

Exploring Teacher Biases, Perception, and Technology Adoption in Urban Schools

EDTC 809 Assessment and Evaluation

New Jersey City University

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Overview

Across the United State, large sums of money are invested to integrate new technologies in schools (Al-Zaidiyeen, Mei & Fook, 2010). Data suggest that educational technology (ET) expense will continue to rise at a steady pace (Johnstone & Poulin, 2010). Schools tend to lack an understanding of important factors that improve the use and adoption of ET in the classroom. Urban schools in particular have worked to improve access to technology in the classroom by closing the digital divided. However, as Peggy Ertmer and Anne Ottenbreit-Leftwich (2010) suggest, ET is not being adopted or used to support the kind of instruction that is required to help students in urban schools. Ertmer and Ottenbreit-Leftwich, suggest that teacher mindset must change to ensure ET is used and adopted to improve instruction in urban schools.

In relation to user behavior and mindset, the technology acceptance model (TAM) serves as a framework to help improve the acceptance and use of ET (Cheung & Vogel, 2013). TAM is an information systems theory that models how users come to accept and use a technology by focusing on perceived usefulness and ease of use (Holden & Karsh, 2010). Studies using the TAM and other models show that user perception and attitudes are key determinants to technology use (acceptance) and long-term use (continuance) (Park, Nam & Cha, 2012). Anol Bhattacharjee's (2004) studied the changes in belief and attitude towards technology and found that discontinued use of technology significantly undermines an organization's efforts to exploit the full potential of technology.

Ray William (2014) suggests that humans tend to have a higher capacity to remember and focus on negative experiences, rather than positive experiences. In relation to successful use of ET, this phenomenon affects experiences and attitudes individual have towards ET. Numerous studies have been carried out to examine and explain the effects of the negativity bias theory in the field of technology. Negativity bias is the tendency for humans to pay more attention, or give more weight to negative experiences over neutral or positive experiences. Even when negative experiences are

inconsequential, humans tend to focus on the negative aspect of an experience more than the positive. (Loranger, 2016) Studies show that negativity bias can manifest itself in many forms, such as user's experience on a website, attitudes towards instructional practices, and beliefs about technology.

Statement of The Problem

The tendency for human beliefs and behaviors towards technology to change over time, teamed with higher capacities to focus on negative experiences, suggests that humans are generally less likely to adopt or use new technology. When this occurs in the classroom, the potential for technology to: improve engagement; increase student achievement, and provide a high return on investment is significantly reduced (Ertmer & Ottenbreit-Leftwich, 2010). If this theory holds true, teachers who have negative biases toward technology are less likely to adopt and more likely to discontinue use of technology in the classroom. Teacher biases (positive and negative) presence a significant area of focus as it pertains to technology implementation, as teachers are key drivers for effective use of technology in the classroom (Rehmat & Bailey, 2014).

Purpose Of The Study

Studies suggest that proper use of technology in the classroom can serve and powerful tools to improve students performance and enhance the classroom environment. Erhan Delen and Okan Bulut (2011) conducted a study that examined the effects of ET on students' math and science achievement and found that students' familiarity with ET and their exposure to technology helped to explain math and science achievement gaps between individuals and schools. Similar Delen and Okan's study, Barkatsas, Kasimatis, and Gialamas (2009) investigated the complex relationship between students' mathematics confidence, confidence with technology, attitude to learning mathematics with technology, affective engagement and behavioral engagement, achievement, gender and year level. The researchers found that technology use in the classroom had a positive

effect on mathematics achievement in the classroom for students that approached technology use with a positive mindset. Similarly, Jing Lei (2009) studied the effects of ET in the classroom and found that ET in the classroom generally had positive effects on overall student outcome, self-esteem, and attitudes towards school when both quantity and quality of ET are high.

Teachers and administrators spend a considerable amount of time and money implementing new technologies in the classroom to enhance the learning experience. Urban classrooms generally have students that are affected by various socio-economic issues that create achievement gaps. Although access to technology in urban classroom has improved, effective technology use in urban classrooms continues to lag behind the average classroom (Ertmer & Ottenbreit-Leftwich, 2010). Effective adoption and use of technology in the classroom could provide tools to improve engagement, students' attitudes towards learning, and ultimately student achievement.

The purpose of this study is to explore the relationship between negativity bias (the tendency for people to focus on negative experiences), perception (perceived ease of use and usefulness), and technology adoption and use in an urban classroom. This study will help urban teachers and administrators understand key components of teacher biases, experiences, and behaviors to improve adoption and use of technology in an urban classroom to enhance the learning environment.

Essential Research Questions

This study will be framed by one central research question. The central question is a broad question that asks for an exploration of the central phenomenon or concept in a study (Creswell, 2013). In addition, eight sub-questions will be used to narrow the focus of the study but leave open the questioning. The central and sub-questions for this study are as follows:

Central Question 1: How does teachers' technology biases impact technology adoption and continued use in an urban classroom.

