

Best Practices for Educational Technology Implementation  
in Two-Year Community College Writing Centers

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## **Introduction**

An area that deserves to be looked into is the implementation of educational technology into college writing centers. Many studies have been conducted on individual software or programs, and the majority of these studies show that educational technology in the writing center is of great help to students, but these studies are often limited to one small sample at a given college and almost always rely on quantitative data, not taking students' perceptions into account, such as Proudfoot (2016) and Wood, Grant, Gottardo, and Evans (2016). There are even fewer studies that address writing center administrator's perceptions, especially in the area of technology. Current best practices in college writing centers neglect to discuss the educational technology in use, focusing more on the training of tutors and pen and paper approaches.

This study will look at the current best practices of technology implementation in college-level writing centers. Because of the vast differences in student populations and budgets at writing centers, this will be a qualitative look and what writing center administrators view as what works best for them, with their own populations and budgeting, along with what they find beneficial, what they find does not work as well as it should, and what they would like to see offered in future technologies.

## **Literature Review**

There has been little study of the effects of educational technology implementation specifically as it applies to the community college writing center, yet Wilson (2017) states that "research has shown that the use of computers, educational technology, and assistive technology can improve students' writing performance" (p. 692). Griffin and Minter (2013) assert that "Technology is now inextricably linked to literacy and literacy education" (p. 141). Writing involves many different factors, such as coordinating "multiple component skills across sub-

lexical (handwriting), lexical (spelling, word choice), syntactic (grammar, sentence structure, punctuation), and discourse levels of language (organization, content)” (Wilson, 2017, p. 692), as well as integrating knowledge from memory.

Davis (2016) found that almost half of students with disabilities enter a college within two years of graduating from high school. Community college is often the choice for these students, though with community colleges being open-admission schools, there is a wide-range of student abilities, from those with disabilities to those who are gifted. Zhanova and Fincher (2019) contend that “While selective universities have been seen as the optimal destination for the gifted, community colleges offer a better option for students with limited preparation, financial support, or a high need for familial support” (p. 136).

Pennington and Gardner (2006) make the argument that “Computer technology should be available in the writing center and should support the work of the center” (p. 261). The importance of the writing center at the community college cannot be denied, as Pennington and Gardner (2006) also state that “Many writing centers in two-year colleges, rather than being tied to specific areas of the curriculum, serve writers at all levels and in any area of the curriculum across the entire institution. In addition to serving students, many writing centers also serve faculty and the community” (p. 261). Writing centers often do much more than just assist with writing: especially at the two-year community college level, many of these centers also must focus on reading comprehension skills as well.

According to Crawford (2016) there is a need for writing centers to create an identity for themselves. One way of doing this is to create a set of “best practices” when it comes to the use of educational technology in the center and how it is implemented. Studies, such as Wilson’s

(2017), show that implementing technology in the writing center is important, yet there has not been a sustained effort to quantify what the best practices in this area are or should be.

As for the actual technology in use, Herold (2016) states that those who write the curriculum often create it with an idealized “average” student in mind. The resulting curriculum must therefore be flexible enough to allow the students actually using it to find benefit from it. By using technology, however, such as reading software, student needs can be anticipated, whether for gifted students or for those in need of remediation. These types of software, while normally found in the K-12 realm, can be used for colleges as well, especially two-year community colleges. The software can be customized to each student’s reading ability and allow instructors or writing centers administrators to target specific skills such as understanding sight words, phonemic awareness, or even just comprehension. Herold (2016) writes that with educational software, such as Houghton Mifflin Harcourt’s *READ 180*,

As the students use the software, it analyzes how they read and perform on subsequent vocabulary quizzes and exercises. From there, *READ 180* seeks to identify which words each student understands and can read and spell, as well as how quickly the student can do each of those functions (p. 2).

The various types of technology currently available to students is not only greater than at any time before, but it allows students to show what they have learned in ways that go beyond putting words to a page. Herold (2016) points out that there is a great deal of free software and applications that can assist students in creating new and original ways of producing content to showcase what they have learned, from iMovie to Google Docs, to Audacity and Skype. These software and apps can turn a smartphone into an almost professional-level video laboratory.

Wood, Grant, Gottardo, Savage, and Evans (2017) state that “Mounting research evidence conducted in formal school learning environments and informal home and child-care contexts indicates that children’s cognitive and social lives can benefit from the use of effective instructional software” (p. 207). Wood, et al, write that one of the largest areas using reading comprehension software is in the lower grades where students are just beginning to learn the basics of reading words and of sentence construction. Phonological awareness, the relationship between the letters and the sounds they represent, is another key part of early reading, regardless of if the student is learning to read in Kindergarten or if they are learning to read as part of a college English as a Second Language class..

