

TRIUMPHS Data Collection Manual

Both student and faculty feedback are a crucial part of the evaluation and research components of TRIUMPHS, as well as a critical piece of the development process of each PSP. The following outlines the process and timeline for collecting each type of data.

Please direct general questions or concerns about data collection to Kathy Clark (triumphs.research@gmail.com).

Individual members of the Evaluation with Research Team who should receive each type of information are listed in the table below.

NOTE: Rows of the table highlighted with orange shading apply only to site-testers invited to collect Student Data.

	What	How	When	Why	Additional Notes
Prior to start of course	Initial Contact with TRIUMPHS "Evaluation with Research" Team (hereafter referred to as "WE" and "US")	YOU: Submit a TRIUMPHS Site-tester Application Form (link available from janet.barnett@csupueblo.edu) that provides the following information: <ul style="list-style-type: none"> • Course number and name • Projected course enrollment • Name of PSP(s) to be tested • Information about student audience • Semester starting and ending dates • Final Exam Date(s) 	As soon as possible, but: <ul style="list-style-type: none"> • no later than October 15 for testing in the subsequent spring semester; • no later than June 15 for testing in the subsequent fall semester. 	This information is needed to allow us sufficient time to issue invitations for student and instructor data collection, and to set up online surveys for you and your students.	If you wish to site-test a PSP in a given semester but were not able to provide this information within the time frame requested for some reason, please email janet.barnett@csupueblo.edu .
	IRB Approval <i>Only required for site-testers invited to collect Student Data.</i>	YOU: <ul style="list-style-type: none"> • Contact your IRB chair and provide them with the FSU IRB materials (<i>available on the TRIUMPHS website</i>); • Return your institution's IRB approval letter to Kathy Clark at triumphs.research@gmail.com. 	Must be completed AT LEAST ONE WEEK PRIOR TO THE START OF THE COURSE , so that Informed Consent Forms can be collected from students on the first day of class.	IRB approval from your institution is required in order for TRIUMPHS to use data collected from your students.	In most cases, FSU's IRB materials will suffice to obtain approval from your institution. <i>Should your IRB have policies that require more than this, please contact Kathy Clark immediately (and no later than November 15 for spring or July 15 for fall) concerning any further TRIUMPHS materials required to obtain local approval.</i> Please note: Since you will neither conduct the research nor collect any data yourself – we will! – you are a research participant in our study (not a researcher). It will thus be infinitely easier for you to submit a local IRB request to <i>gain approval for TRIUMPHS personnel to collect student data.</i> ¹

¹ **FOR STUDENT DATA COLLECTION SITE TESTERS ONLY:** If you are advised by your institution's IRB to seek a reliance agreement with FSU's IRB, note that this process requires four steps at FSU that ***can take at least 6 weeks to complete.*** Before beginning this process at your institution, it is essential that you contact Kathy Clark for full details and timeline requirements!!

	What	How	When	Why	Additional Notes
First Week of Course	Student Informed Consent Forms Only required for site-testers invited to collect Student Data.	<p>YOU:</p> <ul style="list-style-type: none"> inform students about the TRIUMPHS research project using a script or a short video that TRIUMPHS will provide to you; have each participating student sign and return an Informed Consent Form (<i>also available on the TRIUMPHS website</i>) to you; scan and email completed forms to triumphs.research@gmail.com; after scanning, provide the original back to the student. 	<ul style="list-style-type: none"> Forms should ideally be collected from students on the first day of class, and no later than the end of the first week. Please return the forms to us as soon as they are collected. Before emailing the scanned copies of student consent forms, please ensure that the students' names and emails are legible. Trying to decipher spelling of names and email addresses will delay the launch of the Initial Survey. 	<p>Informed consent is needed from any student from whom TRIUMPHS collects data. The consent form also explains students' time commitment for participation; namely, approximately 20 minutes each for three to four online surveys. A small number of students may also be selected for a follow-up interview.</p> <p>When an in-depth study of PSP implementation will be conducted at your site, students who agree to participate (and you, as the instructor) will also be video/audio recorded during classroom implementation of PSPs of interest.</p>	Completion of the Informed Consent Form itself will take about ten minutes of class time, including the time needed to explain the TRIUMPHS research project to students.
	Instructor Informed Consent Form	<p>YOU:</p> <ul style="list-style-type: none"> complete the FSU Instructor Informed Consent Form (<i>available on the TRIUMPHS website</i>) yourself; email a scanned copy to triumphs.research@gmail.com; keep the original for your files. 	No later than the end of the first week of class, but can be completed prior to the start of the course.	Same reason as previous item!	
	Student Initial Survey Only required for site-testers invited to collect Student Data.	<p>YOU:</p> <ul style="list-style-type: none"> scan and send completed Consent Forms for participating students, so that we can establish the Initial Survey for your course <p>WE:</p> <ul style="list-style-type: none"> set up all surveys to send to students via Qualtrics. <p>As needed, WE work with YOU to send reminders to students.</p>	<ul style="list-style-type: none"> We need to disseminate the surveys to consenting students ASAP. Please scan and send completed consent forms (we need the student names and emails) as soon as you receive them. Student surveys should be completed within seven days of the start of the course to be used as project data. 	In addition to basic demographic information, this survey collects data related to our research on the influence of student engagement with PSPs on student views of the nature of mathematics as well students' views on learning mathematics and prior experience with primary sources.	
	Instructor Pre-Course Survey	<p>YOU:</p> <ul style="list-style-type: none"> complete an online Instructor Pre-Course Survey. 	<ul style="list-style-type: none"> WE will send you the link at least two days prior to the start of your semester. Survey should be completed no later than the end of the first week of class, but can be completed prior to the start of the course. 	In addition to basic demographic information, this survey collects data related to our research on development of faculty expertise in the use of PSPs.	This survey will take about 20 minutes to complete.

