious Researcher is a reconized textbook with basic structures applied in academic writing and research at tertiary programs world wide.

NAME: Johnson N. Aldan Atalig   COURSE/SECTION: EN202-02

1. **Author's Name:** Lori Lyn C. Lirio
2. **Author's Credentials:** Marianas Variety Reporter
3. **Publisher [or title of organization]:** Marianas Variety
4. **Heading of Section:** "PSS Holds Workshop for Online Educators"
5. **Year Written:**2018
6. **Pages:** 1
7.**WebsiteURL:https://infoweb.newsbank.com/apps/news/document-view?p=AWNB&docref=news/16E694D14B8BA488**

Main Ideas/Points	Important Quotations	Supporting Details	Relevance
A total of 30 online teachers in the CNMI participated in professional development session that focused on strategies to enhance instruction in an online environment. The public school system in the CNMI has provided online courses to both public and private schools for the past six years. The program is called the Distance Education Program	According to Dr. Pangelinan "Distance education is essential in creating opportunities by leveraging the power of technology to provide more equitable access for students across the CNMI," According to Dr. Bobby Cruz "Our eTeachers are the backbone of the program,"	The distance education program's goal is to improve both student and teacher social presence in an online environment Courses include core subjects such as math, science, language arts, and social studies. Elective courses include Intro to Digital Photography, Journalism, and Creative Writing and the program is always looking to improve.	Although this source does not exactly cover the student researchers topic. This article does prove that there is an appetite for online courses and teachers in the CNMI and the public school system recognizes this. Therefore PSS has provided opportunities to these teachers to develop their teaching strategies to effectively teach students in an online environment.

8. **In this article, is it possible that any of the authors might have a bias about the subject matter? provide examples if needed.**
No.

9. **Is the article timely or a bit outdated?**

No. This article was published last year in 2018. It is current and timely.

10. **Was it published in a reputable source?**
Yes. I would say that this article was published by a reputable source. However, it is a newspaper article so it is a non-academic source.

<u>**Note Taking Sheet: Reading #06**</u>

NAME: Johnson N. Aldan Atalig   COURSE/SECTION: EN202-02

1. **Author's Name:** Bea Cabrera
2. **Author's Credentials:** Saipan Tribune Reporter
3. **Publisher [or title of organization]:** Saipan Tribune
4. **Heading of Section:**PSS embraces 21st century classroom learning
5. **Year Written:** 2018
6. **Pages:** 1
7.**WebsiteURL:**https://www.saipantribune.com/index.php/pss-embraces-21st-century-classroom-learning/

Main Ideas/Points	Important Quotations	Supporting Details	Relevance
Digital learning day. Celebrate online instructors and the CNMI Public School System's Distance Education Program. DEP has seen significant improvements to provide online education to all students in the CNMI public and private schools included. DEP has successfully improved their system to provide uninterrupted online education for years to come.	"Education Commissioner Glen Muña said that PSS has been improving its system for uninterrupted online education." "The occasion gives PSS a chance to place importance on technology as an aid in shaping CNMI students to be global citizens that identifies with the world community and whose actions contribute to building this community's values and practices."	According to Instructional Technology Director Dr. Bobby Cruz over 1,000 IPads have been distributed to schools across the CNMI with the hope of adding new units in the near future. Federal grants are important to PSS because that is the primary source of funding for education technology.	This article is relevant to my topic because it proves that PSS recognizes the need for educators who have been trained to use technology to effectively teach the students of the CNMI. This article also proves that there is an appetite for modern technology use in the classroom.

8. **In this article, is it possible that any of the authors might have a bias about the subject matter? provide examples if needed.**
No.

9. **Is the article timely or a bit outdated?**

No this source was published in 2018 which was last year. I would say this source is timely and is not outdated.

10. **Was it published in a reputable source?**
Yes. This source was published by the Saipan Tribune. However, this is a non-academic source.

Reading Notes to fill out when reading course and outside reading materials for assignment

Note Taking Sheet: Reading # __1__

NAME_____COURSE__English Composition II__Section ____En202-02_____

With many sources to read and evaluate, you need a way to keep track of the material you may use in your research paper. You need to record where you have looked, what you have found, and how to find each piece of information again (this is for your bibliography).

Directions: Fill in the information below, and keep with all of your resources. This will help you when it is time to write both your outline, paper, and annotated bibliography.

1. Author'� s Name: Bruce Ballenger
2. Author'� s Credentials (Boise State University)
3. Publisher [or title of organization]: Pearson Education, inc.
4. Heading of Section [title of reading]: Finding Experts Pg. 83 Living Sources: Interviews and Surveys Pg.82-89   5. Year Written: 6. Pages:
7. Website URL:

Main Ideas/Points
Important Quotations
Supporting Details
Relevance to Your Assignment
How do you find experts to your interviews? (psge 83 - 84)
How do you properly quote your source or sources in your essay? (page 112-113)
How arranging interviews is good for your research?

"Most people, no matter who they are, love the attention of an interviewer, no matter who she is, particularly if what's being discussed fascinates them both." (para. 1)
"To quote someone who says something effectively that supports a key point you're trying to make." (para. 5)
"Ultimately, what makes almost any topic compelling is discovering why it matters to people close to the subject - how it affects their lives."(p. 82, para 3)

Checking your sources, ask your friends and your instructors, check phone book, check faculty directory, and check the internet
When you're writing an essay that uses primary sourcees- a literary text, a transcript, and so on- quoted material is essential.
Doing interviews with people close to the subject is the best way to that out.