Reading comprehension issues are not limited to the lower levels of K-12 education, however. Morales (2018) writes that, for Latino English Language Learners (ELL), “the community college, with its open admissions policies and affordable tuition, is the most attractive place to begin the journey to higher education in the United States” (p. 1). Morales (2018) states that graduation rates for ELL students is drastically lower than non-ELL students. Because ELL students may make up a significant percentage of students at the community college level, reading comprehension becomes an issue, especially for services such as the writing center.

As for writing center administrators concepts of best practices, an important point of interest is when Wood et al. (2017) write that “Formal evaluation is not required and may never be conducted on software prior to its release, leaving parents and educators to determine whether the stated goals or claims are substantiated or how these claims are realized through the software” (p. 208). For reasons such as this, it is important for writing center administrators to understand what the technology is, how it is used, as well as how to assess it in order to ensure

that the students are receiving the assistance that they need and are under the impression that they are in fact receiving. In an era where nutritional values of cheeseburgers are required to be displayed in fast food restaurants, it can be surprising that one of the essential functions of our society, educating our citizens, may utilize technologies that are not given the scrutiny that a bag of pretzels in a school cafeteria vending machine receives.

Sterling (2017) looked at four different types of writing evaluation software and found that “Originally designed for scoring and basic feedback on writing quality, these programs are now capable of providing complex analysis of student writing by employing computer related analytics” (p. 1). Software such as this is often found in writing centers and while research has been conducted on its efficacy, there has been little research that addresses the writing center administrator’s views of writing evaluation software let alone the best practices that drive its usage.

In terms of reading software, Wood et al. (2017) looked at 14 commercially available software that focus on literacy and reading skills, of which three were fully online and 11 were offline programs. The study looked at nine overarching reading skills and 45 associated sub-skills. Their research showed that all 14 software packages were shown to be able to improve baseline literacy scores of students across the nine overarching skills and the 45 associated sub-skills. Greater literacy improvements were found when one of the three online programs were used as compared to any of the offline software that was studied. Wood et al. (2017) write, in regards to the online programs, “They demonstrate a more complete and balanced approach to literacy by training a fuller taxonomic structure of reading development from beginner to advanced level” (p. 214). Writing center administrators and staff come into play when Wood et al. (2017) go on to write that even with the best of the studied software, instructor support is

necessary for student success, as well as “Acknowledgement of the need for experienced supportive instruction is explicitly addressed in the design of some programs but not in others. For example, all of the online programs offer parent and/or teacher portals” (p. 214). The key takeaway is that the technology is only as good as the instructor or administrator using it.

Another reason for the importance of the writing center and its’ effect on student outcomes, especially in regards to the technology that it employs, is struggling readers often have comprehension issues in a variety of classes, even in mathematics where word problems are used. The issue in this case is not the actual mathematics involved, but the difficulty in comprehending, understanding, and sorting through the information that the text is relaying to them. They often simply do not know what is being asked of them (Proudfoot, 2016). As it follows, Proudfoot (2016) writes that “Students who are competent readers, as measured by their performance on reading tests, are more likely to perform well in other subjects, such as math and science” (p. 39).

Keyes, Cartledge, Gibson Jr., and Robinson-Ervin (2016) write that “educators must use software that provides for evidence-based, effective instruction to produce desired results in reading” (p. 143). At the two-year community college, computer assisted instruction and software is often in great need, where many students are economically disadvantaged, English Language Learners, or are part of the special needs population. These students, on average, have more reading difficulties than their more mainstream traditional classmates. Economically disadvantaged students, ELL students, and special needs students who receive computer assisted instruction allow instructors to more specifically tailor what the student is learning towards their needs, while at the same time allowing for differentiated instruction to take place without the

need for extra time on the part of the students or the instructors (Keyes, Cartledge, Gibson Jr., & Robinson-Ervin, 2016).

### **Theoretical Framework**

This study is phenomenological qualitative in nature in that it utilizes interviews as a way to fully understand the feelings, and the experiences, of the writing center administrators involved in this study, what they believe are the best practices of educational technology implementation in writing centers, and why they believe it. Creswell (2013) writes about the fundamental part of phenomenological research is to arrive at a description of the phenomena that is being observed, in this case the best practices of educational technology implementation in two-year community college writing centers. Creswell (2013) suggests a range of five to 25 participants for a qualitative study of this type. The population of this study is made up of two-year community college writing center administrators who utilize writing and/or reading assistance software in their centers.

