Thursday, March 28, 2019

To: Mary-Ann Winkelmes, Center for Teaching and Learning

From: Paul O’Keefe, Associate Provost for Research Administration

Re: IRB Protocol #19096R Winkelmes: Transparency in Learning and Teaching in Higher Education project

The HRPP office has deemed the above-referenced human subjects protocol to be exempt in accordance with 45 CFR 46.101(b)2.

This action is effective March 28, 2019

If you wish to make modifications to your approved protocol, please submit a Modification Request to the HRPP office for review. The Committee will then reassess the project to ensure that it still meets the criteria for exemption. Note that modifications may not be implemented until approval has been granted or your research could be out of compliance.

When your research, including data analysis, is complete, you must submit a Final Report and Termination Form to the HRPP office so that your protocol file can be closed and archived.

Forms and procedures for Modification Requests and Termination Forms are available at http://www.brandeis.edu/ora/compliance/irb/forms.html.

Please contact IRB Administration at irb@brandeis.edu or 781-736-8133 should you have any questions or require official notification to an outside agency.
IRB Protocol #19096R Winkelmes - Exempt Determination

Thursday, March 28, 2019

To: Mary-Ann Winkelmes, Center for Teaching and Learning

From: Marissa Hamilton, IRB Administrator

Re: IRB Protocol #19096R Winkelmes: Transparency in Learning and Teaching in Higher Education project

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--

Marissa Hamilton, CIP
Senior Research Integrity Administrator
Office of Research Administration
Brandeis University
Bernstein-Marcus, Rm 121

IRB Official Exemption #19096R Winkelmes - 03-28-2019.docx.pdf

330K
## Transparency in Learning and Teaching in Higher Education project

### Project Title

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<tr>
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<th>Provost/CTL</th>
<th>(773) 829-5775</th>
<th><a href="mailto:mawink@gmail.com">mawink@gmail.com</a></th>
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### PI Last Name First Name

<table>
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<tr>
<th>Winkelmes</th>
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### Grant PI

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## 1. Exemption

Check all categories of exemption for which you are applying:

- [ ] Category 1
- [ ] Category 2
- [ ] Category 3
- [ ] Category 4
- [ ] Category 5
- [ ] Category 6

## 2. Purpose of the Research

- [x] Class Assignment
- [ ] Thesis/Dissertation
- [ ] Presentation
- [x] Evaluation/Assessment
- [ ] Publication

Describe the overarching goal of what you seek to discover from the research, as well as its expected benefits.

This research explores the impact of teaching practices on college/university students' success.

## 3. Personnel

List all research personnel who will take part in the research, role in the project, and CITI training in human subjects research. For student-initiated research, describe the PI's professional qualifications to oversee the student project.

1. **Mary-Ann Winkelmes**, Ph.D., Principal Investigator, CITI RCR and Human Subjects certification, design/oversight of project, access to all data

## 4. Collaborations

Describe any additional collaboration or subcontract with an outside institution or vendor.

- [ ] Not Applicable

1. **Applied Analysis, Las Vegas, NV** (Jeremy Aguero, Principal), database maintenance on secure cloud server space, generation of automated confidential individual instructor reports containing de-identified, aggregate, anonymous data.
2. **Erika Abad**, Ph.D., University of Nevada, Las Vegas, CITI RCR basic certification, analysis of de-identified data.
3. **Matthew Bernacki**, Ph.D., University of North Carolina, CITI RCR and Human Subjects certification, analysis of de-identified data.
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<td>Jeffrey Butler, Ph.D.</td>
<td>Louisiana State University</td>
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<td>Celeste Calkins, Ph.D.</td>
<td>University of Nevada, Las Vegas</td>
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<td>Eli Collins-Brown, Ed.D.</td>
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<td>Laura Cruz, Ph.D.</td>
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5. Conflicts of Interest

List any actual, potential, or apparent conflicts of interest - financial or otherwise - any research personnel or collaborator may have regarding this research. (This includes any actual, potential, or apparent financial conflicts of interest that do not rise to the level of significant financial interest.)

☒ No Conflicts of Interest Exist

6. Study Location

Outline where the proposed research will be conducted.

☒ Home Institution (e.g., Brandeis campus)

☐ Brandeis Qualtrics account

7. Existing Data and Protected Information

*For detailed information regarding the use of PHI see the HRPP webpage HIPAA and PHI

☐ Yes ☐ No Does the proposed research involve the use of existing data, documents, records, or pathological or diagnostic specimens?