This gives us options to collecting data from experts that we intend to send letters to.
 Quoting properly is essential to the student researcher's essay. This section helps us to site sources properly within the text.
It will definitely help gaining knowledge about the topic from the source.

Main Ideas/Points

Important Quotations

Supporting Details
Relevance to Your Assignment
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"Generally speaking, you shouldd limit the number of open-ended questions you use since they are more demading on respondents"

 Understanding call numbers can help you find the book or article you want.
Using brief responses, essay questions, mutiple choice, true/false, Likert, ranking

 It will help me find books and articles easily.
I used open-ended nad structured questions on my survey to gain an uderstanding of people thought and ideas.

In this article, is it possible that any of the authors might have a bias about the subject matter? No___   provide examples if needed.

Is the article timely or a bit outdated - Timely

Was it published in a reputable source? Yes

It is an academic source. YES

Other important information : The Curious Researcher is a reconized textbook with basic structures applied in academic writing and research at tertiary programs world wide.

NAME: Johnson N. Aldan Atalig   COURSE/SECTION: EN202-02

1. **Author's Name:** Bruce Ballenger
2. **Author's Credentials:** Boise State University Professor and Chair
3. **Publisher [or title of organization]:** Pearson
4. **Heading of Section:** Planning Informal Surveys
5. **Year Written:** 2015
6. **Pages:** 89-95 (6 pages)
7. **Website URL:** n/a

Main Ideas/Points	Important Quotations	Supporting Details	Relevance
Define your goals and identify what it is you want to get out of the survey. You should also consider your options. Would you like to do an electronic survey or a paper survey. Keep in mind that you will need to manually group and analyze data. When creating a survey you must also determine what type of questions to ask. Open-ended or structured questions? Make plans to distribute surveys to your targeted demographic and remember that the campus is an area where a large amount of people is confined to one area.	"Question design is tricky business" "Surveys shouldn't be too long. If you rely mostly on open-ended questions the fewer the better." When deciding between electronic or paper remember that: "Not everyone has easy internet access" "Free versions of online software limit the number of responses you can gather" "Response rates to electronic surveys can be lower than the response rate to paper surveys"	Web based surveys are often the better choice because you will be able to regulate and broaden your sample size. Surveys should begin with polls and end with open ended questions. Depending on the purpose of the survey you may want to ask if the respondent has any political affiliation or if they are registered to vote.	This source is extremely relevant to my topic because my primary data collection tool are surveys. I have a total of two surveys both with different target areas. The survey will give me an idea of technology in the classroom from both the teacher and students perspective.

8. **In this article, is it possible that any of the authors might have a bias about the subject matter? provide examples if needed.**
No.

9. **Is the article timely or a bit outdated?**
No. This book was published in 2015 and I would say it is up to date.

10. **Was it published in a reputable source?**
Yes, Pearson is a well known publisher.

Note Taking Sheet: Reading #08

NAME: Johnson N. Aldan Atalig   COURSE/SECTION: EN202-02

1. **Author's Name:** Peggy A. Ertmer
2. **Author's Credentials:** Curriculum and Instruction Department at Purdue University, USA
3. **Publisher [or title of organization]:** The Journal of Educational Technology Research and Development
4. **Heading of Section:**Teacher pedagogical beliefs: The final frontier in our quest for technology integration
5. **Year Written:** 2005
6. **Pages:** 2
7. **Website URL:** n/a

Main Ideas/Points	Important Quotations	Supporting Details	Relevance
Although the conditions for successful technology integration finally appear to be in place, including ready access to technology, increased training for teachers, and a favorable policy environment, high-level technology use is still surprisingly low. In this article, the author argues for the importance of such research and present a conceptual overview of a teacher beliefs as a vital first step. After defining and describing the nature of teacher beliefs, including how they are likely to impact teachers' classroom practice the authors describes important implications for teacher professional	"high-level technology use is still surprisingly low. This suggests that additional barriers, specifically related to teachers' pedagogical beliefs, may be at work." "According to Becker (2000), computers serve as a "valuable and well-functioning instructional tool" (p. 29) in schools and classrooms in which teachers: (a) have convenient access, (b) are adequately prepared, (c) have some freedom in the curriculum, and (d) hold personal beliefs aligned with a constructivist pedagogy."	The author argues that although integration is important it is also vital to understand a teachers beliefs, motivation, and perception of technology use in the classroom. Not all teachers believe that technology will have a positive effect on student learning and not all teachers believe that technology is an effective teaching tool that should be implemented in classrooms across the country.	This source is extremely relevant to my study because it focuses on the teachers perception of technology in the classroom. My study focuses on how technology impacts educators so maybe hearing their thoughts on it will benefit my research.

development and offer suggestions for future research.			

8. **In this article, is it possible that any of the authors might have a bias about the subject matter? provide examples if needed.**
No.

9. **Is the article timely or a bit outdated?**
This source was published in 2005 which would make it over 10 years old. However, the content area is still relevant today.

10. **Was it published in a reputable source?**
Yes. This article was published by the Journal of Educational Technology Research and Development. This source is an academic source.

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NAME_____COURSE__English Composition II__Section ____En202-02_____

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2. Author'� s Credentials (Boise State University)
3. Publisher [or title of organization]: Pearson Education, inc.
4. Heading of Section [title of reading]: Finding Experts Pg. 83 Living Sources: Interviews and Surveys Pg.82-89   5. Year Written: 6. Pages:
7. Website URL:

Main Ideas/Points
Important Quotations
Supporting Details
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How arranging interviews is good for your research?