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- **Sub Question 1.1:** How does positive teacher-biases relate to teachers' perception of technology adoption and continued use in an urban classroom.
- **Sub Question 1.2:** How does negative teacher-biases relate to teachers' perception of technology adoption and continued use in an urban classroom.
- **Sub Question 1.3:** How does positive teacher-biases relate to administrators' perception of technology adoption and continued use in an urban classroom.
- **Sub Question 1.4:** How does negative teacher-biases relate to administrators' perception of technology adoption and continued use in an urban classroom.
- **Sub Question 1.5:** How do administrators address the biases a teacher holds towards technology that affects adoption and use?
- **Sub Question 1.6:** How do administrators address barriers to technology adoption and use presented by negative experiences?
- **Sub Question 1.7:** What unique factors in an urban environment affect how teachers experience technology and how are their perceived behaviors affected over time?

Research Methodology

This study will use qualitative methods to explore the two psychosocial phenomena presented by focusing on two essential areas of technology adoption and use in the classroom. The first area of focus will be the study of how teachers' technology biases impact technology adoption and continued use in an urban classroom. The second area of focus stems from the first focus and will explore how, positive and negative teacher-biases relate to teachers versus administrators' perception of technology adoption and continued use in an urban classroom. A major barrier to technology adoption and use is user resistance at the implementation level, due to limiting beliefs and anxiety that stem from experiences (Williams 2014).

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Similar to traditional qualitative methods, this study will work to uncover patterns, themes, and connections related to technology adoption and use in urban classrooms to help school administrators better implement sustainable technology systems for students that need the most academic support. According to Martin Marshall, qualitative research studies aim to provide illumination and understanding of complex psychosocial issues. Additionally, Marshall state that qualitative studies are most useful for answering humanistic ‘why?’ and ‘how?’ questions (Marshall, 1996). The central question in the study explores how teachers’ technology biases impact technology adoption and continued use in an urban classroom. The term “how” expresses the desire to understand. Therefore, a qualitative research method is the most appropriate method to conduct this study.

Philosophical Framework

This study seeks to understand and explore two psychosocial phenomena related to teacher biases and technology adoption in an urban classroom. The assumptions or theories will not guide this study. Therefore, this study will be guided by grounded theory and a constructivist approach. Grounded theory will be used as an approach to provide a different end-point through discoveries grounded in information from participants (Creswell, 2013). Likewise, the constructivist approach will be utilized to seek subjective meaning and understanding from teachers and administrators (Creswell, 2013). The goal of a constructivist approach and the grounded theory approach is to rely on the participants to construct meaning, connections, and themes.

Research Design

Sampling

One of the most important components to conduct this study is gaining access to teachers, administrators, and staff in urban schools. To gain access to these individuals, it will be critical to identify schools and seeking approval from gatekeepers, such as principals and other administrators

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(Creswell, 2013). This study will target K-12 charter schools in Newark, NJ. Charter schools in Newark serve in one of the highest poverty and socio economically disadvantaged areas in urban areas.

Participants of this study will include teachers, principals, assistant principals, deans, and technology coordinators. All participants will be over the age of eighteen. The participants of this study will be purposefully selected to ensure knowledge individuals and essentials demographics are captured, ensure that necessary perspectives are achieved to explore the central topic. The study will purposefully target 20-30 teachers and 10-15 administrators and/or staff in at least two Newark Charter Schools. Participants will be selected to include: new and veteran teachers, teachers of general education and special education, teachers and administrators in varying grade levels, and varying genders. In order to obtain access to these teachers, direct phones, email and proposals will be sent to principals and administrators of various Charter School in Newark New Jersey.

In addition, this study will utilize colleagues and professional network in Newark to work with administrators from University Heights Charter School, a PK-8 Charter School in Newark, to gain approval to conduct this study using participants in their upper elementary and middle school. To gain approval, the research plans to leverage prior professional relationship with University Heights, to schedule conduct this research.

Research Instrument

A qualitative survey instrument will be developed and administered to gather rich thick qualitative responses from teachers and administrators. The survey will be designed and administered using New Jersey City University's Qualtrics survey application. The survey will be administered to teachers and administrators over a four to eight-week period. Teacher participants will be asked to complete the survey to provide as much detail about their experiences, biases, and perceived technology us in the classroom. Administrators will also complete the survey. However,

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these participants will be asked to share their perspective on actual use of technology in the classroom. These two different, but qualitative, sets of data will be analyzed and compared to identify themes and connections between teacher biases, teacher perception and administrator versus teacher's perception of technology adoption and use the classroom. The study intends to conclude gathering data after all participants have been surveyed and once a saturation point, where no new information is being received (Francis, et al., 2010 & DePaulo, 2000).

Survey Questions

This study will employ qualitative methods guided by a constructivist approach to develop central and sub-questions. Each question or prompt used will be designed to explore the central and sub-questions for the study. Previously used survey question will not be used in this study. This study will employ open-end, prompt-type, and best-fit questions or response items administered via the survey instrument. The study will use more open-ended and subjective questions to improve the quality of data gathered (Creswell, 2013). Likert style survey items and questions will also be used when appropriate to explore responses to state and user perspectives. Examples of each type of question and item can be found in *Appendix I-II*. In addition, the survey instrument will ask participant to share information, such as their name, place of work (school), position type (teacher, administrator or staff), years worked current position, other work-related description, and other personally identifiable information to ensure that data can be accurately analyzed and compared to explore the topic of this study. However, participants will not be asked or require to share their physical description.