☐ Yes ☐ No Does the proposed research involve the use of de-identified HIPAA-Protected Health Information (PHI)?

☐ Yes ☐ No Does the proposed research involve the use of non-de-identified HIPAA-Protected Health Information (PHI)?

☐ Yes ☐ No Does the proposed research involve the use of FERPA-protected educational records?

8. Subject Details:

*For detailed information regarding the use of vulnerable populations see the HRPP webpage Vulnerable Subjects

☐ Adults (≥18) ☐ Minors (<18) ☐ Cognitively Impaired ☐ Minorities ☒ Students

☐ Economically Disadvantaged ☐ Educationally Disadvantaged ☐ Elderly/Aged

☐ Other:

Approximately how many subjects do you plan to enroll? If enrolling multiple groups (e.g., those to be surveyed vs those to be interviewed, controls, etc.) specify how many subjects you plan to enroll in each group.

Over 15000 students have already been surveyed via Qualtrics (survey forms attached). Up to 10000 more may be surveyed. In addition, faculty may be surveyed (survey form attached)

Describe your subjects – explain any inclusion and exclusion criteria you plan to employ.

When faculty request a TILT Higher Ed survey link, they may invite students in their courses to complete the survey. Those students who choose to complete the Qualtrics surveys are the subjects.

Justify the use of any special/vulnerable populations for this research.

☐ Not Applicable

Underrepresented, low-income and first-generation college students will be among the college students whose faculty invite them to complete the TILT Higher Ed surveys.

9. Identifiers to be Collected:

*For detailed information regarding the collection of subject identifiers see the HRPP webpage De-identifying non-PHI Data
Past publications from this project identify teaching methods that benefit all college students in terms of their views about their learning of critical thinking skills, their grades, retention/graduation rates, and these findings are disaggregated to look at the impacts on the success of students who are ethnically underrepresented, first-generation and low-income students. Future publications from the project will continue these analyses.

10. Recruitment Methods

Describe the recruitment methods you plan to employ. (Attach recruitment materials and site-specific permissions to recruit, if applicable.)

☐ Not Applicable

Faculty find out about the project via publications, word of mouth or TILTHigherEd.org, where they can sign up to receive TILT survey links to share with their students. When faculty invite students to complete the surveys, those students who accept the invitation will read an Information & Consent statement, and then will choose to accept and continue the survey or reject and discontinue the survey.

11. Procedures

What data recording methods will you employ?

☐ Handwritten Notes ☒ Computer ☐ Video Recording ☐ Audio Recording ☐ Photograph

☐ Other:

What Data Collection Tools/Study Instruments will you use? (Attach all study instruments.)

☒ Online Survey ☐ Paper Survey ☐ Interview Guide ☐ Standardized Test ☐ Behavioral Measure(s)

☐ Other:

How will you interact with your subjects/conduct your research?

☐ In person (1 on 1) ☐ In person (group) ☒ Email ☐ Telephone/Skype ☐ Online ☐ Standard Mail

☐ Other:

Describe all procedures, steps, and actions you will be performing in chronological order – be as detailed as possible.
- Include a discussion of the specific data you will be collecting and what you plan to do with it.
- Describe in detail your plans for protecting the subjects’ privacy and data confidentiality/anonymity, if applicable.
- Note: If helpful, you may use bullet points and/or attach flow charts, graphs, timelines, etc.

Faculty find out about the project via publications, word of mouth or TILTHigherEd.org.

1. A faculty member who wishes to participate reads the Information and Consent Statement for faculty, and agrees to participate. They can then provide their name, email address and information about the course they wish to
survey (discipline, level, size, institution, online/onsite/blended format) and request TILT survey links to share with their students.

2. When a faculty member signs up to participate (as in step 1), the PI contacts the IRB at that institution if the institution is new to the TILT project. Without identifying the faculty member, the PI describes the TILT Higher Ed project and shares all IRB approvals with that IRB. In roughly 95% of cases to date since the 2008 beginning of the project, IRBs agree that no additional approvals are needed from the new institution. In some cases, the IRB requests additional Investigator Assurances from any staff members at the institution who will be involved (like institutional analysis staff or faculty development staff or new research team members who might wish to join the project from the institution). New research team members also must complete CITI certification for human subjects research.

3. After providing all requested documentation to the new institution's IRB, the Principal Investigator provides TILT online survey URLs to each faculty member who requested them, at the beginning and end of term, along with suggested language that the faculty member has the option to use when extending the invitation to their students. (See attached document: TILT Survey URL for Your Students.) Faculty are free to tell students as much or as little as they wish about the TILT project and their reasons for participating.