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"Ultimately, what makes almost any topic compelling is discovering why it matters to people close to the subject - how it affects their lives."(p. 82, para 3)

Checking your sources, ask your friends and your instructors, check phone book, check faculty directory, and check the internet
When you're writing an essay that uses primary sourcees- a literary text, a transcript, and so on- quoted material is essential.

Doing interviews with people close to the subject is the best way to that out.

This gives us options to collecting data from experts that we intend to send letters to.
Quoting properly is essential to the student researcher's essay. This section helps us to site sources properly within the text.
It will definitely help gaining knowledge about the topic from the source.

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Understanding call numbers can help you find the book or article you want.
Using brief responses, essay questions, mutiple choice, true/false, Likert, ranking

It will help me find books and articles easily.

I used open-ended nad structured questions on my survey to gain an uderstanding of people thought and ideas.

In this article, is it possible that any of the authors might have a bias about the subject matter? No___   provide examples if needed.

Is the article timely or a bit outdated - Timely

Was it published in a reputable source? Yes

It is an academic source. YES

Other important information : The Curious Researcher is a reconized textbook with basic structures applied in academic writing and research at tertiary programs world wide.

Technology in the Classroom: The Impact of Technology on Educators

Johnson N. Aldan Atalig

Northern Marianas College

June 14, 2019

EN202-02 English Composition II

Dr. Kimberly Bunts-Anderson

Research Report

Table of Contents

Abstract

A Northern Marianas College student describes an original six-week study highlighting the impact of modern technology in today's classrooms. Focusing specifically on the impact it has on educators in Saipan Southern High School. Atalig wanted to get a general understanding of how educators are impacted by the ever changing technology industry and did so by locating literature and gathering original data. Interviews that were conducted on four Saipan Southern High School teachers indicated that technology plays a crucial role in both the curriculum and infrastructure of today's modern classrooms. There were also indications that technology is a much needed resource in order to effectively teach the youth of the CNMI. This study is important because it allows the reader to get an understanding of how crucial technology is in our educational system and details the impact it has on our teachers and students alike.

Introduction

Our educational system today relies heavily on the use of modern technology to effectively educate generations of students. The technology industry is a three trillion dollar industry that prides themselves on making quality tools to make life easier and enjoyable. Not to mention the $400 billion dollar software industry that provides many of our schools with software to manage grades, conduct lectures, and make the overall experience of modern education worthwhile. Through this study the student researcher studied the effects modern technology has on educators in the CNMI. Focusing specifically on educators in Saipan Southern High School. The United States spends more than $620 billion dollars on K-12 education each year which roughly estimates to around $12,000 per student. Research suggests that roughly 36%

of those funds are utilized on education technology tools. It beats the question as to whether those funds are used effectively to train and supply classrooms with the appropriate infrastructure and tools for modern day education.

Background

This report details a study focusing on the impact technology has on teachers in Saipan Southern High School. Mainly focusing on how technology impacts their teaching strategies and lesson plans. Today, technology plays a key role in the majority of a teacher's lesson plan. Printed Assignments, digitally displayed lectures, and electronic grade books are all prime examples of technology being utilized to improve the quality of education around the globe. The use of technology in classrooms can be categorized as "normal" today. However, the researcher has studied this topic to determine if technology is necessary for teachers to teach and students to learn. The student researcher requested a total of six (6) weeks to complete this study. In addition, the researcher successfully located academic and non-academic sources and used methods to use the data to better benefit the study. The methodology was been planned and scheduled accordingly with both the interests of the student researcher and the participants in mind.

The student researcher identified five (5) academic and three (3) non-academic sources that served as literature for this research paper. One academic source that the student researcher believed would support this study is an academic journal titled "*The Journal of Science Education and Technology*." This particular source was peer reviewed by multiple professors at the University of North Dakota and Cleveland State University. The journal details the many

challenges of integrating technology on a mass scale and focuses on understanding a teacher's

motivation, perception, and overall beliefs about technology use in the classroom. The researcher

also identified a newspaper article from one of Saipan's newspaper distributors Marianas

Variety. The article titled *Preparing NMI Students for the Tech Revolution* details the efforts of

the OPEN Reef Innovations and their support in a summer technology program that high school

students in the CNMI could avail of during summer break.The program introduced students to

forms of modern technology such as virtual reality (VR) and coding.

In order to gather original data on this topic the student research conducted surveys on

the entire teacher population at Saipan Southern High School. In addition to the teacher surveys,

approximately 26 NMC students were surveyed on their thoughts on the quality of education

when technology is heavily utilized in their courses. Surveys for SSHS teachers were also

conducted on the southern campus headed by the student researcher. Following the completion

of both surveys, the student researcher conducted interviews on four SSHS teachers. The

interviews mainly focused on their perception of technology in their classrooms and the overall

benefits and setbacks on both themselves and their students.The student researcher planned and

scheduled data collection days accordingly with the school administration and the teacher

participants.

The student researcher developed a timely schedule that determined when data should be

collected and when academic research and writing should be completed. See schedule below.