Research Analysis

The goal of this study is to collect rich thick data during the data collection process. Following data collection, data will be aggregated for analysis. To effectively analyze and interpret data to identify findings, a winnow technique will be employed to identify at least five themes,

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categories, or trends. To winnow the data, the researcher will analyze the data and focus on important pieces, while disregarding other parts. (Creswell, 2013) During the winnowing process, data will be transcribed, coded and then categorized. During the coding and analysis process, coding software will be used. Identifying themes that emerged as a result of this process will conclude the analysis process.

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Appendix I: Survey Questions/Instrument For Teachers

This survey will be administered to teacher participants only. Click [here](#) for live survey.

Q1 Hi! Thank you for taking the time to participant in this survey. This survey should take approximately thirty minutes to complete. You will be asked to respond to open-ended, rating, and response items. When responding, enter complete sentences and rich details.

Q2 Enter your name

Q3 Please select the subject(s) you teach.

- Mathematics
- English Language Arts
- Science
- Social Studies
- Arts/Technology
- Other

Q4: How many years have you been a teacher?

- 1-2
- 3-5
- 5-10
- 10-15
- 15+

Q5: What grade level and subject(s) do you teach?

_____ Grade Level

Q6: Read each statement and select one response on the scale

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
I have more positive experience with technology in my class than negative experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am less likely to use technology in my classroom are a negative experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think using technology in my class is easy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often use technology in my classroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think I effectively use technology in my classroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to find new ways to use technology in my classroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tend use technology more when it's ease to use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tend to abandon technology when it fails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think I have a positive mindset when new technologies are presented to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7: Select one statement that best describes your experience with technology use in the classroom and why you selected the statement. **Statement:**

- I tend to succeed when using technology in the classroom
- I sometimes succeed when using technology in the classroom
- I equal succeed and fail when using technology in the classroom
- I sometimes fail when using technology in the classroom
- I often fail when using technology in the classroom

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Q8: What is your most memorable experience using technology in your classroom as teacher?

Q9: Describe your least memorable experience using technology in your classroom as teacher.

Q10: List five words that describe your experience and use of technology in the classroom.

Q11: How do you currently use technology in the classroom?

Q10: Do you think technology provides a benefit in your classroom. If so, why? If not, why?

Q12: How does your teaching environment (resources, students, instructional support) impact your use of technology in the classroom? Please give one an example.

Appendix II: Survey Questions/Instrument For Administrators and Staff

This survey will be administered to administrators and staff participants. Click [here](#) for live survey.

Q1: Hi! Thank you for taking the time to participant in this survey. This survey should take approximately thirty minutes to complete. You will be asked to respond to open-ended, rating, and response items. When responding, enter complete sentences and rich details.

Q2: Enter your name

Q3: What is the name of your school?

Q4: Please select the position that best matches your current position

- Principal/School Lead
- Assistant Principal
- Dean
- Technology Coordinator
- Other

Q5: Read each statement and select one response.

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
I often observe technology being used in the classroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, I observe effective use of technology in the classrooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher try to find new ways to use technology in the classroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urban classrooms present a unique challenge to use of technology in the classroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teachers tend to abandon technology when it fails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think teacher have a positive mindset when new technologies are presented they	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Q6: Select one statement that best describes your general observations of technology use in the classroom and why you selected the statement.

Statement:

- I tend to observe teachers use technology effectively in the classroom
- I sometimes tend to observe teachers use technology effectively in the classroom
- I equally observe teachers effectively and ineffectively use technology in the classroom
- I sometimes observe teachers ineffectively use technology in the classroom
- I often observe teachers ineffectively use technology in the classroom

Q7: Do you believe teachers that have negative experiences with technology in the classroom are less likely to use technology in future? If so, why?

Q8: List five words that describe your assessment of teachers' technology use in the classroom.

Q9: How do teachers currently use technology in the classroom?

Q10: How does your teaching environment (resources, students, instructional support) impact your use of technology in the classroom? Please give one an example.

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Appendix III: Informed Consent Form

Informed Consent Forms

Participants Over the Age of 18

I agree to participate in a study entitled “*Exploring Teacher Biases, Perception, and Technology Adoption in Urban Schools*”, which is being conducted by Doctor of Education Candidate, Dwayne Davis of the Department of Educational Technology, New Jersey City University. The purpose of this study is to explore the relationship between negativity bias (the tendency for people to focus on negative experiences), perception (perceived ease of use and usefulness), and technology adoption and use in an urban classroom. The data collected in this study will be combined with data from previous studies and will be submitted for publication in a research journal.

I understand that I will be required to complete an online survey by answering questions with as much details as possible about experiences, biases, and perceived use of technology in the classroom, related to myself or teachers. My participation in this survey should not exceed one hour. I also understand that I may be asked follow-up questions after completing the survey. My overall participation in this study should not exceed four hours over a four to eight-week period.

I understand that my responses will not be anonymous. However, all names and other personally identifiable information will be kept anonymous within the final report. I further understand that all data gathered may be shared with my school administrators. I agree that any information obtained from this study may be used in any way thought best for publication or education provided that I am in no way identified and my name is not used.

I understand that there are no physical or psychological risks involved in this study, and that I am free to withdraw my participation at any time without penalty. I further understand that I will not receive monetary compensation for my participation in this study.

I understand that my participation does not imply employment with the state of New Jersey, New Jersey City University, the principal investigator, or any other project facilitator.