4. Faculty member invites their students to participate in the TILT survey and shares the corresponding online survey URL at the beginning and end of term.

5. Students click the TILT survey URL and immediately see a Student Information and Consent Statement. (See attached Student Information and Consent Statement.)

6. If the student agrees to participate, they click “agree” on the Student Information and Consent Statement, and they may begin the online TILT survey inside of the Brandeis Qualtrics system. They may choose to end their participation any time and may stop answering the online survey questions part way through the survey. The TILT surveys ask questions about students' views of their learning experiences as well as demographic questions. (See attached Student Pre-survey Questions, Student End-of-Term Survey Questions.)

7. The students' survey responses are gathered inside the Brandeis University Qualtrics system. Each survey URL attaches to the students' responses (inside of Qualtrics) data including: the course number, instructor's name/ email, institution name.

8. Only four people, the PI, postdoctoral or graduate assistant, database administrator and one additional research team member (Daniel Richard) have access to: the students' actual ID numbers, faculty names/emails, institution names.

9. The PI and a postdoctoral or graduate assistant send the survey data in a password protected file once per semester to the database administrator (Jeremy Aguero, Applied Analysis). The database administrator adds the data to the database and assigns randomized identifiers to: the students' ID numbers, faculty identifying data (names, emails), institutions' names.

10. The database generates automated confidential individual instructor reports. (See attached Sample Confidential Individual Instructor Report.)

11. After term grades for students are submitted to the registrar, the PI sends automated confidential individual instructor reports to participating faculty, or sends them an email telling them how to download their report, using their individual password, directly from the database portal.

12. Once each winter and spring (in December/January and May/June), the PI requests students' retention/graduation/grades data from one institutional analysis staffer at each institution via a password protected file containing no survey data, and only students' ID numbers along with corresponding randomized identifiers.

13. The institutional analysis staffer sends students' retention/graduation/grades data back to the PI in a password protected file containing only randomized identifiers and no actual ID numbers. This process limits the number of times the students' ID numbers ever appear in a password protected file that is transmitted to 2: 1) from the PI or postdoctoral/graduate assistant to the database administrator; 2) from the PI to the institutional analysis staff person.

14. The PI sends a password protected file containing coded identifiers and corresponding retention/graduation/grades data to the database administrator, who imports the retention/graduation/grades data into the database, thus connecting students' TILT survey responses with retention/graduation/grades data.

15. Analysis is conducted by research team members on specific research questions. Research team members do not have access to the full database. They may access only anonymous aggregate data and only coded identifiers
for faculty, students, and institutions. They cannot see an institution's name unless by written agreement from the institution's IRB.

16. The PI shares with research team members the data that pertains to their research question. In the future, research team members will be able to download that data from the database. However, they can never download a subset of data that is smaller than data pertaining to 5 institutions.

17. The PI and research team members may invite participating faculty to complete an online survey about their experiences with the TILT project.

18. The PI and research team members present, publish and disseminate findings (with anonymous aggregate data) from the TILT project that do not identify students or faculty or institutions without express written consent.

### 12. Risk and Benefits

*For detailed information regarding minimizing risks and balancing risks and benefits see the HRPP webpage Criteria for Review.*

What risks do you foresee for subjects in this research? Remember, all research involves some risk, even if only minimal.

- Social
- Psychological/Emotional
- Physical
- Legal
- Economic
- Loss of privacy/confidentiality
- Other:

Describe in more detail the risks to subjects checked above.

The risks are no greater than those experienced in everyday college student life. If a data breach occurs (all possible protective measures are in place to make a breach unlikely) a breach could reveal students' ID numbers and survey responses about their views on their learning. Benefits to students may include greater awareness of their learning processes.

Describe your provisions for managing the risks discussed above.

Data is stored in password protected files on password protected computers, drives, the Brandeis Qualtrics system, and secure cloud server space. Only four people, the PI, postdoctoral or graduate assistant, database administrator and one additional research team member (Daniel Richard) have access to: the students' actual ID numbers, faculty names/emails, institution names. All other research team members have access only to coded ID numbers.