Data Collection Table

Date	Time	Method	Location

TECHNOLOGY IN THE CLASSROOM

May 06, 2019	12:00 AM - 12:00 PM	Teacher Survey	Administered Online (Principal will distribute survey links)
May 07, 2019	12:00 AM - 12:00 PM	Teacher Survey	Administered Online
May 13, 2019	11:30 AM - 1:00 PM	Teacher Interviews (2)	SSHS Conference Room
May 14, 2019	11:30 AM - 1:00 PM	Teacher Interviews (2)	SSHS Conference Room
Survey opens in MAY	12:00 AM - 12:00 PM	NMC Student Survey	Administered Online (Dr. Anderson will distribute survey links)

Academic Reading & Writing Schedule

Date	Time	Reading/Writing
May 20-24, 2019	6:00 PM - 8:00 PM	Reading (Academic & Non-Academic Sources)
May 27-31, 2019	6:00 PM - 8:00 PM	Writing Introduction & Body #01
June 03-05, 2019	6:00 PM - 9:30 PM	Writing Body #02 & #03
June 06-08, 2019	6:00 PM - 9:00 PM	Writing (Conclusion)
June 10, 2019	6:00 PM - 9:00 PM	Peer Review (Project PROA)

		*See Tina Lepwach
June 11, 2019	6:00 PM - 9:00 PM	Edits & Final Touch ups
June 14, 2019	11:55 PM	Submission

The student researcher is passionate towards this topic and sees this study as a great way to inform readers about not just the way technology impacts students, but educators as well. This study mainly focused on the educator's perspective and will detail their perception and beliefs on technology in the classroom. The researcher has taken time and reviewed all academic and non-academic sources that was crucial for the completion of this study. All sources, academic and non-academic played a key role in this study.Times for original data collection, research, and academic writing was scheduled accordingly.

Literature Review

A general browser search with Google Scholar on May 23, 2019 on the topic of "technology integration and teachers" resulted in 2,390,000 hits. The majority of the publications being various articles and case studies. The first significant section of the search located various articles focusing on teacher acceptance and perception of technology (Ertmer, 2005). Narrowing the topic further the student researcher did another search on Google on the topic of "technology integration and teachers in the CNMI" which yielded 61,000 hits. The majority of the publications being various newspaper articles from local newspaper distributors and government reports. The first significant section of the search located various newspaper articles that focused

on teacher training and professional development (Cabrera, 2018). The student researcher successfully located academic and non-academic literature both locally and internationally to support this study as a whole. This topic is extremely important to our region and our educational system. Classrooms today have an abundant amount of technology integrated into both the infrastructure and curriculum. Through this study the student researcher wanted to get a general understanding on how technology affects not just students but educators as well. This review detailed the relevance of both academic and non-academic literature located for this study and focused specifically on three primary literature sources that the student researcher believes will be beneficial to the completion of this study.

The first primary literature source located for this study is an article titled "Teacher Pedagogical Beliefs: The Final Frontier in our Quest for Technology Integration." The article was published by the journal of Educational Technology Research and Development in 2005. The article focuses on teacher training and their overall perception or beliefs of technology in the classroom. According to the author, "high-level technology use is still surprisingly low. This suggests that additional barriers, specifically related to teachers' pedagogical beliefs, may be at work (Ertmer, 2005)." This article allowed the student researcher to get a general understanding of how educators feel about utilizing technology in their curriculum. This source is a credible academic source and in the student researcher's opinion it is vital for the completion of this study.

Another academic literature source is an article titled "Computer Technology Integration and Student Learning: Barriers and Promise." The article was published by the Journal of Science Technology and Education in September 2008. Although the article is 11 years old the

student researcher believes it is still relevant to our educational system today. The article

questions if technology has been effectively integrated into the curriculum and details concerns

over the impact technology has on student learning. This article serves as a great foundation for

this study. Although the article mainly focuses on technology in regards to student learning it

also mentions that technology integration would cause a major change in not just students' lives

but teachers as well. The article also emphasizes the importance of understanding integration

from a teacher perception. According to the article, "technology integration is a complex

phenomenon that involves understanding teachers' motivations, perceptions, and beliefs about

learning and technology (Woodbridge, 2008)." This article is vital for the completion of this

study due to the fact it provides information on technology integration and its impact on teachers

and students alike.

The last source for this study is an article from one of Saipan's local newspaper

distributors. The article titled "PSS embraces 21st century classroom learning" was published in

February 2018 by the Saipan Tribune. The article focuses on digital learning and the Distance

Education Program. The article also details both the accomplishments and improvements the

program has made to supply uninterrupted online education. According to the instructional

technology director Dr. Bobby Cruz, "Gone are the days that we see technology as something

unknown and intimidating to us," he said. "Technology [is] ever changing, advancing and

improving… because people continue to learn and grow and learn and go some more (Cabrera,

2018)." This source proves that the CNMI Public School System is educating and training their

teachers to embrace technology in order to keep up with students today who are considered the

"tech savvy generation" and allows both teachers and students to maintain an effective online learning environment.

The student researcher successfully located both academic and non-academic literature relevant to this study. The literature allowed the student researcher to get a general understanding on how teachers perceive technology and determines whether or not the CNMI Public School System is aware of this. Majority of the literature located proved that both students and teachers in the CNMI have an appetite for modern technology use in the classroom. In addition, the literature also informs the researcher that technology integration has come a long way since the early 2000s and that educators are more open to learn and grow with the ever changing technology industry.

Primary and Secondary Research Questions

Primary: How do forms of modern technology impact educators in the CNMI?

Secondary: How does technology impact students and teachers in Saipan Southern High School. Has technology been effectively integrated into both the curriculum and infrastructure?