If I have any questions or problems concerning my participation in this study I may contact Dwayne Davis, the principal investigator, at 646-824-8940 or Dr. Beimnet Teclezghi, Chair of NJCU Institutional Review Board, at 201-200-3139 or email bteclezghi@njcu.edu.

Signature of Participant

Date

Signature of Principal Investigator
Dwayne Davis

Date
12/4/2016

Appendix IV: NJCU IRB Application

**NEW JERSEY CITY UNIVERSITY
INSTITUTIONAL REVIEW BOARD**

File # _____

APPLICATION FOR REVIEW OF RESEARCH

1. TYPE OF APPROVAL REVIEW REQUESTED (CHECK ONE):

FULL REVIEW EXPEDITED EXEMPT REVIEW

2. PRINCIPAL INVESTIGATOR: Dwayne Davis

DEPARTMENT: Educational Technology

PHONE: 646-824-8940

TITLE OF RESEARCH: Exploring Teacher Biases, Perception and Technology Adoption

CO-INVESTIGATORS: Not Applicable

3. PURPOSE OF RESEARCH (INDEPENDENT PROJECT, MASTER'S THESIS, AND COURSE WHICH INCLUDES COURSE TITLE, SEMESTER AND INSTRUCTOR'S NAME.) ETC.

The purpose of this research is to satisfy the dissertation requirement for the Doctor of Education degree.

4. IF YOU ARE A STUDENT RESEARCHER PLEASE PROVIDE THE FOLLOWING:

MAILING ADDRESS: 224 Christie Street Apt 4

CITY/STATE/ZIP: Ridgefield Park, New Jersey 07660

TELEPHONE: 646-824-8940

EMAIL: ddavis1@njcu.edu

FACULTY SPONSOR NAME: Christopher Shamburg

DEPARTMENT OF SPONSORING FACULTY: Educational Technology

EXT. _____ FAX : _____ EMAIL: _____

FACULTY SPONSOR SIGNATURE: _____

DATE: _____

5. HAS THIS RESEARCH PROJECT BEEN CONSIDERED PREVIOUSLY BY THE IRB? YES NO

IF YES, GIVE LAST APPROVAL DATE: _____

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6. SOURCE OF FUNDING (IF APPLICABLE):

UNIVERSITY GRANTS: PLEASE INDICATE WHICH GRANT PROGRAM: (FOUNDATION, SBR)

No applicable

EXTRAMURAL FUNDS: PLEASE INDICATE AGENCY NAME: _____

TITLE: _____

AWARD NUMBER: _____

DATE : _____

7. ARE YOU WORKING WITH A RESEARCHER FROM ANOTHER INSTITUTION? IF SO, BE AWARE THAT YOUR CO-INVESTIGATOR MUST ALSO SUBMIT YOUR JOINT PROPOSAL TO THE IRB AT THE INSTITUTION THAT EMPLOYEES HIM/HER.

YES NO

8. WHAT IS THE OBJECTIVE OF THE RESEARCH?

The objective of this study is to help urban teachers and administrators understand key components of teacher biases, experiences, and behaviors to improve adoption and use of technology in the classroom to enhance the learning environment. This objective will be achieved y exploring the relationship between negativity bias (the tendency for people to focus on negative experiences), perception (perceived ease of use and usefulness), and technology adoption and use in an urban classroom.

9. DOES YOUR RESEARCH INVOLVE ANY OF THE FOLLOWING (CHECK ALL THAT APPLY)?

- MINORS
- PRISONERS
- PREGNANT WOMEN
- USE OF THE INVESTIGATORS' CURRENT STUDENTS AS SUBJECTS
- DRUGS OR OTHER CONTROLLED SUBSTANCES
- PSYCHOLOGICAL OR PHYSIOLOGICAL STRESS ABOVE THE LEVEL OF NORMAL EVERYDAY ACTIVITIES
- MISLEADING OR DECEIVING SUBJECTS ABOUT ANY ASPECT OR PURPOSE OF THE RESEARCH
- COLLECTION OF INFORMATION WHICH DEALS WITH SENSITIVE ASPECTS OF THE PARTICIPANTS' BEHAVIOR (ILLEGAL ACTIVITY, DRUG OR ALCOHOL USE, SEXUAL BEHAVIOR, ETC.)
- COLLECTION OF INFORMATION WHICH WOULD PLACE SUBJECTS AT RISK OF CRIMINAL OR CIVIL LIABILITY IF IT BECAME KNOWN
- COLLECTION OF INFORMATION WHICH COULD AFFECT SUBJECTS' FINANCIAL STANDING, EMPLOYABILITY, OR REPUTATION
- EXAMINATION OF EXISTING DATA, RECORDS, DOCUMENTS, OR SPECIMENS THAT ARE NOT PART OF THE PUBLIC RECORD
- CHILDREN INVOLVED IN YOUR RESEARCH WITHOUT SENSITIVE INFORMATION ABOUT THEMSELVES OR THEIR FAMILIES.
- COLLECTING OR STUDYING EXISTING DATA, DOCUMENTS, RECORDS, PATHOLOGICAL SPECIMENS OR DIAGNOSTIC SPECIMENS WHICH ARE PUBLICLY AVAILABLE AND FROM WHICH PARTICIPANTS CANNOT BE IDENTIFIED BY ANYONE OTHER THAN THE INVESTIGATOR(S).