Once each winter and spring (in December/January and May/June), the PI requests students' retention/graduation/grades data from one institutional analysis staffer at each institution via a password protected file containing no survey data, and only students' ID numbers along with corresponding randomized identifiers. The institutional analysis staffer sends students' retention/graduation/grades data back to the PI in a password protected file containing only randomized identifiers and no actual ID numbers. This process limits the number of times the students' ID numbers ever appear in a password protected file that is transmitted to 2: 1) from the PI or postdoctoral/graduate assistant to the database administrator; 2) from the PI to the institutional analysis staff person. The PI sends a password protected file containing coded identifiers and corresponding retention/graduation/grades data to the database administrator, who imports the retention/graduation/grades data into the database, thus connecting students' TILT survey responses with retention/graduation/grades data.

Describe the anticipated benefits to subjects, society, and/or other specific groups from this research. (Note: Compensation is not a benefit.)

Already, this research has identified small, replicable teaching adjustments that all faculty can make to increase college students' success and reduce equity gaps. Thousands of faculty at institutions around the US have received training in those methods that the project's research have identified as most helpful for students' equitable success. The project expects to continue identifying such teaching practices and informing faculty across the US about adopting these practices.

### 13. Costs and Compensation

Describe any costs to subjects for their involvement in this research (time, transportation, economic – loss of work, need for
Taking the online Qualtrics survey at the beginning of term can take up to 2 to 3 minutes. The end of term survey can take 9 - 11 minutes to complete. Students and faculty are not required to take the surveys, nor are they required to complete all the survey questions.

Describe any form of compensation subjects will receive (cash, gift card, course credit, medical care) as well as the terms and conditions of receiving the compensation (e.g., partial compensation for partial participation, etc.).

14. Informed Consent

*For detailed information regarding informed consent — including how to construct an informed consent form — see the HRPP webpage Informed Consent

Select all that apply:

- The proposed research will follow standard procedures for obtaining documented informed consent.
- Approval for a waiver of documented informed consent is being requested.
- Approval for an alteration to or waiver of informed consent is being requested.
- The proposed research involves children.
- Information regarding the true objectives of the research will be withheld during the informed consent process (incomplete disclosure).

Describe the circumstances surrounding your informed consent procedures — remember that obtaining informed consent is a continuous process.

- Describe the setting in which you will be obtaining informed consent, along with any special considerations you will make for vulnerable or non-English speaking subjects (e.g. witnesses or translators).
- If your subjects include children (<18), describe both the parental consent and child assent processes.
- Attach all consent documents and scripts.

- Not Applicable: A waiver of informed consent is being requested.

Informed consent (attached) will be provided in written form online to faculty and students at institutions where the primary language of instruction is English. If desired, subjects could use an online translation tool or screen reader of their choice. Subjects indicate that they are 18 years of age or older.

- If requesting a waiver of standard documented informed consent procedures, detail the reasons why and the conditions that necessitate the request.
- If requesting an alteration to or waiver of informed consent, detail the reasons why and the conditions that necessitate the request.

- Not Applicable: Standard procedures for obtaining documented informed consent will be followed.

Informed consent documentation is attached.

15. Data Security

*For detailed information regarding data security see the HRPP Guide to Data Management and Protection

Describe how you will keep the research data you collect (including consent forms, surveys, notes, recordings, etc.) secure throughout their lifespan (collection → transportation → storage → data analysis → publication → destruction/indefinite storage):

Describe how you will keep the research data secure during collection (e.g., audiotape directly to Box.com).

- Not Applicable

Brandeis's Qualtrics system will be used to gather survey data.

If collecting sensitive information (level IV or V), describe how you will keep the research data secure during transportation (e.g., in a locked briefcase).

- Not Applicable

Describe how you will keep the research data secure during storage (e.g., in a locked file cabinet).

Data resides in secure cloud server space monitored by Applied Analysis (subcontractor who maintains the database). Only
research team members can access the data on the server. Most research team members cannot access ID numbers on the server. Only the principal investigator, database manager and four research team members have access to ID numbers. Partial data files are also on password protected computers in locked offices and on a backup flashdrive in a locked office.

Describe how you will keep the research data secure during data analysis (e.g., on Box.com).

Data analysis takes place inside the secure cloud server space maintained by Applied Analysis (subcontractor), and also on password protected computers by research team members.

Describe how and at what point the research data will be de-identified.

☐ Not Applicable

Data is de-identified before research team members access it. Only the PI (Mary-Ann Winkelmes), the database manager (Jeremy Aguero) and several research team members (Daniel Richard, Carolyn Weisz, Kathy Olson and a postdoctoral assistant [currently Celeste Calkins]) will have access to the complete data (including student ID numbers). ID numbers are then immediately coded. One staff member from each institution's institutional analysis/research office will see the ID numbers of students from that institution who participated in the TILT survey at the moment when the PI requests retention/graduation data and grades for those students (in order for the PI and database manager to connect students' retention/graduation data and grades to their TILT survey responses in the database, before coding the ID numbers). However, that institutional staff member will not see the students' TILT survey responses.