Methodology

Various tools are often used in classrooms to either enhance or improve the quality of teaching and learning. Technology plays a key role in education and is often seen as a "norm" in today's modern classrooms. According to Buabeng-Andoh, "information and communication technology (ICT) is becoming increasingly important in our daily lives and in our educational system." Therefore, the demand for ICT in secondary and post-secondary institutions has

increased (Buabeng-Andoh, 2012). The purpose of this section is to detail the many steps the student researcher has taken to gather original data on this specific topic. As well as, describe the steps taken to determine the most effective and efficient data collection tools and methods.

The student researcher collected data through two surveys that were distributed to approximately 38 Northern Marianas College students. The first survey was a 10 question pilot survey intended to test the student researchers primary data collection tool. The pilot survey comprised of demographic, matrix, short answer, and closed ended questions.The survey was reviewed by english composition II students and the instructor and participants were asked to provide feedback on other student's surveys. Including the student researcher. In total, the student researcher received nine comments and suggestions on the pilot survey. Majority of the suggestions focused on questions that needed clarification from the student researcher. After applying changes to the pilot survey the student researcher distributed the final survey links via a Google document shared with english composition II students and the instructor. After the distribution of links on the shared Google document the student researcher received a total of one suggestion and three responses. As a task for week seven, English Composition II students were required to provide feedback or helpful information on 10 surveys. The final survey link was posted on May 06, 2019 will remain open for a total of three weeks. The student researcher has carefully analyzed data collected thus far and will compare results when the alloted time for responses expires.

In addition to surveys, the student researcher has also sent letters to a total of 10 experts. Five of which are on island experts and the remaining five live abroad. The experts are made up of both secondary and postsecondary teachers. Three live abroad and are employed at Cleveland

State University (CSU). Together all three professors authored an article in an academic journal titled *Education and Science Technology*. As of today, the student researcher has not received any responses from any of the 10 experts. However, the student researcher has successfully distributed letters to all five on island experts. Three of which have scheduled a meeting with the student researcher. Therefore, said experts will also be interviewed on the meeting day.

An informal interview conducted on May 07, 2019 in room Y18 has allowed the student researcher to collect input from one NMC student. In the short time alloted for the interview the student researcher was able to record much needed data from a student's perspective.The interview questions asked mainly composed of open ended questions and demographic questions. Fernandez the interviewee was interviewed by the student researcher for a total of 16 minutes and the interview was both recorded on a recorder and hand written notes were taken. According to Fernandez, an education major at the Northern Marianas College, "Access to modern technology has allowed not only me but my instructors to save time in the classroom" (Informal Interview, May 07, 2019, 9:30am, NMC Campus). Fernandez also suggested that the abundance of technology on the NMC campus pairs well with the both the instructors and students in NMC. In addition to Fernandez's interview, a second interview was conducted on the NMC campus in room Y5. The interview began at 3:32 pm and lasted for approximately 11 minutes. Calvo, the interviewee was interviewed by the student researcher. After being asked the same questions as Fernandez the student researcher analyzed the similarities between both interview responses and identified key differences between the two. Calvo, a first year college student at the Northern Marianas College suggests that the quality of education at NMC is much better compared to his former high school where technology was limited and seldom used

(Personal Interview, May 09, 2019, 3:32pm, NMC Campus). Because of this, the student researcher was able to gather input on the differences of education quality between a secondary and post-secondary institution. In this case the institutions are NMC and Saipan Southern High School.

Technology plays a key role in not just the lives of students but educators as well. Our education system has grown dependent on technology to satisfy the need for quality education and learning.The student researcher has successfully tried and tested multiple methods for original data collection. A total of two surveys, 10 letters to experts, and two informal interviews have been completed. The student researcher has taken time to analyze and evaluate all original data collected during the process. Additional survey data and expert opinions is expected in the coming weeks. All data collected through these methods will benefit the completion of this study as well as helps the student researcher to answer the question at hand.

Results and Analysis

After following a precise schedule located in appendix G the researcher has gathered significant amounts of original data. Teacher and student interviews were conducted on two teachers and students at Saipan Southern High School. Although, the researcher did not meet his goal of four teacher and student interviews Atalig still believes that the data collected has served its purpose. The data suggests that although technology is usually accessible in Saipan Southern, it is not frequently integrated into the curriculum. With exceptions to the distance education program and hybrid courses. Students interviewed suggest that technology is absolutely necessary for them to learn and pass their courses. Camacho, a student at Saipan Southern stated

that she uses technology for majority if not all her courses (Appendix E). Technology plays a key role in not just the way a teacher teachers but the way students learn. A survey was distributed to approximately 38 NMC students resulted in a total of 24 responses. Of the 24 responses 11 people had attended Saipan Southern. The results suggests that both secondary and post secondary educators yielded the same education quality. It also shows that students are well aware of the software and tools readily available for their education. However, the data also suggests that it is difficult for some students to access some forms of modern technology.

Conclusion

Technology is ever changing and plays a significant role in our educational system. Through this study the researcher has collected original data that suggests that both students and teachers rely heavily on modern technology to learn and teach. Teachers perceive technology more as a convenience than an actual educational tool but teachers agree that it is necessary to teach their students in the most effective way possible. NMC student surveys suggest that secondary and post secondary education quality remain the same and indicate that teachers are utilizing technology in their curriculum to enhance and encourage learning. Billions of dollars are spent each year on education alone with a little 36% of those funds dedicated to education technology. It is apparent that people in higher places value technology greatly.