**IF ANY OF THE ABOVE ITEMS ARE
CHECKED
YOUR PROPOSAL DOES NOT QUALIFY FOR AN EXEMPT
REVIEW**

10. DESCRIBE THE DESIGN OF THE RESEARCH INCLUDING WHAT WILL BE REQUIRED OF SUBJECTS (ATTACH ADDITIONAL SHEET IF NECESSARY):

This study will use a qualitative method to explore two psychosocial phenomena related to technology adoption and use in the classroom. The first area of focus will be the study of how teachers' technology biases impact technology adoption and continued use in an urban classroom. The second area of focus stems from the first focus and will explore how, positive and negative teacher-biases relate to teachers versus administrators' perception of technology adoption and continued use in an urban classroom.

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True to a qualitative method, this study will work to uncover patterns, themes, and connections related to technology adoption and use in urban classrooms to help school administrators better implement sustainable technology systems for students that need the most academic support.

Participants of this study will include teachers, principals, assistant principals, dean, and technology coordinators. The participants of this study will be purposefully selected to ensure knowledge individuals and essentials demographics are captured, ensure that necessary perspectives are achieved to explore the central topic. The study will purposefully target 20-30 teachers and 10-15 administrations in at least two Newark Charter Schools.

A qualitative survey instrument will be developed and administered to gather rich thick qualitative responses from teachers and administrators. The survey will be designed and administered using New Jersey City University's Qualtrics survey application. The survey will be administered to teachers and administrators over a four to eight-week period. Teachers participants will be asked to complete the survey to provide as much details about their experiences, biases, and perceived technology us in the classroom.

Each question or prompt used will be designed to explore the central and sub-questions of the study. This study will employ open-end, prompt-type, and best-fit questions or response items administered via the survey instrument. The study will use more open-ended and subjective questions to improve quality of data gathered. In addition, the survey instrument will ask participants to share information, such as their name, school, grade level, years in the classroom, and other personally identifiable information to ensure that data can be accurately analyzed and compared.

11. UNDER WHICH OF THE FOLLOWING CATEGORIES ARE YOU APPLYING FOR EXEMPTION?

- 1. RESEARCH CONDUCTED IN ESTABLISHED OR COMMONLY ACCEPTED EDUCATIONAL SETTINGS, INVOLVING NORMAL EDUCATIONAL PRACTICES, SUCH AS (I) RESEARCH ON REGULAR AND SPECIAL EDUCATION INSTRUCTIONAL STRATEGIES, OR (II) RESEARCH ON THE EFFECTIVENESS OF THE COMPARISON AMONG INSTRUCTIONAL TECHNIQUES, CURRICULA, OR CLASSROOM MANAGEMENT METHODS.
- 2. RESEARCH INVOLVING THE USE OF SOCIAL SCIENCE OR EDUCATIONAL TESTS (COGNITIVE, DIAGNOSTIC, APTITUDE, ACHIEVEMENT), SURVEY PROCEDURES, INTERVIEW PROCEDURES, OR OBSERVATION OF PUBLIC BEHAVIOR UNLESS (I) INFORMATION IS OBTAINED IN SUCH A WAY AS THAT THE PARTICIPANTS CAN BE IDENTIFIED DIRECTLY OR INDIRECTLY OR (II) THE PARTICIPANTS' RESPONSES, IF THEY BECAME KNOWN, COULD PLACE THE PARTICIPANT AT RISK OF CRIMINAL OR CIVIL LIABILITY OR BE DAMAGING TO THE PARTICIPANTS' FINANCIAL STANDING, REPUTATION, OR EMPLOYABILITY. (ALL RESEARCH INVOLVING SURVEY AND INTERVIEW PROCEDURES IS EXEMPT WHEN THE PARTICIPANTS ARE ELECTED OR APPOINTED PUBLIC OFFICIALS OR CANDIDATES FOR PUBLIC OFFICE. HOWEVER, CONFIDENTIALITY MUST BE MAINTAINED WHEN REQUIRED BY FEDERAL STATUTE.)
- 3. RESEARCH INVOLVING THE COLLECTION OR STUDY OF EXISTING DATA, DOCUMENTS, RECORDS, PATHOLOGICAL SPECIMENS, OR DIAGNOSTIC SPECIMENS, IF THESE SOURCES ARE PUBLICLY AVAILABLE OR IF THE INFORMATION IS RECORDED BY THE INVESTIGATOR IN SUCH A MANNER THAT PARTICIPANTS CANNOT BE IDENTIFIED.
- 4. RESEARCH AND DEMONSTRATION PROJECTS WHICH ARE FUNDED BY A FEDERAL AGENCY AND DETERMINED TO BE EXEMPT BY THE AGENCY HEAD AND WHICH ARE DESIGNED TO STUDY, EVALUATE, OR OTHERWISE EXAMINE: (I) PUBLIC BENEFIT OR SERVICE PROGRAMS; (II) PROCEDURES FOR OBTAINING BENEFITS OR SERVICES UNDER THOSE PROGRAMS; (III) POSSIBLE CHANGES IN OR ALTERNATIVES TO THOSE PROGRAMS OR PROCEDURES; OR (IV) POSSIBLE CHANGES IN METHODS OR LEVELS OF PAYMENT FOR BENEFITS OR SERVICES UNDER THOSE PROGRAMS.
- 5. EXEMPTION FOR COLLECTION OR STUDY OF EXISTING DATA: RESEARCH INVOLVING COLLECTION OR STUDY OF EXISTING DATA, DOCUMENTS, RECORDS, IF THESE DATA ARE NON-IDENTIFIABLE AND PUBLICLY AVAILABLE OR INFORMATION IS RECORDED BY THE INVESTIGATOR IN SUCH A MANNER THAT SUBJECTS CANNOT BE IDENTIFIED DIRECTLY THROUGH IDENTIFIERS LINKED TO THE SUBJECT (CODES LINKING NAMES TO DATA ARE CONSIDERED INDIRECT IDENTIFIERS).
- 6. EXEMPTION FOR STUDY OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES: UNLESS SPECIFICALLY REQUIRED BY THE STATUTE, RESEARCH AND DEMONSTRATION PROJECTS WHICH ARE CONDUCTED BY OR SUBJECT TO THE APPROVAL OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES, AND WHICH ARE DESIGNED TO STUDY, EVALUATE, OR OTHERWISE EXAMINE:
 - (A) _____ PROGRAMS UNDER THE SOCIAL SECURITY ACT OR OTHER PUBLIC BENEFIT OR SERVICE PROGRAMS
 - (B) _____ PROCEDURES FOR OBTAINING BENEFITS OR SERVICES UNDER THOSE PROGRAMS
 - (C) _____ POSSIBLE CHANGES IN OR ALTERNATIVES TO THOSE PROGRAMS OR PROCEDURES
 - (D) _____ POSSIBLE CHANGES IN METHODS OR LEVELS OF PAYMENT FOR BENEFITS OR SERVICES UNDER THOSE PROGRAMS.