### **Research Problem**

Bielinska-Kwapisz (2015) writes that almost 45% of students in their first two years of college “demonstrated no significant improvement in a range of skills including critical thinking, complex reasoning, and writing” (p. 382). She goes on to state that there is, however, a “direct relationship between rigor and gains in learning: students whose classes reflected high expectations – more than 40 pages of reading each week and more than 20 pages of writing each semester” (p. 382). Therefore, writing at the college level is directly linked to gains in learning.

Lerner (2019) states that while writing centers themselves are extremely valuable, as data has consistently shown, there is not a great amount of research devoted to them. He then goes on to write that

Christina Murphy, also both a past-president of the National Writing Centers Association and a widely published scholar on writing center–related topics, infamously declared in her talk at the national conference that writing center research was, essentially, “bankrupt” (p. 458).

Murphy’s argument, and Lerner’s as well, is that there is little “big picture” research currently being done on this important aspect of college learning. Many studies focus only on student outcomes, which of course are important, but may lack nuance. Grades are ultimately seen as the last word in student achievement, but the confidence that is built up in a student is much more difficult to gauge. Perhaps even more difficult to express is what the writing center administrator sees in the students, as they are often the ones who watch the growth of a student of the course of a single semester or even years.

### **Research Questions**

These are the research questions that I will seek to answer:

Q1: What do Writing Center Administrators perceive as being the best practices in terms of educational technology implementation into their writing centers?

Q2: How have Writing Center Administrators seen technology as being beneficial to their students at their writing centers, if at all?

Q3: What kinds of future educational technology functionalities would Writing Center Administrators view as the most important for writing center assistance?

### **Method**

Up to 10 writing center administrators will be emailed a survey through Qualtrics that asks for some relevant background information (Appendix A) that includes how long they have served in that position, how many unique students they assist each semester, how many visits

they record each semester, what type of scheduling software they use, and what percentage of their student's visit use some type of technology.

A series of interviews and open-ended questions (Appendix B) will be used to elicit each administrators view on what they perceive as a best practice when it comes to technology in writing centers in general, and their writing center in particular. The answers to all interviews and open-ended questions will then be coded to tease out themes and be analyzed to determine what best practices have emerged from their responses. These interviews will be conducted in one of three ways: 1) telephone, 2) Skype, or 3) in person. Franklin (2014) used a similar set-up in his study of program evaluation at community college learning assistance centers.

### **Sampling Overview**

This study will select participants using purposeful sampling. Up to 10 two-year community college writing center administrators will be contacted either through email or via telephone to ask about their interest in participating in this study (Appendix C). Centers will be chosen based on their standing with professional tutoring organizations, such as the National Tutoring Association (NTA), Association for the Coaching and Tutoring Professional (ACTP), the National College Learning Center Association (NCLCA), and the College Reading and Learning Association (CRLA). Writing centers at the following locations fit the criteria: Borough of Manhattan Community College (NY), Bronx Community College (NY), Community College of Morris (NJ), Hudson County Community College (NJ), Essex County Community College (NJ), LaGuardia Community College (NY), Middlesex Community College (NJ), Passaic County Community College (NJ), Queensborough Community College (NY), and Rockland Community College (NY).

Potential issues that may arise include participants either not willing to take part in this study or simply being unavailable to take part. By stating that up to 10 writing center administrators will be contacted, I have doubled the minimum of five participants as recommended by Creswell (2013). Another issue is conducting the interview. While I would like to conduct these face-to-face, there are many logistical issues that may prevent this and force me to rely on a system such as Skype or telephone calls to conduct this part of my research.

### **Procedures**

This research will use a qualitative approach to the study. Studies such as Gibson Jr., Cartledge, Keyes, and Yawn (2014) have shown a positive correlation between literacy software and improved student performance. My particular interest is in the views of the administrators who are tasked with running the writing centers. While there is a great amount of data that can be combed through and quantified, perceptions of student performance, by the very people who are tasked to assist them, may not always match up. Since these administrators are at the front lines of higher education literacy assistance, and there has yet to be a clear notion of best practices in writing center educational technology implementation, these administrators views are important for defining what those best practices currently are as well as where they are heading in the future.

To begin, 10 writing center administrators will be contacted and asked about their willingness to participate in this study. The study is being conducted in two parts: the first is a six question survey that is being administered through Qualtrics. This survey should take respondents no more than 5 – 7 minutes to complete. The second part is an interview with the administrator. These interviews will be scheduled in advance according to the interviewees schedule and should last approximately 20 – 30 minutes. The interview will take place either

over the phone, through Skype, or face-to-face, depending on the preference and availability of the interviewee. All interviews will be recorded and professionally transcribed.