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Technology in the Classroom: The Impact of Technology on Educators

Appendices

Johnson N. Aldan Atalig

Northern Marianas College

Appendix A

NMC Survey Questions

1. Demographics

    Gender

    Age

    Course Load

    Full Time/ Part Time Student

    Major

    High School Attended

2. How many of your COLLEGE instructors utilize technology in the classroom to help them with their lessons/lectures?

3. What subject areas use the most technology in the classroom? Please rank them in order. 1 being the HIGHEST and 5 being the LOWEST

    English/Reading/Writing/Literature

    Mathematics

    Science

    Social Studies/History

    Foreign Language

4. On a scale from 0 to 10 rate how often your COLLEGE instructors utilized technology in their lessons.

0   Lowest - Highest   10

5. On a scale from 0 to 10 rate how often your former HIGH SCHOOL instructors utilized technology in their lessons.

0   Lowest - Highest   10

6. What are some forms of technology utilized by your instructor during his/her lessons? Please check all that apply.

Desktop Computers

Portable Laptops

Tablets/IPads

Smart Phones

Printers/Scanners/Fax Machines

Smart Boards

Projectors

Clickers

Moodle

Black Board

Edmodo

Quizlet

Turnitin

Microsoft Office (Word, Power Point, Excel, etc.)

Video Editing Software (IMovie,Movie Maker, Adobe Premier, Final Cut Pro)

Photo Editing Software (Adobe Photoshop, Adobe Lightroom)

Smart Speakers

Virtual Assistants (Siri, Alexa, Cortana, Bixby)

Virtual Reality Goggles

3D Printers

7. Which forms of technology do you believe is the most helpful in the classroom? Please check all that apply.

8. In one paragraph or less explain why you found those forms of technology helpful during the lesson. Please explain

9. On a scale from 0 to 10 rate your COLLEGE instructors teaching quality when he or she utilized technology to conduct his or her lesson.

0   Low Quality - High Quality   100

10. On a scale from 0 to 10 rate your former HIGH SCHOOL instructors teaching quality when he or she utilizes technology to conduct his or her lesson.

0   Low Quality - High Quality   100

Appendix B

NMC Survey Results

Q1

Save as ▼

Demographics

Answered: 22   Skipped: 2

ANSWER CHOICES ▼		RESPONSES ▼	
High School Attended	Responses	95.45%	21
Gender	Responses	100.00%	22
Age	Responses	100.00%	22
Course Load	Responses	100.00%	22
Full Time/ Part Time Student	Responses	100.00%	22
Major	Responses	100.00%	22

Q2

Customize   Save as ▼

How many of your COLLEGE instructors utilize technology in the classroom to help them with their lessons/lectures?
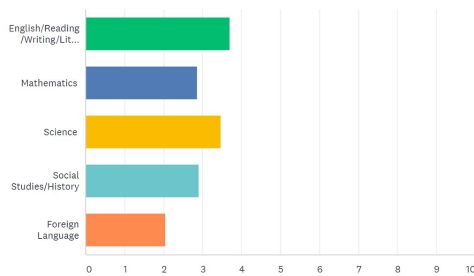
Answered: 24   Skipped: 0
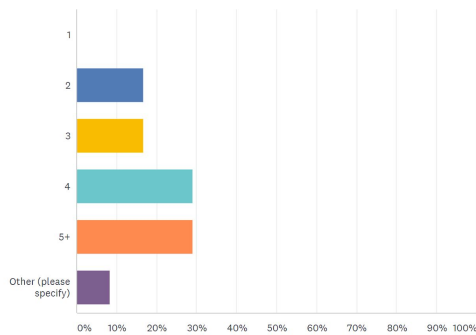
Q3

Customize   Save as ▼

What subject areas use the most technology in the classroom? Please rank them in order. 1 being the HIGHEST and 5 being the LOWEST
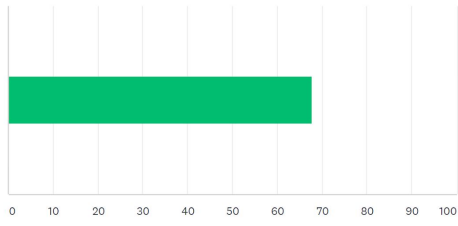
Answered: 21   Skipped: 3

TECHNOLOGY IN THE CLASSROOM

On a scale from 0 to 10 rate how often your COLLEGE instructors utilized technology in their lessons.
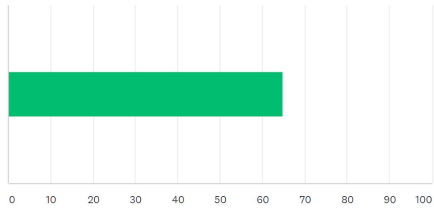
Answered: 22   Skipped: 2

Customize   Save as ▼

On a scale from 0 to 10 rate how often your former HIGH SCHOOL instructors utilized technology in their lessons.

Answered: 24   Skipped: 0

Q6

Customize   Save as ▼

What are some forms of technology utilized by your instructor during his/her lessons? Please check all that apply.

Answered: 24   Skipped: 0

■ Check if Applicable

TECHNOLOGY IN THE CLASSROOM

Which forms of technology do you believe is the most helpful in the classroom? Please check all that apply.