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IF YOUR RESEARCH IS GIVEN EXEMPTION STATUS, THE FOLLOWING MUST BE STATED ON A COVER LETTER ACCOMPANYING ANY SURVEY OR QUESTIONNAIRES.

1. A STATEMENT THAT ALL PARTICIPATION IS VOLUNTARY
2. A STATEMENT THAT YOU ARE CONDUCTING RESEARCH AND THE REASON FOR IT (MASTER'S THESIS, PUBLICATION, ETC.)
3. PURPOSE OF THE RESEARCH - WHAT YOU ARE INVESTIGATING
4. A STATEMENT THAT ALL RESPONSES WILL BE KEPT ANONYMOUS AND CONFIDENTIAL
5. A STATEMENT THAT PARTICIPANTS NEED NOT RESPOND TO ALL QUESTIONS
6. IF PARTICIPANTS ARE YOUR OWN STUDENTS, A STATEMENT THAT CLASS STANDING WILL NOT BE AFFECTED IN ANY WAY BASED ON PARTICIPATION
7. THE NAME AND TELEPHONE NUMBER OF THE PRINCIPAL INVESTIGATOR (PI) AND FACULTY SPONSOR (IF APPLICABLE)

CLAIMS FOR EXEMPTION MAY NOT BE MADE FOR (A) RESEARCH INVOLVING CHILDREN, (B) AIDS-RELATED RESEARCH, (C) RESEARCH INVOLVING SUBSTANCE OR CHILD ABUSE OR (D) RESEARCH TO BE CONDUCTED AT THE V.A. (RESEARCH UNDER THESE CATEGORIES IS SUBJECT TO SPECIAL FEDERAL GUIDELINES.)

ALL IRB APPLICANTS MUST COMPLETE QUESTIONS 12 – 18

12. DESCRIBE THE SUBJECTS WHO WILL BE PARTICIPATING (NUMBER, AGE, GENDER, ETC.)

Subjects in this study will include teachers, principals, assistant principals, dean, and technology coordinators in one to Newark New Jersey Charter Schools. The participants of this study will be purposefully selected to ensure knowledge individuals and essentials demographics are captured, ensure that necessary perspectives are achieved to explore the central topic. Subject will be selected to include: new and veteran teachers, teachers of general education and special education, teachers and administrators in vary grade levels, and varying genders. The study will purposefully target 20-30 teachers and 10-15 administrations and/or staff in at least two Newark Charter Schools.

13. HOW WILL SUBJECTS BE RECRUITED? IF STUDENTS, WILL THEY BE SOLICITED FROM CLASS?

One of the most important components to conduct this study is gaining access to teachers, administrators, and staff in urban schools. To gain access to these individuals, it will be critical to identify schools and seeking approval from gatekeepers, such as principals and other administrators. Subject will be solicited via email and person requests to participate in the study. Permission to solicit subjects will be gained through administrators beforehand.

14. WHAT RISKS TO SUBJECTS (PHYSIOLOGICAL AND/OR PSYCHOLOGICAL) ARE INVOLVED IN THE RESEARCH?

There are no physical or psychological risks involved in this study. A subject is free to withdraw his or her participation at any time without penalty. Identifiable risk to subjects include, sharing technology related information about his or her school that is not positive and could be view as negative to the school, causing adverse effects to professional relationship. Additionally, subjects risk sharing information that he or she may no longer want to be shared as part of the research. Additionally, data submitted by a subject could create a negative view of the school in which he or she works, which could create future ramification once the data is reported.