The interviews will be coded to search for themes that recur in order to answer Research Questions 1, 2, and 3. Survey results will then be linked with the interviews in order to create a broader picture of each administrator and the environment that they serve.

### **Validity of Tools and Interview Questions**

Questions have been assessed by five experts in the field of two- and four-year college learning centers. These experts all have experience as writing center administrators and all are either members of the Two Year College Association or sit on the Board of Directors of the National Tutoring Association. None of these experts are associated with one of 10 writing centers that are being used for this research study.

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## Appendix A

**Survey Questions**

1. How long have you been a writing center administrator?
  1. 15 or more years
  2. 10-14 years
  3. 5-9 years
  4. 1-4 years
  5. Less than 1 year
2. What type of scheduling software, if any, do you use? (TutorTrac, Whiteboard, etc.)
3. How many registered, credit-seeking students are currently enrolled at your college?
  1. Over 20,000
  2. 15,000 – 19,999
  3. 10,000 – 14,999
  4. 5,000 – 9,999
  5. Less than 5,000
4. How many unique students do you assist on average each semester for writing/reading?
  1. 500 or more
  2. 400-499
  3. 300-399
  4. 200-299
  5. Less than 199
5. How many writing/reading visits do you record on average each semester?
  1. 1,500 or more

2. 1,000-1,499
  3. 600-999
  4. 300-599
  5. Less than 300
6. What percentage of writing/reading visits utilize some form of educational technology?
1. 80% and above
  2. 60% - 79%
  3. 40% - 59%
  4. 20% - 39%
  5. Less than 20%

If you have questions about your rights as a participant in this study, you may contact Dr. Ashok Vaseashta, chair of the NJCU IRB at 201-200-2453 or Tavaseashta@njcu.edu.

This survey is available at the following link:

[https://njcu.co1.qualtrics.com/jfe/form/SV\\_6WgTr4ZPayArzBH](https://njcu.co1.qualtrics.com/jfe/form/SV_6WgTr4ZPayArzBH)

## Appendix B

**Interview Questions**

1. What type/s of technology do you use in your writing center?
2. How have you observed students use technology in your writing center? What type of feedback have students given you about the technology?
3. Which technology or technologies, from what you have seen, have assisted students the most?
4. Are there technologies that you have discontinued using? If yes, why did you discontinue using them?
5. Do you feel students gravitate to a specific technology? Do they specifically look for one technology instead of another?
6. Do you feel any functionalities currently included are not needed? Do you feel any of the functionalities currently included are underutilized?
7. What functionalities, in the technology that you currently use, do you view as being the most beneficial?
8. What future functionalities would you like to see implemented moving forward?
9. What do you consider “best practices” in implementing and using writing center technology?
10. Which of these “best practices” do you consider the most important? Why?

If you have questions about your rights as a participant in this study, you may contact Dr. Ashok Vaseashta, chair of the NJCU IRB at 201-200-2453 or Tavaseashta@njcu.edu.

## Appendix C

**Participant Email**

Hello \_\_\_\_\_,

My name is John Findura and I am a doctoral student at New Jersey City University studying Educational Technology Leadership. My dissertation and research is focused on Best Practices for Educational Technology Implementation in Two-Year Community College Writing Centers. As there are currently no baselines for best practices in the implementation of educational technology in the open-admission community college world, as a writing center administrator in a community college, you are uniquely suited to assist in this research. As both a researcher and as a practicing writing center administrator myself, I believe that the results of this study will have a positive impact on our field and allow us to better understand the best ways to assist our students.

I would like to invite you to participate in this study in your position as a writing center administrator. There is, of course, no obligation on your part to participate or to even complete the process once started. This study will involve a brief 5-7 minute survey delivered via email, followed by an interview of approximately 20 - 30 minutes that can take place via telephone, Skype, or in person if you so wish.

If you are interested in participating in this study, please reach out to me at this email address ([jfindura@njcu.edu](mailto:jfindura@njcu.edu)) or by phone at 201-463-9855 and I will be happy to discuss Informed Consent, confidentiality, risks involved, and any and all other information you may require. If you have questions about your rights as a participant in this study, you may contact Dr. Ashok Vaseashta, chair of the NJCU IRB at 201-200-2453 or [Tavaseashta@njcu.edu](mailto:Tavaseashta@njcu.edu).