Describe how you will protect confidentiality when the research data is presented/published.

No individual student subject or participating faculty member is ever identified in any communications, presentations, papers or publications by this project. Faculty may identify themselves as connected with the project if they wish. For example, some faculty have identified themselves as participants when they have published their own studies about their experiences with the project.

Describe when and how the research data will be destroyed - if the research data will be stored indefinitely, describe how you will continue to keep it secure.

Data will be preserved by the methods described above for up to 10 years after the completion of the project (December 31, 2021). When the data is destroyed, it will be deleted from all files and scrubbed from all computers and the secure server space where it was stored.

Describe who will have access to the research data throughout its life (must always include PI).

The PI (Mary-Ann Winkelmes) and some research team members: (Daniel Richard, Carolyn Weisz, Kathy Oleson, one postdoctoral or graduate assistant, currently Celeste Calkins, and database manager Jeremy Aguero) will have access to the complete data (including student ID numbers). Other research team members will have access to the de-identified data. A list of research team members and their levels of access is included above.

Discuss any additional data security plans you may have.

☐ Not Applicable

16. Additional Committee Approvals

☐ Yes  ☐ No  This research involves human blood, fluids, tissues, or cell lines; infectious agents; select agents; or rDNA.
☐ Yes  ☐ No  This research involves animals.

17. Additional Comments

The data includes student secondary data (course grades, GPA and retention/graduation information) from students at schools who agree to share that data with this project starting from 2015.

18. Supporting Documents

Please attach to this application:

☒ Assurance: PI or Faculty-Student
- **Consent Documents:** Final versions (as they will appear to your subjects - e.g., with graphics, on letterhead, etc.) of informed consent/assent forms, information sheets, computer consent screens, consent/assent scripts, etc.

- **Recruitment Materials:** Final versions (as they will appear to your subjects - e.g., with graphics, on letterhead, etc.) of fliers, letters, texts of e-mails, scripts for phone calls, etc., as well as site-specific permissions to recruit if working with an outside organization (i.e., letters of permission from each organization that details their understanding of your project, their support and involvement in your project, and the duration of their involvement in your project).

- **Study Instruments:** Surveys, questionnaires, interview guides, tests, photographs, equipment diagrams or photographs, etc.

- **Translation Certification(s)**, if applicable

- **Permission Letter(s):** Data Use Agreements (DUAs), Memorandums of Understanding (MOUs), etc.

- **International Research Addendum**, if applicable

- **Other:**

Revised 10/18/2018
Exempt Categories of Review

Exempt Category 1
Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as:
1. Research on regular and special education instructional strategies.
2. Research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

Note: This category may be applied to research involving children

Exempt Category 2
Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior, unless:
1. Information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects.
   —and—
2. Any disclosure of the human subjects’ responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects’ financial standing, employability, or reputation.

Note: Surveys on sensitive or personal topics which may cause stress to study participants are not exempt from IRB review.

Note: This category may be applied to research involving children provided it is 1) research involving educational tests, or 2) public observation involving no interaction between the investigators and the children.

Exempt Category 3
Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under paragraph (2) of this section, if:
1. The human subjects are elected or appointed public officials or candidates for public office.
2. Federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.

Exempt Category 4
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 subjects cannot be identified, directly or through identifiers linked to the subjects.

Examples: Existing Data Records Review, Pathological Specimens

Exempt Category 5
Research and demonstration projects which are conducted by or subject to the approval of Department or Agency heads, and which are designed to study, evaluate, or otherwise examine:
1. Public benefit or service programs.
2. Procedures for obtaining benefits or services under those programs.
3. Possible changes in or alternatives to those programs or procedures.
4. Possible changes in methods or levels of payment for benefits or services under those programs.

Exempt Category 6
Taste and food quality evaluation and consumer acceptance studies:
1. If wholesome foods without additives are consumed.
2. If a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the US Department of Agriculture.

Note: This category may be applied to research involving children.
INFORMED CONSENT

Transparency in Learning and Teaching in Higher Education (TILTHigherEd)

You are invited to participate in a research study being conducted by Mary-Ann Winkelmes, Ph.D., Executive Director of the Center for Teaching and Learning at Brandeis University.

