TEACHERS COLLEGE
COLUMBIA UNIVERSITY
Institutional Review Board
Box 151 | 525 West 120th St. New York, NY 10027
212-678-4105 | RH 13 | IRB@tc.edu | tc.edu/IRB

IRB APPLICATION TEMPLATE

SECTION I: PROTOCOL DESCRIPTION

1. Study Title.

What Do Math Teachers Think about Math Learning?

2. Principal Investigator (*person conducting the research*). Professional title and email.

Dr. Anna Freud, Ph.D., Primary Researcher, A.Freud@tc.columbia.edu
Dr. Carl Rogers, Ph.D., Co-Investigator, C.Rogers@tc.columbia.edu

If there is more than one researcher on the project, include all names here.

This data was collected in a previous TC IRB approved study. If you did not collect your data (e.g., you are using a publicly available dataset) make sure to identify where you received the data.

3. Write an original, brief, non-technical description of the purpose of your research. Include a narrative that explains the major parts of your study and how the data will advance your research hypothesis or question. ***NOTE:*** *This section should be easy to read for someone not familiar with your academic discipline. Provide relevant background information and scientific justification for your study. You may provide citations as necessary. Please adhere to a 350-word limit (not including citations).*

This data was originally collected under Teachers College IRB protocol #10-101. The data was collected to understand how math teachers feel about their profession and how they handle math mistakes they make or those made by their students.

You may also need to specify how you plan to access the secondary data. For example, do you need to sign a data sharing agreement (a template is in Mentor IRB/Documentation) or is it publicly

The researchers seek to analyze de-identified secondary data.

IRB applications under Exempt Category 4 – Secondary Data should only be analyzing secondary data. No new recruitment should occur within your study activities for this review category.

4. State your research question(s). Your planned research protocol should be one that can realistically address your research question(s).

- How do teachers talk about math learning?
- How do teachers engage in math strategies?
- How does an environment (classroom setting and class culture) help promote or hinder math learning?

5. Provide the inclusion criteria for the participant population (*e.g., by gender, class, race, occupation, or age*). Provide a rationale for selecting this population for research purposes.

Not applicable. Secondary data collected from protocol #10-101.

A researcher can indicate "not applicable" for any application question referring to new data.

6. Federal guidelines state that research cannot exclude any classes of participants without scientific justification. Indicate who will be excluded from your study and why (*e.g., persons under 18 years of age*).

Not applicable. Secondary data collected from protocol #10-101.

7. Provide the maximum number of participants you plan to enroll for each participant population and justify the sample size.

Not applicable. Secondary data collected from protocol #10-101.

8. Describe your recruitment methods. **How** and **where** will participants be recruited (*e.g., flyers, announcements, word-of-mouth, snowballing, etc.*)? Submit a copy of all recruitment letters, scripts, emails, flyers, or social media posts you plan to use to recruit participants for your study as separate documents with your application. You will need to include your IRB Protocol number (*e.g., 18-123*) on all recruitment materials, including announcements, online posts, and email text, etc.

Not applicable. Secondary data collected from protocol #10-101.

9. Describe the location, setting, and timing of data collection (*e.g., face-to-face interview at a mutually convenient location, at the start of the semester*). Include the state, city, school district, etc. ***Note:*** *If you are recruiting participants from institutions other than Teachers College include a site permission form (template located in Mentor/Documentation) or a pending IRB approval from the institution(s) with this submission. If you are conducting any part of your research within NYC DEPARTMENT OF EDUCATION (DOE) Schools, it is required that you receive approval from Teachers College IRB prior to submitting your application to the Department of Education IRB (DOE IRB).*

Not applicable. Secondary data collected from protocol #10-101.

SECTION II: DESCRIPTION OF STUDY ACTIVITIES & PROCEDURES

10. List what your participants will be asked to do during your study and your data collection process (*e.g., fill out a 25-question, closed-ended, paper survey*). ***Note:*** *Submit copies of all instruments, surveys, interview questions, observation checklists, etc. that you plan to use for data collection as separate documents. Indicate whether data are collected as part of an initial participant screening or the actual study. If you have multiple participant groups (e.g., parents, teachers, and students or control groups and experimental groups), please specify which group you are asking to complete which task(s). If applicable, submit separate translated copies of all questionnaires, interview questions, consent forms, and recruitment materials, for each participant population. Upload a copy of the back-translation (translation into the target language and back into English) document using Google-Translate to validate translation accuracy. Alternatively, the translator can sign the "translation verification" form in Mentor/Documentation.*

Not applicable. Secondary data collected from protocol #10-101.

