

Technology in the Classroom: The Impact of Technology on Educators

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EN202-02 English Composition II

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Research Report

TECHNOLOGY IN THE CLASSROOM

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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%

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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

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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 researcher 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
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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)

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		*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

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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

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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

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“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

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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 allotted 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

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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 allotted 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

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(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

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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 teaches 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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References

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Appendices

Johnson N. Aldan Atalig

Northern Marianas College

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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.

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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)

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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

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Appendix B

NMC Survey Results

Q1

Save as ▼

Demographics

Answered: 22 Skipped: 2

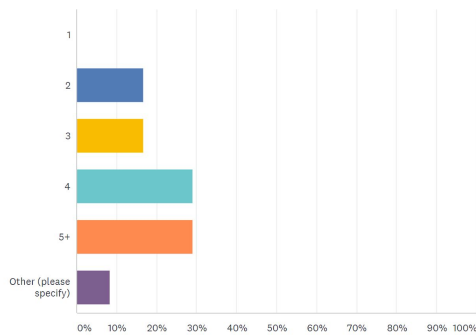
ANSWER CHOICES	RESPONSES
High School Attended	Responses 95.45% 21
Gender	Responses 100.00% 22
Age	Responses 100.00% 22
Course Load	Responses 100.00% 22
Full Time/ Part Time Student	Responses 100.00% 22
Major	Responses 100.00% 22

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

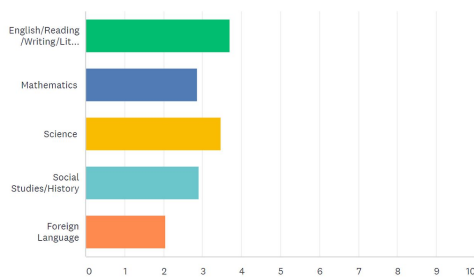


Q3

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

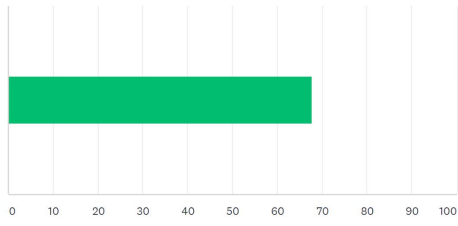
Answered: 21 Skipped: 3



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

Answered: 22 Skipped: 2

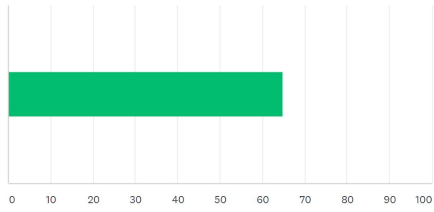


Q5

[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



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Q7

Customize Save as

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

Answered: 22 Skipped: 2



Q8

Save as

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

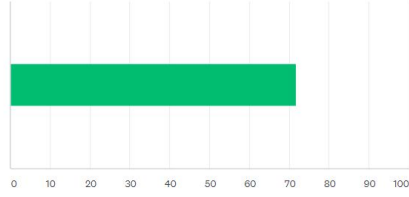
View respondent's answers Add tags

They explaining and checking work much easier for the teacher.

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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



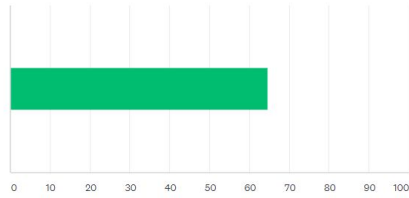
ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
Responses	72	1,724	24
Total Respondents: 24			

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			

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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
Network Specialist
CNMI Public School System
Technology Infrastructure
Contact Number: 322-1239
Email: daniel.suda@cnmipss.org

Bobby A. Cruz
Director of Instructional Technology
CNMI Public School System
Student Support Services
Contact Numbers: 237-3014, 287-2792, 322-6760
Email: bobby.cruz@cnmipss.org

Lorraine R. Catienza
Distance Education Program Coordinator
CNMI Public School System
Student Support Services
Contact Numbers: 483-1925, 322-6760
Email: lorraine.catienza@cnmipss.org

Arisa Sakai Peters
Career Technical Education (CTE) Department Head
Saipan Southern High School
CNMI Public School System

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Contact Numbers: 287-0109, 664-4000

Email: arisa.sakai@cnmipss.org

Off-Island/Online Experts (5)

Grace Keengwe

Associate Professor, Teaching & Leadership

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Office: 701.777.3378

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Sagini Keengwe

Professor, Teaching & Leadership

Digital Technologies; Active Learning, and Social Justice in Teacher Education

Contact Info

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Bernadette Adams

Senior Policy Advisor

White House Leadership Fellow

Office of Educational Technology

U.S. Department of Education

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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 is 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
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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?

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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?

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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)
<p>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</p> <p>Questions:</p> <p>#01 Rate how often you USE technology in the classroom. -3 Usually</p> <p>#02 Rate how often you have ACCESS to technology -3 Usually</p> <p>#03 Do you agree that the integration of technology in classrooms is vital to student and teacher success? -Strongly Agree</p> <p>#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</p>	

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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)
<p>Notes: Interviewee: N/A Female Age: 40 SSHS Teacher since 2004 Digital Media, Journalism, Yearbook Instructor</p> <p>Questions:</p> <p>#01 Rate how often you USE technology in the classroom. -3 Usually</p> <p>#02 Rate how often you have ACCESS to technology -3 Usually</p> <p>#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."</p> <p>#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</p>	

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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?	

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#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)
<p>Notes: **Interviewee would like to remain anonymous** **OK to use family name**</p> <p>Interviewee: Camacho Female Age: 16 SSHS Student 9th-12th Grade</p> <p>Questions:</p> <p>#01 Rate how often you USE technology in the classroom. -3 Usually</p> <p>#02 Rate how often you have ACCESS to technology -3 Usually</p> <p>#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.</p> <p>-#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.</p>	

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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

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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