Please read this form carefully. We encourage you to ask questions if you want more information about any part of the form or the study.

If you decide to participate in this study you will be asked to sign this form electronically. A copy of the signed form will be given to you to keep for your records – it has important information, including whom to contact if you have questions in the future.

What is this study about?
We are conducting this study because we are trying to learn more about how higher education students understand their own learning processes, and how instructors can enhance that understanding and improve students’ success equitably. Your participation will help instructors and institutions improve students’ learning experiences.

Why have we asked you to participate?
We are asking you to take part in this study because you are between the ages of 18 and 100 and are enrolled in a course in college or university.

What will you be asked to do if you participate?
If you decide to participate in this study, you will be asked to complete an online questionnaire at the beginning and end of the course about your learning experiences.

The questionnaire will take you about 2-3 minutes at the beginning of the course and 9-11 minutes at the end of the course.

Are there any possible risks to you?
You may feel uncomfortable answering some of the questions. If a certain question or topic makes you feel uncomfortable, you are free to skip the question. You can also withdraw from the study completely at any time.

There is always the risk that your information could be accidentally disclosed to people not connected with this study; however, we will do our utmost to secure your information so this does not happen.

Will you benefit from participating in the study?
You may benefit from this project by becoming more aware of your own learning practices and how these impact your performance in school. You will be providing valuable information about your learning that will help schools and instructors to improve students’ learning experiences.

Will it cost you anything to participate in the study?
The only cost to you will be your time.

Will you be compensated or receive anything for participating in the study?
No.
How will your information be kept private?
Any information that is obtained in connection with this study and that can be identified with you will remain confidential to the extent permitted by law. Your name will be coded using a random combination of letters and numbers (for example b4h86). The list that connects your name with your code number will be kept separate from the actual data we collect.

The list with your name on it will be stored in a locked file cabinet in the researcher’s office. The coded data we collect will be stored electronically in a password protected encrypted file on secure computer server space. The researchers will be the only ones who have access to your information.

When the data from the questionnaire is reported (in publications and presentations), it will be in aggregate form – your information will not be separable from the findings as a whole.

What if you don’t want to participate or change your mind partway through?
Participating in this study is completely voluntary. You have the right to refuse to participate in all or a part of this study. Even if you decide to participate now, you may change your mind and withdraw from the study at any time without penalty. You may also refuse to answer specific questions at any time without penalty – simply skip them on the questionnaire.

What will happen with your information once research is complete?
The information collected as part of this study will be destroyed ten years after the study concludes and the results have been published. Your information (identifiable or de-identified) will not be used or distributed for future research.

Who can you call if you have more questions?
If you have any questions about the research being conducted or your participation in the study, feel free to contact the researchers at 781-736-4795 or wink@brandeis.edu.

If you have any questions about your rights as a subject in this study, would like to speak with someone other than the researchers about concerns you have about the study, or in the event the researchers cannot be reached, please contact the Brandeis University Human Research Protection Program at 781-736-8133 or irb@brandeis.edu.

Subject Consent
I have read the contents of this consent form, have been encouraged to ask questions, and have received satisfactory answers to my questions. I understand that my participation is voluntary and that I may withdraw my participation at any time without penalty. I voluntarily agree to participate in this study.

☐ Yes  ☐ No

Investigator’s Signature ___________________________ Date ____________

Revised January 21, 2019, by Brandeis University Human Research Protection Program
Transparency in Learning and Teaching in Higher Education
Pre-Survey and End-of-Term Survey Questions

A pilot version of the survey was written and tested at the University of Chicago (2008-2009) and tested/revised at the University of Illinois at Urbana-Champaign (2010-2013, https://illinois.edu/sb/sec/4282975 copyright The Board of Trustees of the University of Illinois. All rights reserved. For academic and research purposes only).

1. How well do you understand the content of this course?
2. How accurately does your submitted work for the course (including exams/quizzes) reflect your understanding of the course content?
3. Did the coursework and course activities benefit your learning?
4. How much has this course helped you in writing effectively?
5. How much has this course helped you in communicating your ideas effectively in your spoken statements?
6. How much has this course helped you in collaborating effectively with others?
7. How much has this course helped you in improving your ability to separate and examine the pieces of an idea, experience, or theory?
8. How much has this course helped you in learning how to connect information from a variety of sources?
9. How much has this course helped you in learning how to apply concepts to practical problems or in new situations?
10. How much has this course helped you in considering the ethical implications of your actions?
11. How much has this course helped you in improving your ability to learn effectively on your own?