11. Please check the box(s) that best describes the specific nature of your data.

In Microsoft Word, double-click the box or type an "X" to mark your selection.	
☐ I will personally collect new data.	☒ I will access secondary data.
☐ Somebody else will collect the data via proxy (*please explain*).	☐ I will use a web-based data collection site (*e.g., Amazon's Mechanical Turk (MTurk) or ResearchMatch*).
☐ Other (*please explain*).	

Applications for Exempt Category 4 – Secondary Data must choose this

12. Please check the box(s) that best describe your study activities.

In Microsoft Word, double-click the box or type an "X" to mark your selection.	
☐ Audio recordings	☐ Clinical trials, Experiments, or Randomized Controlled Trials
☒ Documents and Records	☐ Ethnographies, Oral History, and Case Studies
☐ Interviews or Focus Group Sessions	☐ Online (*e.g., Qualtrics, RedCap, or other web-based collection method*)
☐ Observations	☐ Program Evaluations
☐ Other (*please explain*)	☐ Video recordings

Applications for Exempt Category 4 – Secondary Data must choose this

13. Please list the *activity*, *occurrence,* and *duration* in which your participants will be engaging.

Name of Task or Procedure (*e.g., individual audio recorded interview*)	Number of occurrences (*e.g., twice*)	Activity Duration (*e.g., 30 minutes, each time*)	Total time per participant (*e.g., one day, two interviews, 60 minutes total*)	Describe the data collected
Secondary data				

Researchers applying for Exempt Category 4 – Secondary Data can leave question #13 blank, as the study does not include new participant activities.

Total hours of participation for all tasks:
Total duration of participation (*e.g., days, months, and/or years*):

14. If you will be audio/video recording, please state how you will ensure that all participants have consented to be recorded. How will you ensure that individuals who are not participating in your study (*e.g., other children in a classroom*) will not also be recorded?

No, the data includes documents and records. The data is secondary data collected from protocol #10-101.

15. State whether participants will be compensated for their participation. ***NOTE:*** *If you plan to use a lottery system, please state odds of winning here and in the consent form. Also, if you will be offering course credit for study participation, you must discuss this here and include the alternative assignment for those who decline to participate in the study. Will compensation be pro-rated if the participant does not complete all aspects of the study? If you pay participants after their participation, please make it clear how you will link names/contact information confidentially to any record of the compensation.*

No. This is secondary data collected from protocol #10-101.

16. Will deception be used? If so, please provide a rationale for its use. ***NOTE:*** *Upload a debriefing script as a separate document. Include a statement that gives your participants the opportunity to withdraw their participation at that time. Studies involving deception are given Full Board Review unless the deception is minor and risks are minimal.*

No deception. This is secondary data collected from protocol #10-101.

17. Will you have a control group, or a comparison group? If so, please describe your procedures and explain the purpose of using a control group.

No, this is secondary data collected from protocol #10-101.

18. Will you need bilingual interpreters or interviewers, and if so, what will you do to ensure participant confidentiality? What are your procedures for recruiting interpreters and interviewers?

No, not applicable, this is secondary data collected from protocol #10-101.

SECTION III: DESCRIPTION OF RESEARCH RISKS & BENEFITS

19. Describe the potential risks to your participants. Risks can be physical, psychological, economic, or social. What is the likelihood of these risks occurring, and/or their seriousness (*e.g., exposure of sensitive data*)? How will you work to minimize these risks? ***NOTE:*** *The IRB regards no research involving human participants as risk-free. You may describe minimal risks for your study (such as discomfort, boredom, fatigue, etc.), or state that the research will involve minimal risk, similar to an activity (named) that participants would perform in their daily lives.*

20. The data includes documents and records. The data is de-identified. The data cannot be linked to any participant names or personally identifiable information.

Only data that is de-identified may be used for Exempt Category 4 – Secondary Data, unless the identifiable materials are publicly available, the secondary use is regulated under HIPAA, OR secondary research is conducted by or on behalf of a federal department or agency.

21. What are yo
participant and/or your referral sources if there is a need for psychological and/or physical treatment/assistance?

Not applicable.

22. What qualifications and preparations enable you to estimate and minimize risk to participants?

23. The primary investigator is CITI trained and has 10 years of experience working on research projects.

All research staff must be CITI trained **before** participating in research. The CITI training certificate, awarded at the completion of the CITI course, should be uploaded into TC Mentor IRB/PI Documentation prior to submitting an IRB protocol application. Studies listing researchers who do not have their CITI training in TC Mentor IRB will be subject to revisions.

24. Describe any possible direct benefits to your participants. Most research will not have any direct benefits to participants. Occasionally, a study design will include a diagnosis, evaluation, screening, counseling or training, etc., that has a concrete benefit to participants, independent of the nature or results of a research study.

No direct benefit to participants. However, an analysis of this data may contribute to a deeper understanding about teachers beliefs of math.

Even if the original data collection provided some benefit to the participants (e.g., the participants received a math intervention) the **current** data analysis study does not directly benefit the participants.