Thank you,

John Findura

Doctoral Candidate

New Jersey City University

Appendix D

NJCU Institutional Review Board Application for  
Review of Research Proposal

Email: [IRB@njcu.edu](mailto:IRB@njcu.edu)

<b>FOR OFFICE USE ONLY</b>			
File Number			
Review Type	Exempt <input type="checkbox"/>	Expedited <input type="checkbox"/>	Full <input type="checkbox"/>
PI			

Date of Submission 12/3/19

Proposal type:  Original  Revised\*

\*If this is a revised application, there is no need to complete the remainder of this form. However, please describe in detail the changes that you have made in response to the IRB's concerns.

Principal Investigator	NJCU EDTC Faculty Member TBA
Proposal title	Best Practices in Educational Technology Implementation at Community College Writing Centers
Proposed start date	4/1/2019
Anticipated duration of research	12 months

**Type of Research**

- Student/Classroom project
- Faculty project
- Staff project
- External researcher project (All external researchers must have an NJCU sponsor.)

**NJCU Investigators** (Please list additional investigators as necessary.)

**Principal Investigator** (For all student research, the faculty advisor is the PI.)

Name NJCU EDTC Faculty TBA  
 Department EDTC  
 Telephone TBA  
 Email TBA

**Co-Investigator** (including student researchers)

Name John Findura  
 Department EDTC

Telephone 201-463-9855  
Email jfindura@njcu.edu

**Co-Investigator**(including student researchers)

Name \_\_\_\_\_  
Department \_\_\_\_\_  
Telephone \_\_\_\_\_  
Email \_\_\_\_\_

**Co-Investigator**(including student researchers)

Name \_\_\_\_\_  
Department \_\_\_\_\_  
Telephone \_\_\_\_\_  
Email \_\_\_\_\_

\*Any NJCU investigator who plans to work on this project either with or for a Principal Investigator or a Co-Investigator at another institution must identify those investigators and their institutions.

**External Investigators**

Name \_\_\_\_\_  
Title \_\_\_\_\_  
Institution \_\_\_\_\_

Name \_\_\_\_\_  
Title \_\_\_\_\_  
Institution \_\_\_\_\_

Name \_\_\_\_\_  
Title \_\_\_\_\_  
Institution \_\_\_\_\_

Name \_\_\_\_\_  
Title \_\_\_\_\_  
Institution \_\_\_\_\_

**NJCU Sponsor** (if the researcher is not affiliated with NJCU)

Name \_\_\_\_\_  
Department \_\_\_\_\_  
Telephone \_\_\_\_\_  
Email \_\_\_\_\_

**Data Sources**

Number of participants Up to 12

How was this number determined (e.g., power analysis) Trends in previous similar research

Does this project require the collection of new data?  Yes  No

If Yes: How will participants be selected or recruited? Purposeful sampling of WC Admins

Will subjects participate on a fully voluntary basis?  Yes  No

Will subjects be compensated for their participation?  Yes  No  
If yes: Please briefly describe the compensation.

Does this project make use of human tissue or cell lines?  Yes  No

Briefly describe the research methodology(ies) to be used in this study (e.g., focus group, participant observation, survey, experiment).

**Online survey and Interviews**

Does this project use data that have already been collected for a non-research purpose or by another researcher?

Yes  No

If yes: What is the source of the data?

Are the data accessible in the public domain?  Yes  No

If no: Are fields included that would allow identification of individuals, either directly or indirectly?

Yes  No

If yes: Please explain briefly how participant confidentiality will be safeguarded

**Participant Risks**

Will participants be exposed to any stresses (e.g., anxiety, pain, etc.) or physical harm (e.g., injury, infection, etc.) in connection with this research?

Yes  No

If yes: Please briefly explain what risks may be involved in the research, what specific steps will be taken to minimize and monitor the risk, and what will be done to compensate and/or treat participants who are harmed by the research.

Does the research design require that participants be deceived?  Yes  No

If yes: Please briefly explain why deception is necessary and what steps will be taken to reduce potential harm from this deception.

**Potentially Vulnerable**

Populations Will this research involve:

- |  |                              |  |
|--|------------------------------|--|
| Physically/Mentally Challenged Individuals | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| Young children (ages 0-13)                 | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| Older children (ages 14-17)                | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| Senior Citizens (over age 65)              | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| Pregnant Women                             | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| Prisoners                                  | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |

If yes to any of the above: Please briefly explain how the rights of this (these) population(s) will be protected.