15. IS DECEPTION INVOLVED IN THE RESEARCH? IF SO, WHAT IS IT AND WHY WILL IT BE USED?

Participant description will be limited to his or her name, place of work (school), position type (teacher, administrator or staff), years worked current position, and other work-related description. The participant description list will ensure that necessary and useful data will be gather that can be accurately analyzed and compared to explore the topic of this study. Physical description of the participant will not be involved in the study.

16. WHAT INFORMATION WILL BE GIVEN TO THE SUBJECTS AFTER THEIR PARTICIPATION? IF DECEPTION IS USED, IT MUST BE DISCLOSED AFTER PARTICIPATION.

To ensure transparency, all subjects will have the options to view his or her survey responses. Once all responses are gathered, the data will be analyzed, coded, and reported. Subjects can request to review the final report. However, it will not be the obligation of the research to share the final report with the subject in the

Exploring Teacher Biases, Perception, and Technology Adoption in Urban Schools

absence of a request form the subject. Additional all data collected during this study will be used for the purpose of this study. An informed consent form will be issued to each participants before participation in the study.

17. HOW WILL CONFIDENTIALITY BE MAINTAINED? WHO WILL KNOW THE IDENTITY OF THE SUBJECTS? IF A PRE AND POST TEST DESIGN IS USED HOW WILL THE SUBJECTS BE IDENTIFIED?

To mitigate risk to all participants' names and other personally identifiable information for each participant will not be included in the final report. General information about the type of participants specific to a various demographics will be used to explore and report on the central topics of this study.

18. HOW WILL THE DATA BE RECORDED AND STORED? WHO WILL HAVE ACCESS TO THE DATA? WHERE WILL IT BE STORED? ALL DATA MUST BE KEPT FOR A MINIMUM OF THREE YEARS.

Data will be recorded via an online survey instrument. The survey will be designed and administered using New Jersey City University's (NJCU) Qualtrics survey application. The data reside on the NJCU application and servers. Copies of the survey data will be downloaded for analysis and stored safely on the principal investigators computer. All data will be kept for a minimum of three years on the NJCU Qualtrics application and on the principal investigator's computer.

Institutional Review Board

Check List for Submitting a Complete IRB Application

- | | | |
|---|------------|-----------------------------|
| 1. That they will be participating in research; | Yes | <input type="checkbox"/> No |
| 2. The purpose of the research; | Yes | <input type="checkbox"/> No |
| 3. The expected duration of the participant's participation; | Yes | <input type="checkbox"/> No |
| 4. The procedures to be followed; | Yes | <input type="checkbox"/> No |
| 5. Any foreseeable risks or discomforts the participant may suffer; | Yes | <input type="checkbox"/> No |
| 6. The benefits to the participant and others that may occur as a result of the research; | Yes | <input type="checkbox"/> No |
| 7. Appropriate alternative procedures or courses of treatment that are open to the participant; | Yes | <input type="checkbox"/> No |
| 8. The extent to which confidentiality and anonymity will be maintained; | Yes | <input type="checkbox"/> No |
| 9. The amount of compensation or medical treatment that is available for research that involves more than minimal risk; | Yes | <input type="checkbox"/> No |
| 10. Whom to contact (principal investigator) with any questions they may have; | Yes | <input type="checkbox"/> No |
| 11. All questions on the application have been completed. | Yes | <input type="checkbox"/> No |
| 12. All supporting documents have been attached. This includes protocol, survey instruments, interview schedules and letters. | Yes | <input type="checkbox"/> No |
| 13. If this study requires approval of another Committee or cooperating agency, documentation of approval or notice of application has been attached. | Yes | <input type="checkbox"/> No |
| 14. Signatures of advisor for student research been secured. | Yes | <input type="checkbox"/> No |
| 15. A copy of this application has been made for the investigator's records. <i>If this Application is approved, this copy must be maintained for 3 years after the completion of the study by the PI or faculty sponsor.</i> | Yes | <input type="checkbox"/> No |
| 16. That participation is voluntary, and that the participant may withdraw at any time without suffering a penalty; and | Yes | <input type="checkbox"/> No |

Exploring Teacher Biases, Perception, and Technology Adoption in Urban Schools

17. That participation does not imply that an employer-employee relationship exists between the participant and the State of New Jersey, New Jersey City University, the principal investigator or any other project facilitator. Yes No

Consent is given by signing a written statement that includes the above elements. If participants are minors or unable to give consent (due to a mental disability, etc.) consent must be obtained from the legal guardian. A copy of the informed consent form must be included with each application and submitted to the IRB.

File No. _____

JERSEY CITY UNIVERSITY INSTITUTIONAL REVIEW BOARD

DISPOSITION FORM

Dowayne Davis	Not Applicable
Principal Investigator	Co-Principal Investigator (if applicable)
224 Christie Street, Apt 4	Not Applicable
Address of Principal Investigator	Address of Co-Principal Investigator
Ridgefield Park, New Jersey, 07660	Not Applicable
City, State, and Zip Code	City, State, and Zip Code
646-824-8940	Not Applicable
Telephone # - Fax # - E-mail address	Telephone # - Fax # - E-mail address

Title of Research: Exploring Teacher Biases, Perception and Technology Adoption

ADMINISTRATIVE DISPOSITION

PART 1: Your Claim for Exemption for the research study identified above has been reviewed. The Action taken is indicated below:

APPROVED FOR EXEMPTION AS CLAIMED: CATEGORY#

Note: Anything that conceivably changes the exempt status of this study must be presented to the IRB for approval before the changes are implemented. Such modifications should be sent to the IRB Office at the address above.