What	How	When	Why	Additional Notes
Student PSP Work Samples Only required for site-testers invited to collect Student Data.	YOU <ul style="list-style-type: none"> select a sample of participating students (all students for classes with ten or fewer students; ten students for larger classes); make a copy of all written PSP work completed by selected students; scan and email collected PSP Work Samples to triumphs.research@gmail.com; please also provide information concerning whether PSP work was completed outside of class, or in class with other students. 	<ul style="list-style-type: none"> Collect work samples while the PSP is being completed in class; Email scanned copies to us within two weeks of completing the PSP. 	Analysis of these work samples will: <ul style="list-style-type: none"> assist PSPs authors with project revisions; provide data on the impact of engagement with PSPs on student learning of mathematics. 	Student PSP work samples involve little or no time commitment from students, as these are part of their required course work. Please ask participating students to include their student code on their submitted work (or write their codes on yourself after student submission). WE will then redact names upon receipt.
Student Post-PSP Survey Only required for site-testers invited to collect Student Data.	YOU <ul style="list-style-type: none"> inform us by email with the date when PSP implementation is completed. WE <ul style="list-style-type: none"> send your participating students the survey link. As needed, WE work with YOU to send reminders to students.	<ul style="list-style-type: none"> Email us as soon as you have a firm implementation dates, and no later than two days prior to the date on which you will collect the last of the PSP work that students will complete. The student surveys will be set to open on the day following your collection of any final student work on the PSP and remain open for ten days after that date. 	This survey collects data on the impact of engagement with PSPs on student learning of mathematics.	If you implement two or more PSPs in the same class, this survey will be completed twice by participating students : once after the first PSP is implemented (exceptions include instances in which the first PSP begins the first day of class), and again after one of the later PSPs is implemented. We will inform you in advance which PSP is selected for the second survey. <i>(There is no need for students to complete this survey more than twice.)</i>
On-site Researcher Visit For select Student Data Collection Sites Only.	WE <ul style="list-style-type: none"> visit your institution during PSP implementation for the purpose of conducting: <ul style="list-style-type: none"> classroom observations; interviews with a sample of participating students; and an instructor interview with you. YOU <ul style="list-style-type: none"> assist us with on-campus logistical arrangements for the interviews. 	<ul style="list-style-type: none"> It is essential for us to have firm dates for these on-site visits, in order to make our travel arrangements. WE will set up the interview schedule prior to arrival, via email to selected participants. Your assistance should only be needed with interview room arrangements. 	In prior years, we have relied on survey and implementation report data, in which students and instructors are asked to recall what occurred in PSP implementation. We now seek to complete more in-depth study of implementation for a select number of classrooms by including the collection of (real-time!) implementation data.	Site visits will typically be conducted by one member of the Evaluation-with-Research working group, but may include a second member to assist with data collection. WE will make all the necessary travel arrangements for these visits. Every effort will be made to keep the collection of classroom implementation data as non-intrusive as possible.
Instructor PSP Implementation Report	YOU <ul style="list-style-type: none"> complete a PSP Implementation Report <i>(available on the TRIUMPHS website)</i>, including a daily log for longer PSPs; e-mail completed report to janet.barnett@csupueblo.edu. 	Report should be returned within two weeks of completing the PSP in class.	Analysis of these reports will: <ul style="list-style-type: none"> assist PSPs authors with project revisions; provide data related to evaluation of the effectiveness of TRIUMPHS development cycle. 	A separate report is requested for each PSP implemented.

	What	How	When	Why	Additional Notes
End of Course	Student Final Survey Only required for site-testers invited to collect Student Data.	WE: <ul style="list-style-type: none"> email the survey link to students. Participating students: <ul style="list-style-type: none"> complete the online Final Survey, using the link we provide. As needed, WE work with YOU to send reminders to students.	<ul style="list-style-type: none"> Link will be emailed at least one week prior to the final exam date. 	This survey collects data related to our research on the influence of student engagement with PSPs on: <ul style="list-style-type: none"> student views of the nature of mathematics. 	Completion of surveys no later than one week after the semester's ending date will be helpful for our data analysis efforts.
	Instructor Post-Course Survey	WE: <ul style="list-style-type: none"> email you the survey link. YOU: <ul style="list-style-type: none"> complete the instructor on-line Post-Course Survey, using the link we provide. 	<ul style="list-style-type: none"> Link will be emailed at least one week prior to the final exam date. 	This survey collects data related to our research <ul style="list-style-type: none"> the development of faculty expertise in the use of PSPs; on the influence of student engagement with PSPs on their learning experience. 	Completion of surveys no later than one week after the semester's ending date will be helpful for our data analysis efforts.