**Informed Consent**

Will participants be fully informed about:

- |  |   |                             |
|--|---|-----------------------------|
| The voluntary nature of their participation and the freedom to withdraw without penalty at any time                                      | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| The purposes and procedures of the research  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Any reasonably foreseeable risks or discomforts  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Any benefits to them or to others from the research  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| The extent to which confidentiality will be maintained   | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| The compensation and/or treatments available if injury occurs<br>(This question need only be answered for research that involves risks.) | <input type="checkbox"/> Yes            | <input type="checkbox"/> No |
| Whom to contact for information about the research participants' rights and any research-related injury                                  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

If the answer to any of the above is no, please briefly explain why the research requires an alteration of the standard elements of informed consent.

How will participants' informed consent be documented? Please check all that apply.

- Signature on written consent document
- Signature on document to be read to the participants and witnessed by another party
- Written documentation of informed consent will not be obtained because one or more of the following criteria is satisfied (check all that apply):

- The only link between the subject and the research would be the informed consent documentation and the primary risk is loss of confidentiality.
- The risks to participants, including risks associated with the loss of privacy, are no greater than those ordinary encountered in daily life and the research involves no procedure for which written consent is normally required outside of the research context.

Who will obtain the informed consent from the participants?

- Principal Investigator
- Co-Investigator
- Sponsor (in cases where PI is not affiliated with NJCU)
- Other
- Not applicable

Please include your protocol summary (5 pages maximum) and your recruitment materials (as applicable).

**External Reviews and Funding**

Has this protocol been reviewed by an Institutional Review Board or Human Subjects Review Committee at another institution(s)?  Yes  No

If yes: At what institutions(s)?

\_\_\_\_\_

What is its status?  Approved  Rejected  Pending (or provisionally approved)

Has this protocol been submitted for Federal Funding?  Yes  No

If yes: Agency or Organization: \_\_\_\_\_

Submission Date: \_\_\_\_\_

Funding Start Date: \_\_\_\_\_  Anticipated  Actual

Contact Person: \_\_\_\_\_

Contact's Telephone: \_\_\_\_\_

Has this protocol been submitted for any other types of funding?  Yes  No

If yes: Agency or Organization: \_\_\_\_\_

Submission Date: \_\_\_\_\_

Funding Start Date: \_\_\_\_\_  Anticipated  Actual

Contact Person: \_\_\_\_\_

Contact's Telephone: \_\_\_\_\_

**Proof of NIH or CITI Certification**

Please provide documentation of current CITI and/or NIH certification in human subjects research for all researchers involved in this project.

**Certificate of Agreement**

**The signatures of all researchers involved in this project must be provided.**

I certify that I agree to comply with the requirements of both NJCU and the Office for Human Research Protection (OHRP) of the United States Department of Health and Human Services as described in 45 CFR §46.

\_\_\_\_\_  
PI Signature \_\_\_\_\_  
Date

\_\_\_\_\_  
Co-PI Signature \_\_\_\_\_  
Date

\_\_\_\_\_  
Co-PI Signature \_\_\_\_\_  
Date

\_\_\_\_\_  
Co-PI Signature \_\_\_\_\_  
Date

\_\_\_\_\_  
Co-PI Signature \_\_\_\_\_  
Date

Please submit the completed application and accompanying documents as one document or pdf to IRB@njcu.edu and kresch@njcu.edu.

All applications must be submitted by the NJCU faculty or staff member who is serving as the Principal Investigator (PI). Neither students nor external researchers may submit an application.

## Appendix E

### Protocol Summary for IRB

#### Theoretical Framework

This study is phenomenological qualitative in nature in that it utilizes interviews as a way to fully understand the feelings, and the experiences, of the writing center administrators involved in this study, what they believe are the best practices of educational technology implementation in writing centers, and why they believe it. Creswell (2013) writes about the fundamental part of phenomenological research is to arrive at a description of the phenomena that is being observed, in this case the best practices of educational technology implementation in two-year community college writing centers. Creswell (2013) suggests a range of five to 25 participants for a qualitative study of this type. The population of this study is made up of two-year community college writing center administrators who utilize writing and/or reading assistance software in their centers.

#### Research Problem

Bielinska-Kwapisz (2015) writes that almost 45% of students in their first two years of college “demonstrated no significant improvement in a range of skills including critical thinking, complex reasoning, and writing” (p. 382). She goes on to state that there is, however, a “direct relationship between rigor and gains in learning: students whose classes reflected high expectations – more than 40 pages of reading each week and more than 20 pages of writing each semester” (p. 382). Therefore, writing at the college level is directly linked to gains in learning.