1. That the materials you submitted to the New Jersey City University IRB provide a complete and accurate account of how human subjects are involved in your project.
2. That you will carry on your research according to the procedures described in those materials.
3. That you will report to IRB any changes in your procedures that would remove the project from the exempt category and make it subject to IRB review.
4. That if such changes are made, you will submit the project for IRB review.
5. That you will immediately report to the IRB any problems that you encounter while using human subjects.

NOT APPROVED:

FULL REVIEW: _____ APPROVED

FULL REVIEW: _____ APPROVED WITH MODIFICATIONS

FULL REVIEW: _____ DENIED

DENIED: _____

See the attached Committee Action Letter for additional comments.

Chair, IRB _____ Date _____

NEW JERSEY CITY UNIVERSITY

Last Name: _____
File No.: _____
Project: _____

NOTICE OF EXEMPTION FROM IRB REVIEW

The project identified below has been declared exempt from review by the IRB under the provision of Federal Regulations 45 CFR 46.101(b).

Your Research is exempt under category

This exemption is based on the following assumptions:

1. That the materials you submitted to the New Jersey City University IRB provide a complete and accurate account of how human subjects are involved in your project.
2. That you will carry on your research according to the procedures described in those materials.
3. That you will report to IRB any changes in your procedures that would remove the project from the exempt category and make it subject to IRB review.
4. That if such changes are made, you will submit the project for IRB review.
5. That you will immediately report to the IRB any problems that you encounter while using human participants.

Name of Chief Investigator: _____

Name of Co-Investigators: _____

Title of Project: _____

Conditions: _____

Note: For Categories 2 & 3, a consent form is not needed for subjects asked to complete an anonymous questionnaire.
Signed

Chair of IRB at New Jersey City University

Date

Exploring Teacher Biases, Perception, and Technology Adoption in Urban Schools

NEW JERSEY CITY UNIVERSITY

Last Name: _____

File No.: _____

Project: _____

INITIAL, REVISED OR CONTINUATION

PART II: NOTICE OF IRB REVIEW AND APPROVAL

The project identified below, for which you requested review and approval by the NJCU Institutional Review Board for the Protection of Human Participants in Research, has now been reviewed and approved. This approval is based on the assumption that the materials you submitted to the NJCU IRB c/o Grants and Sponsored Programs contain a complete and accurate description of all the ways in which human subjects are involved in your research.

This approval is given with the following conditions:

1. That you will conduct the research according to the plans and protocol you submitted.
2. That you will immediately inform the IRB of any injuries to subjects that occur in the course of your research.
3. That you immediately inform the IRB of any problems that arise in the course of your research.
4. That you will immediately inform the IRB of any changes that you make in the protocol of the research.
5. That you will give each person who signs the consent document a copy of that document, if you are using such documents in your research.
6. That you will retain all signed consent documents for at least three years after the termination of the research.

Failure to comply with these conditions will result in the withdrawal of this approval.

Approved

Not Approved

Note: _____

Name of Principal Investigator: _____

Title of Project: _____

Period of Approval: _____

Additional Conditions: _____

One month before the end of the period of approval, you must file with the IRB a new application for revised or continuation of your research project.

NJCU Institutional Review Board Chair _____

Date _____

Appendix B
Informed Consent Forms

Participants Over the Age of 18

I agree to participate in a study entitled “*Exploring Teacher Biases, Perception, and Technology Adoption in Urban Schools*”, which is being conducted by Doctor of Education Candidate, Dwayne Davis of the Department of Educational Technology, New Jersey City University. The purpose of this study is to explore the relationship between negativity bias (the tendency for people to focus on negative experiences), perception (perceived ease of use and usefulness), and technology adoption and use in an urban classroom. The data collected in this study will be combined with data from previous studies and will be submitted for publication in a research journal.

I understand that I will be required to complete an online survey by answering questions with as much details as possible about experiences, biases, and perceived use of technology in the classroom, related to myself or teachers. My participation in this survey should not exceed one hour. I also understand that I may be asked follow-up questions after completing the survey. My overall participation in this study should not exceed four hours over a four to eight-week period.

I understand that my responses will not be anonymous. However, all names and other personally identifiable information will be kept anonymous within the final report. I further understand that all data gathered may be shared with my school administrators. I agree that any information obtained from this study may be used in any way thought best for publication or education provided that I am in no way identified and my name is not used.

I understand that there are no physical or psychological risks involved in this study, and that I am free to withdraw my participation at any time without penalty. I further understand that I will not receive monetary compensation for my participation in this study.

I understand that my participation does not imply employment with the state of New Jersey, New Jersey City University, the principal investigator, or any other project facilitator.

If I have any questions or problems concerning my participation in this study I may contact Dwayne Davis, the principal investigator, at 646-824-8940 or Dr. Beimnet Teclezghi, Chair of NJCU Institutional Review Board, at 201-200-3139 or email bteclezghi@njcu.edu.

Signature of Participant

Date

Signature of Principal Investigator
Dwayne Davis

Date
12/4/2016

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