Response options: Not at all, A little, A moderate amount, A lot, A great deal

The following 11 questions are asked at the beginning and end of term:

7. I can judge the reliability of information from various sources.
13. I can express my ideas effectively when I write.
14. I can communicate effectively when I speak.
15. I collaborate well with others on academic work.
16. I am good at breaking down theories, ideas and experiences into pieces so I can consider them.
17. When I am given information from multiple sources, I have an easy time making connections between them.
18. I am able to apply the things I have learned to new problems and situations.
19. I tend to consider the ethical implications of my actions.
20. I am capable of learning on my own.

Response options: Never, Sometimes, Often, Always

30. Please rate your confidence about your ability to succeed in school.
31. Please rate your confidence about your ability to succeed in this field.

Response options: Low, Moderate, High

21. As a result of taking this course are you more or less likely to consider opinions or points of view different from your own or has the course made no difference?

Response options: Much less likely, Somewhat less likely, No difference, Somewhat more likely, Much more likely

22. As a result of taking this course are you a better or worse judge of the strengths and weaknesses of ideas, or has the course made no difference?

23. As a result of taking this course are you a better or worse judge of how well a group discussion has met its goals, or has the course made no difference?

24. As a result of taking this course are you a better or worse judge of the reliability of information from various sources, or has the course made no difference?

Response options: Much worse, Somewhat worse, No difference, Somewhat Better, Much Better

http://www.unlv.edu/provost/teachingandlearning
mary-ann.winkelmes@unlv.edu
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25. As a result of taking this course are you more or less confident about your ability to succeed in school, or has the course made no difference?

26. As a result of taking this course are you more or less confident about your ability to succeed in this field, or has the course made no difference?
   Response options: Much less confident, Somewhat less confident, No difference, Somewhat more confident, Much more confident

27. As a result of taking this course are you better or worse at recognizing when you need help with your academic work, or has the course made no difference?
   Response options: Much worse, Somewhat worse, No difference, Somewhat Better, Much Better

28. As a result of taking this course are you more or less likely to discuss ideas from your courses, outside of class with others such as students, family members, or co-workers, or has the course made no difference?

29. As a result of taking this course are you more or less likely to ask future instructors about how coursework and course activities benefit your learning, or has the course made no difference?
   Response options: Much less likely, Somewhat less likely, No difference, Somewhat more likely, Much more likely

32. Are you likely to apply knowledge and skills you gained from this course in contexts outside of this course?
   Response options: Not likely, Slightly likely, Moderately likely, Very likely, Extremely likely

33. How well do you understand what constitutes successful work in this course?
   Response options: Not well at all, Slightly well, Moderately well, Very well, Extremely well

34. How much did class meetings incorporate the students' suggestions and interests?

35. How much did the instructor value you as a student?

36. In this course, I knew the purpose of each assignment.
   Response options: Not at all, A little, A moderate amount, A lot, A great deal

37. Each assignment included a section that explained how the assignment was related to the objectives of the course.

38. My instructor identified a specific learning goal for each assignment.

39. In this course, I knew the steps required to complete my assignments.

40. Each assignment included a detailed set of instructions for completing it.

41. My instructor provided detailed directions for each learning activity that was assigned.

42. In this course, I knew how my work would be evaluated.

43. My instructor provided students with annotated examples of past students' work.

44. My instructor provided tools I could use to assess the quality of my and others' work.
   Response options: Never, Sometimes, Often, Always

45. How much has this course helped you in designing experiments or processes to address a problem?

46. How much has this course helped you in analyzing and interpreting data and/or problems?

47. How much has this course helped you in choosing methods appropriate to solving a problem?
   Response options: Not at all, A little, A moderate amount, A lot, A great deal

48. I feel that I am a member of my school's community:
   Response options: Never, Sometimes, Often, Always

49. How much has this course helped you to feel that you are a member of your school's community?
   Response options: Not at all, A little, A moderate amount, A lot, A great deal

Next page: demographic questions
What is your gender?
Response options: Male, Female, I prefer not to respond, Additional: Please describe how you identify your gender.

Before taking this course, did you complete any other course(s) in this department or field?