Lerner (2019) states that while writing centers themselves are extremely valuable, as data has consistently shown, there is not a great amount of research devoted to them. He then goes on to write that

Christina Murphy, also both a past-president of the National Writing Centers Association and a widely published scholar on writing center–related topics, infamously declared in her talk at the national conference that writing center research was, essentially, “bankrupt” (p. 458).

Murphy’s argument, and Lerner’s as well, is that there is little “big picture” research currently being done on this important aspect of college learning. Many studies focus only on student outcomes, which of course are important, but may lack nuance. Grades are ultimately seen as the last word in student achievement, but the confidence that is built up in a student is much more difficult to gauge. Perhaps even more difficult to express is what the writing center administrator sees in the students, as they are often the ones who watch the growth of a student of the course of a single semester or even years.

### **Research Questions**

These are the research questions that I will seek to answer:

Q1: What do Writing Center Administrators perceive as being the best practices in terms of educational technology implementation into their writing centers?

Q2: How have Writing Center Administrators seen technology as being beneficial to their students at their writing centers, if at all?

Q3: What kinds of future educational technology functionalities would Writing Center Administrators view as the most important for writing center assistance?

### **Method**

Up to 10 writing center administrators will be emailed a survey through Qualtrics that asks for some relevant background information (Appendix A) that includes how long they have served in that position, how many unique students they assist each semester, how many visits

they record each semester, what type of scheduling software they use, and what percentage of their student's visit use some type of technology.

A series of interviews and open-ended questions (Appendix B) will be used to elicit each administrators view on what they perceive as a best practice when it comes to technology in writing centers in general, and their writing center in particular. The answers to all interviews and open-ended questions will then be coded to tease out themes and be analyzed to determine what best practices have emerged from their responses. These interviews will be conducted in one of three ways: 1) telephone, 2) Skype, or 3) in person. Franklin (2014) used a similar set-up in his study of program evaluation at community college learning assistance centers.

### **Sampling Overview**

This study will select participants using purposeful sampling. Up to 10 two-year community college writing center administrators will be contacted either through email or via telephone to ask about their interest in participating in this study (Appendix C). Centers will be chosen based on their standing with professional tutoring organizations, such as the National Tutoring Association (NTA), Association for the Coaching and Tutoring Professional (ACTP), the National College Learning Center Association (NCLCA), and the College Reading and Learning Association (CRLA). Writing centers at the following locations fit the criteria: Borough of Manhattan Community College (NY), Bronx Community College (NY), Community College of Morris (NJ), Hudson County Community College (NJ), Essex County Community College (NJ), LaGuardia Community College (NY), Middlesex Community College (NJ), Passaic County Community College (NJ), Queensborough Community College (NY), and Rockland Community College (NY).

Potential issues that may arise include participants either not willing to take part in this study or simply being unavailable to take part. By stating that up to 10 writing center administrators will be contacted, I have doubled the minimum of five participants as recommended by Creswell (2013). Another issue is conducting the interview. While I would like to conduct these face-to-face, there are many logistical issues that may prevent this and force me to rely on a system such as Skype or telephone calls to conduct this part of my research.

### **Procedures**

This research will use a qualitative approach to the study. Studies such as Gibson Jr., Cartledge, Keyes, and Yawn (2014) have shown a positive correlation between literacy software and improved student performance. My particular interest is in the views of the administrators who are tasked with running the writing centers. While there is a great amount of data that can be combed through and quantified, perceptions of student performance, by the very people who are tasked to assist them, may not always match up. Since these administrators are at the front lines of higher education literacy assistance, and there has yet to be a clear notion of best practices in writing center educational technology implementation, these administrators views are important for defining what those best practices currently are as well as where they are heading in the future.

To begin, 10 writing center administrators will be contacted and asked about their willingness to participate in this study. The study is being conducted in two parts: the first is a six question survey that is being administered through Qualtrics. This survey should take respondents no more than 5 – 7 minutes to complete. The second part is an interview with the administrator. These interviews will be scheduled in advance according to the interviewees schedule and should last approximately 20 – 30 minutes. The interview will take place either

over the phone, through Skype, or face-to-face, depending on the preference and availability of the interviewee. All interviews will be recorded and professionally transcribed.