Answered: 22   Skipped: 2

Desktop Computers	
Portable Laptops	
Tablets/iPads	
Smart Phones	
Printers/Scanners/Fax Machi...	
Smart Boards	
Projectors	
Clickers	
Moodle	
Black Board	
Edmodo	
Quizlet	
Turnitin	
Microsoft Office (Word...	
Video Editing Software...	
Photo Editing Software (Ad...	
Smart Speakers	
Virtual Assistants...	
Virtual Reality Gogg...	
3D Printers	

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

In one paragraph or less explain why you found those forms of technology helpful during the lesson. Please explain

Answered: 22   Skipped: 2

RESPONSES (22)   WORD CLOUD   TAGS (0)   🔒 Sentiments: OFF ⬤

PAID FEATURE   ⊗
Text Analysis lets you search and tag comments and see word clouds of frequent words and phrases. To get this feature, upgrade to a paid plan.

[UPGRADE]   Learn more »

☐ Apply to selected ▾   Filter by tag ▾   Search responses 🔍 ❓

Showing **22** responses

5/19/2019 9:59 PM   View respondent's answers   Add tags ▾

☐ those are what are needed for class

5/19/2019 8:32 PM   View respondent's answers   Add tags ▾

☐ In this generation today, technology are everywhere. Anywhere we go, we will most likely to be surrounded by some sorts of technology in our lives. It is becoming very dominate in today's world. Technology in education is the biggest change in teaching we will ever see.

5/19/2019 8:26 PM   View respondent's answers   Add tags ▾

☐ They help do my work and made learning easier.
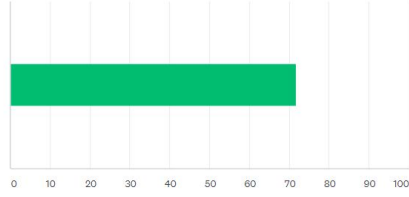
5/19/2019 2:52 PM   View respondent's answers   Add tags ▾

☐ They explaining and checking work much easier for the teacher.

TECHNOLOGY IN THE CLASSROOM

On a scale from 0 to 10 rate your COLLEGE instructors teaching quality when he or she utilized technology to conduct his or her lesson.
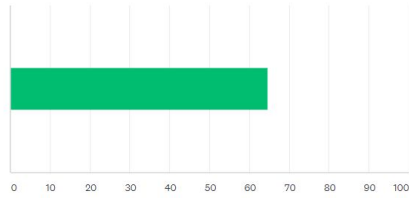
Answered: 24   Skipped: 0

ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
Responses	72	1,724	24

Total Respondents: 24

Q10   📌 Customize   Save as ▼

On a scale from 0 to 10 rate your former HIGH SCHOOL instructors teaching quality when he or she utilized technology to conduct his or her lesson.

Answered: 22   Skipped: 2

ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
Responses	65	1,422	22

Total Respondents: 22

Appendix C

Expert Contacts

On-Island Experts (5)

Jesse Tenorio
State Technology Director
CNMI Public School System
Technology Infrastructure
Contact Numbers:322-1239, 783-8971
Email: jesse.tenorio@cnmipss.org

Daniel Suda
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Lorraine R. Catienza
Distance Education Program Coordinator
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Arisa Sakai Peters
Career Technical Education (CTE) Department Head
Saipan Southern High School
CNMI Public School System

TECHNOLOGY IN THE CLASSROOM

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Off-Island/Online Experts (5)

Grace Keengwe
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2121 Euclid Ave. JH 313, Cleveland, OH 44115

Bernadette Adams
Senior Policy Advisor
White House Leadership Fellow
Office of Educational Technology
U.S. Department of Education

Appendix D

Expert Sample Letters

Grace Keengwe
Associate Professor, Teaching & Leadership
Education Building Room 276
231 Centennial Dr Stop 7189
Grand Forks, ND 58202-7189

Greetings! My name is Johnson Aldan Atalig, and I am a student at the Northern Marianas College located on the island of Saipan.I am currently enrolled in an English Composition II course and I was hoping to get your input on technology in classrooms. I am doing a research paper on technology integration in classrooms and its effect on educators and students. I have been tasked with locating experts to interview and would like to ask you a few questions in regards to your work in various publications. I have provided a short questionnaire that might provide me with the information I require to write my paper. You may respond to this email or feel free to give me a call on the numbers I have provided below. I understand that the time difference might pose as a problem so email if very much preferred.I thank you kindly for your time and I look forward to your response, if you choose to do so. Thank you again.

Best regards,

Johnson N. Aldan Atalig
Liberal Arts Emphasis in Education
Northern Marianas College
Home: (670) 288-2978
Cell: (670) 287-9960
Email: johnson.atalig@my.marianas.edu / johnsonatalig14@gmail.com

\Questionnaire:

1.In your honest opinion, do you think the U.S. education system has successfully integrated sufficient amounts of technology in classrooms around the country? Why?

2. As an educator, what are your opinions on technology integration in classrooms?

3.Do you find technology to be helpful in the classroom or just a complete distraction?

Appendix E

Teacher Interviews

Interview #	T01
Interviewer	Johnson N. Aldan Atalig
Interviewee	Arisa Sakai Peters
Date of Interview	Friday, May 31, 2019
Start Time	8:02 AM
End Time	8:17 AM
Location of Interview	Saipan Southern High School (Room #D103)

Notes:
Interviewee: Arisa Sakai Peters
Female
Age: 41
SSHS Teacher since 2002
Saipan Southern High School Japanese I & II Instructor
CTE Department Head
Student Council Advisor
Youth Advisory Panel Advisor

Questions:

#01 Rate how often you USE technology in the classroom.
-3 Usually

#02 Rate how often you have ACCESS to technology
-3 Usually

#03 Do you agree that the integration of technology in classrooms is vital to student and teacher success?
-Strongly Agree

#04 If I were to take all forms of technology from you today will you be able to teach tomorrow?
-"Technology has played a key role in many of my teaching strategies and practices. I use technology for almost everything in my lesson plan. I use software and computer applications to create assignments and tests. I use technology to print them out. I use technology to project/display my

lectures on the whiteboard. I also use technology to input grades so that grades won't have to be calculated manually.In my opinion if we didn't have access to the technology I have now teaching would be a lot harder on the students and myself. I am quite torn. As a teacher I have to be flexible so YES I do believe I could still teach my students but it will be a lot harder."