Before taking this course, did you take any course(s) that gave "transparent" or explicit attention to how coursework and course activities benefit your learning?
Response options: Yes, No, I don't know

What is your primary reason for taking this course?
Response options: To fulfill a requirement or prerequisite, Interest in the subject, Another reason

Are you a person of Hispanic, Latino, or Spanish origin?
- No, not of Hispanic, Latino, or Spanish origin
- Yes, Mexican, Mexican American, Chicano/a
- Yes, Puerto Rican
- Yes, Cuban
- Yes, another Hispanic, Latino, or Spanish origin -- for example: Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. Please indicate:

With which of the following racial/ethnic groups (from the US Census categories below) do you identify? Please select all that apply.
- White
- Black, or African American
- American Indian or Alaska Native. Please enter the name of your enrolled or principal tribe:
- Asian Indian
- Chinese
- Filipino
- Other Asian -- for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on. Please indicate:
- Japanese
- Korean
- Vietnamese
- Native Hawaiian
- Guamanian or Chamorro
- Samoan
- Other Pacific Islander -- for example, Fijian, Tongan, and so on. Please indicate:
- Middle Eastern / North African (MENA)
- Some other race. Please indicate:

Are you a citizen of the country in which this course is taught?
Response options: Yes, No, I prefer not to respond

Which of the following types of schools have you attended other than the one you are attending now?
- Vocational, technical or trade school
- Community college, junior college or two-year college
- University or college other than this one
- None
- Other
- Please select a category below that most closely matches your proposed major field of study.
  - Humanities
  - Social and Behavioral Sciences
  - Physical Sciences, Mathematics and Engineering
  - Life Sciences

- Are you a first-generation student (first in your family to attend):
  - College
  - Graduate school
  - I'm not a first generation student

- Are you a first-generation immigrant in the country where you are living?
- Are you a part-time student? Response options: Yes, No, Other

- Please identify the number of people in your household/family.

- Please choose the range that best represents your household/family’s income.
  - 0- $17,500
  - $17,501- $23,600
  - $23,601- $29,700
  - $29,701- $35,800
  - $35,801- $41,800
  - $41,801- $47,900
  - $47,901- $54,000
  - $54,001- $60,100
  - $60,101- $66,200
  - $66,201-$75,000
  - Above $75,000

- Comments
Statement of Assurance

Title of Project: Transparency in Learning and Teaching in Higher Education (TILT Higher Ed)

Name of Principal Investigator: Mary-Ann Winkelmes

☐ Yes ☑ No The attached protocol involves a student researcher for whom the PI is the primary advisor.

My signature below indicates that the information provided in this application is correct and that I agree to comply with all federal, state, and institutional policies and procedures designed to protect human subjects in research. My signature also acknowledges my understanding of my responsibilities as a research investigator, as outlined below and in Brandeis University's Federalwide Assurance.

✓ I acknowledge and accept the responsibility for protecting the rights and welfare of human research subjects and for complying with all applicable provisions of the Brandeis University Federalwide Assurance.

✓ I will provide a copy of the IRB-approved informed consent document to each subject at the time of consent, unless the IRB has specifically waived this requirement. All signed consent documents are to be retained in a manner approved by the IRB.

✓ I will request review by the IRB for any proposed changes in previously approved human subject research. The proposed changes will not be initiated without IRB review and approval, except where necessary to eliminate apparent immediate hazards to the subjects.

✓ I will report progress of approved research as often as and in the manner prescribed by the IRB.

✓ I will promptly report to the IRB any injuries or other unanticipated problems involving risks to subjects or others.

✓ No research investigator who is obligated by the provisions of this Assurance, any associated Inter-Institutional Amendment, or Noninstitutional Investigator Agreement will seek to obtain research credit for, or use data from, patient interventions that constitute the provision of emergency medical care without prior IRB approval. A physician may provide emergency medical care to a patient without prior IRB review and approval, to the extent permitted by law, however such activities may not be counted as research nor the data used in support of research.

✓ I will advise the IRB, Office of Research Administration, and the appropriate officials of other institutions of the intent to admit human subjects who are involved in research protocols for which this Assurance or any related Inter-Institutional Amendment or Noninstitutional Investigator Agreement applies. When such admission is planned or a frequent occurrence, those institutions must possess an applicable OHRP-approved assurance prior to involvement of such persons as human subjects in those research protocols.

Signature of Principal Investigator: [Signature]

Date: February 8, 2019
This is to certify that:

Mary-Ann Winkelman

Has completed the following CITI Program course:

Human Research
Group 2. Social/Behavioral IRB
1 - Basic Course

Under requirements set by:

University of Nevada, Las Vegas

Verify at www.citiprogram.org/verify/?w0dbdb483-f39a-4895-88a8-89f0a340dc8b-26267555