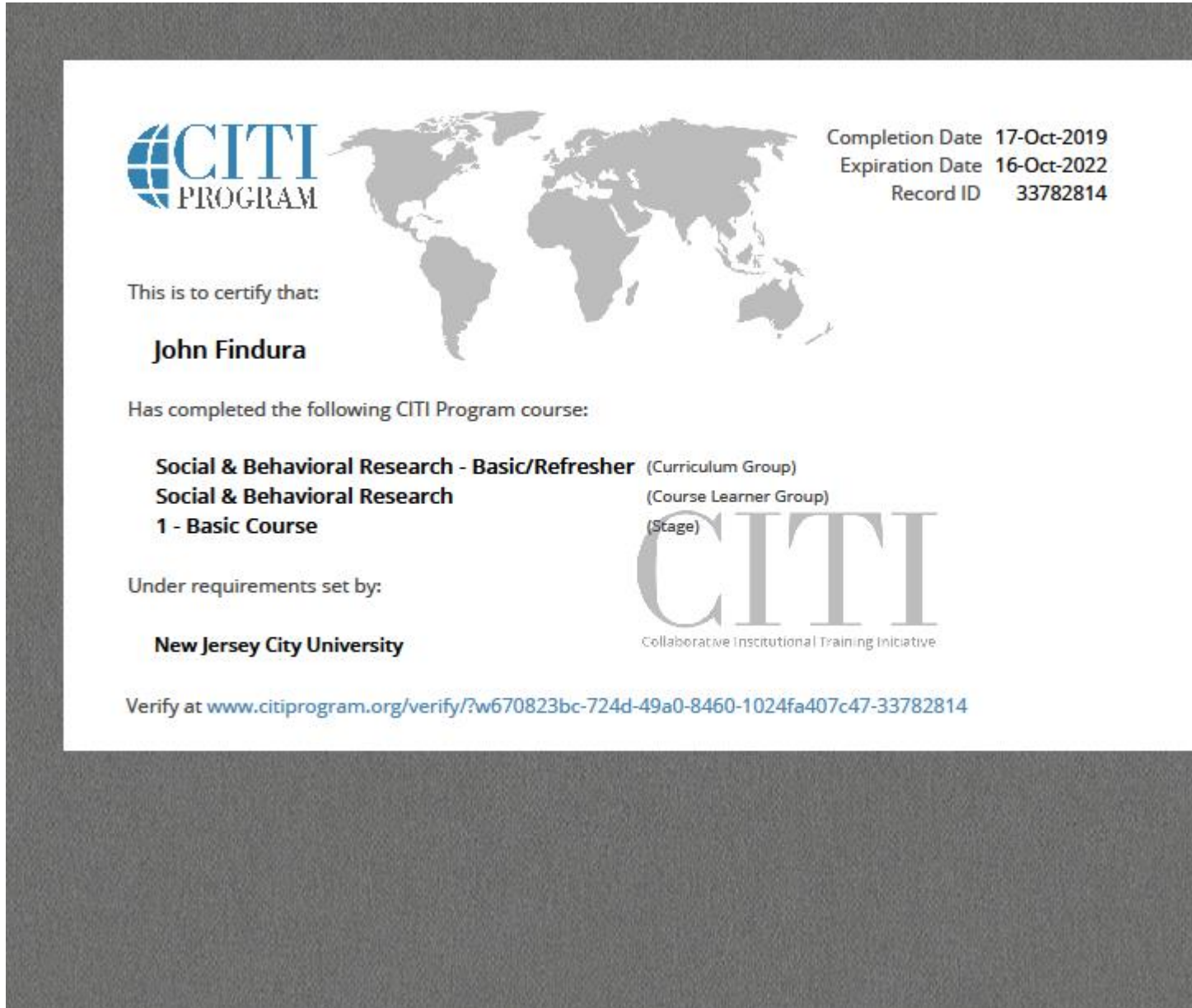
The interviews will be coded to search for themes that recur in order to answer Research Questions 1, 2, and 3. Survey results will then be linked with the interviews in order to create a broader picture of each administrator and the environment that they serve.

### **Validity of Tools and Interview Questions**

Questions have been assessed by five experts in the field of two- and four-year college learning centers. These experts all have experience as writing center administrators and all are either members of the Two Year College Association or sit on the Board of Directors of the National Tutoring Association. None of these experts are associated with one of 10 writing centers that are being used for this research study.

Appendix F

**CITI Certification**



Completion Date 17-Oct-2019  
Expiration Date 16-Oct-2022  
Record ID 33782814

This is to certify that:

**John Findura**

Has completed the following CITI Program course:

**Social & Behavioral Research - Basic/Refresher** (Curriculum Group)  
**Social & Behavioral Research** (Course Learner Group)  
**1 - Basic Course** (Stage)

Under requirements set by:

**New Jersey City University**



Verify at [www.citiprogram.org/verify/?w670823bc-724d-49a0-8460-1024fa407c47-33782814](http://www.citiprogram.org/verify/?w670823bc-724d-49a0-8460-1024fa407c47-33782814)