Interview #	T02
Interviewer	Johnson N. Aldan Atalig
Interviewee	INTERVIEWEE REQUESTS TO REMAIN ANONYMOUS
Date of Interview	Friday, May 31, 2019
Start Time	9:00 AM
End Time	9:26 AM
Location of Interview	Saipan Southern High School (Room #I101)

Notes:
Interviewee: N/A
Female
Age: 40
SSHS Teacher since 2004
Digital Media, Journalism, Yearbook Instructor

Questions:

#01 Rate how often you USE technology in the classroom.
-3 Usually

#02 Rate how often you have ACCESS to technology
-3 Usually

#03 Do you agree that the integration of technology in classrooms is vital to student and teacher success?
-"Agree. Although technology is not a priority in the classroom, I do find it very helpful in regards to student achievement as well as my personal achievements in the classroom. Technology allows me to teach my students in the most convenient way possible."

#04 If I were to take all forms of technology from you today will you be able to teach tomorrow?
-Yes, of course, it is possible for me to teach my students tomorrow. There are other resources that teachers like myself can rely on. But, that does mean we would need to put in more work for something I could have done in two minutes on a computer. I would say that teachers use and incorporate technology into their lesson plans for two key reasons. One is because the technology is very

convenient for both the students and the teacher and two because it allows us to complete lessons in a timely manner.

Appendix F

Student Interviews

Interview #	S01
Interviewer	Johnson N. Aldan Atalig
Interviewee	Sablan
Date of Interview	Monday, June 03, 2019
Start Time	1:00 PM
End Time	1:35 PM
Location of Interview	Saipan Southern High School (Main Office Conference Room)

Notes:
Interviewee would like to remain anonymous
OK to use family name

Interviewee: Sablan
Female
Age: 17
SSHS Student 10th-12th Grade
Simon Sanchez High School (GU) 9th Grade

Questions:

#01 Rate how often you USE technology in the classroom.
-4 Always

#02 Rate how often you have ACCESS to technology
-4 Always

#03 Do you agree that the integration of technology in classrooms would be beneficial for you and your peers?
-Yes.I think that there should be more technology integrated into classrooms across the CNMI. We rely heavily on technology so why not?

> **#04 If I were to take all forms of technology from you today will you be able to learn tomorrow?**
> -Logically speaking, No. I think without technology I would not be able to learn. We rely on technology so much nowadays, I don't think we could survive without it. I know I wouldn't. Sure there are other resources like libraries and what not but I feel like without access to basic technology like the world wide web we would take forever to complete assignments that require research.

Interview #	S02
Interviewer	Johnson N. Aldan Atalig
Interviewee	Camacho
Date of Interview	Monday, June 03, 2019
Start Time	10:57AM
End Time	11:12AM
Location of Interview	Saipan Southern High School (Room #D103)

Notes:
Interviewee would like to remain anonymous
OK to use family name

Interviewee: Camacho
Female
Age: 16
SSHS Student 9th-12th Grade

Questions:

#01 Rate how often you USE technology in the classroom.
-3 Usually

#02 Rate how often you have ACCESS to technology
-3 Usually

#03 Do you agree that the integration of technology in classrooms would be beneficial to you and your peers?
Yes. I would say that our generation relies a lot on technology and sometimes we take it for granted.
-#04 If I were to take all forms of technology from you today will you be able to learn tomorrow?
-No. I honestly do not think I will be able to learn because it will be much harder especially without the internet. Reading books, going through encyclopedias. I can't name one person who still does that anymore. Dictionaries too. I can find the definition of a word in seconds on the internet.

Appendix G

Schedules

Data Collection Table

Date	Time	Method	Location
May 06, 2019	12:00 AM - 12:00 PM	Teacher Survey	Administered Online (Principal will distribute survey links)
May 07, 2019	12:00 AM - 12:00 PM	Teacher Survey	Administered Online
May 13, 2019	11:30 AM - 1:00 PM	Teacher Interviews (2)	SSHS Conference Room
May 14, 2019	11:30 AM - 1:00 PM	Teacher Interviews (2)	SSHS Conference Room
Survey opens in MAY	12:00 AM - 12:00 PM	NMC Student Survey	Administered Online (Dr. Anderson will distribute survey links)

Academic Reading & Writing Schedule

Date	Time	Reading/Writing

TECHNOLOGY IN THE CLASSROOM

May 20-24, 2019	6:00 PM - 8:00 PM	Reading (Academic & Non-Academic Sources)
May 27-31, 2019	6:00 PM - 8:00 PM	Writing Introduction & Body #01
June 03-05, 2019	6:00 PM - 9:30 PM	Writing Body #02 & #03
June 06-08, 2019	6:00 PM - 9:00 PM	Writing (Conclusion)
June 10, 2019	6:00 PM - 9:00 PM	Peer Review (Project PROA) *See Tina Lepwach
June 11, 2019	6:00 PM - 9:00 PM	Edits & Final Touch ups
June 14, 2019	11:55 PM	Submission