SECTION IV: CONFIDENTIALITY PROCEDURES & PARTICIPANT PRIVACY

25. Please check the box(s) that best describes your data. ***Note:*** *Sensitive data potentially poses substantial threat to research subjects and can become problematic for the researcher, researched collection, and/or the dissemination of research data (Lee & Renzetti, 1990). Substantial threat may include threat to reputation, employment, or access to resources. Sensitive data may include studies of domestic violence, immigration status, political activism, homicide, death, trauma, assault, and/or mental, sexual, or physical health* (Lee, R. M., & Renzetti, C. M. (1990). The problems of researching sensitive topics: An overview and introduction. *The American Behavioral Scientist, 33*(5), 510–528).

☒ Completely anonymous data (*both sensitive and non-sensitive*)	☐ Non-sensitive data with identifiers
☐ Sensitive data with identifiers	☐ Other (*please explain*)

26. For data with identifiers please describe your method for de-identifying the data to maintain confidentiality. ***Note:*** *The term de-identified data refers to subject data from which all information that could reasonably be used to identify the subject has been removed or replaced. For example, the researcher may use the safe-harbor method to remove specified identifiers (name, address, phone, or any other unique identifier, etc.) from a dataset; the partially de-identified method to remove most, but not all identifiers from the data set (may require a data use agreement); or the generation of variables method to replace study subjects' identifiers, like using a unique code or pseudonym. To be truly de-identified data, the investigator cannot have codes that link to identifiers.*

The data has no identifiers.

27. If you are working with sensitive identifiable data, please explain why identifiers are necessary to carry out your research. Sensitive identifiable data should never be sent as an email attachment. ***NOTE:*** *If you are collecting private, identifiable heath information as part of your research, please see our website* ***www.tc.edu/irb*** *under Forms and Guidelines for the Health Insurance Portability and Accountability Act (HIPAA) document.*

Not applicable.

SECTION V: DATA SECURITY

28. Please respond to the following sections.

Please check the box(s) that best describes how you will transfer your data.	
☐ I will use a Virtual Private Network (VPN) for secure data transfer or other form of encryption *(e.g., Teachers College's secure remote network access*).	☒ Not applicable (*e.g., data will <u>not</u> be accessed remotely or transferred. It will exist only on a locally stored password-protected hard drive*).

If you are working with a data set from another institution or researcher, you must describe how the data will be securely transferred. Please see TC's Data Security Plan for more information. TC's IRB's Data Security Plan can be accessed through Mentor IRB/Documentation.

Please check the box(s) that best describes how you will store your data.	
☒ On a password-protected local or external computer hard drive.	☐ On Teachers College's local password-protected network.
☒ On Teachers College's Google Drive, in a password-protected folder.	☐ In Teachers College's Dropbox (*faculty only*).
☐ Other (*e.g., cloud-based, password-protected storage*) (*please explain*).	

Researchers should select as many options as possible to protect their data. For a guide, please review TC IRB's Data Security Plan.

Please check the box(s) to affirm your data security plans.	
☐ I will encrypt my data (e.g., *conceal data by converting it into a code*).	☒ I will use anti malware protections and automatic software updates.
☒ I will block unauthorized access to my data (*e.g., firewall*).	☒ I will disable file and media sharing if I do not need it.
☒ I will delete old files from cloud-based backups and local hard drives.	☒ I will take care of privacy settings immediately upon setup.

29. Teachers College classifies all data associated with ongoing research studies as confidential, meaning only project staff, academic advisors, collaborators and other individuals at the college on a need-to-know basis may have access to it. Confidential data at a minimum should be stored on a password-protected computer, or in a password-protected file or folder if the computer is shared. Paper and other physical media should be kept under lock and key. All computers accessing data should have anti-virus software installed.

Please check the box below:
☒ Yes, I acknowledge and understand how Teachers College classifies research data.

SECTION VI: INFORMED CONSENT PROCEDURES

Informed consent is a process, not just a form.

30. What are your procedures for obtaining a participant's informed consent to take part in the research?

Not applicable.

Exempt Category 4 – Secondary Data does not include new data collection from participants. Researchers should not be creating new consent forms for this type of research. Including "not applicable" is an acceptable answer.

31. How will you describe your research to potential participants?

Not applicable. The data currently exists.

32. What will you do to ensure participants' understanding of the study and what it involves?

Not applicable.

33. Use this section to provide a request for a full or partial waiver of informed consent, and justify this request. Indicate "*not applicable*," if you are not requesting a waiver. ***Note:*** *You may cite criteria from the following link regarding Federal regulations and guidelines:* **www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html#46.116**

Not applicable.

Note for Researchers: *Templates are available in Mentor/Documentation. Drafts of forms will not be accepted. Please proofread all files.*