

## 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](mailto: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 <b>TRIUMPHS "Evaluation with Research" Team</b> (hereafter referred to as <b>"WE"</b> and <b>"US"</b> )	<b>YOU:</b> Submit a TRIUMPHS Site-tester Application Form (link available from <a href="mailto:janet.barnett@csupueblo.edu">janet.barnett@csupueblo.edu</a> ) that provides the following information: <ul style="list-style-type: none"> <li>• Course number and name</li> <li>• Projected course enrollment</li> <li>• Name of PSP(s) to be tested</li> <li>• Does course serve pre-service teachers?</li> <li>• Semester starting and ending dates</li> <li>• Final Exam Date(s)</li> </ul>	As soon as possible, but: <ul style="list-style-type: none"> <li>• <b>no later than October 15</b> for testing in the subsequent spring semester;</li> <li>• <b>no later than June 15</b> for testing in the subsequent fall semester.</li> </ul>	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 <a href="mailto:janet.barnett@csupueblo.edu">janet.barnett@csupueblo.edu</a> .
	IRB Approval <b>Only required for site-testers invited to collect Student Data.</b>	<b>YOU:</b> <ul style="list-style-type: none"> <li>• Contact your IRB chair and provide them with the FSU IRB materials (<a href="#">available on the TRIUMPHS website</a>);</li> <li>• Return your institution's IRB approval letter to <a href="mailto:triumphs.research@gmail.com">triumphs.research@gmail.com</a>.</li> </ul>	Must be completed <b>PRIOR TO THE START OF THE COURSE</b> , 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 will suffice to obtain approval from your institution. Should your institution have IRB policies that require more than this, please coordinate with Kathy Clark ( <a href="mailto:triumphs.research@gmail.com">triumphs.research@gmail.com</a> ) concerning any further materials you require from TRIUMPHS to obtain local approval.

	What	How	When	Why	Additional Notes
First Week of Course	Student Informed Consent Forms <b>Only required for site-testers invited to collect Student Data</b>	<b>YOU:</b> <ul style="list-style-type: none"> <li>inform students about the TRIUMPHS research project using a script or a YouTube video that TRIUMPHS will provide to you;</li> <li>have each participating student sign and return an Informed Consent Form (<a href="#">available on the TRIUMPHS website</a>) to you;</li> <li>scan and email completed forms to <a href="mailto:triumphs.research@gmail.com">triumphs.research@gmail.com</a>;</li> <li>after scanning, provide the original back to the student.</li> </ul>	<ul style="list-style-type: none"> <li>Forms should ideally be collected from students on the <b>first day</b> of class, and no later than the <b>end of the first week</b>.</li> <li>Please return the forms to us as soon as they are collected.</li> </ul>	<p>Informed consent is needed from any student from whom TRIUMPHS collects data.</p> <p>The consent form also explains students' time commitment for participation; namely, approximately 20 minutes each for three to four online surveys.</p> <p>A small number of students may also be selected for a follow-up interview.</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	<b>YOU:</b> <ul style="list-style-type: none"> <li>complete the FSU Instructor Informed Consent Form (<a href="#">available on the TRIUMPHS website</a>) yourself;</li> <li>email a scanned copy to <a href="mailto:triumphs.research@gmail.com">triumphs.research@gmail.com</a>;</li> <li>keep the original for your files.</li> </ul>	No later than the <b>end of the first week</b> of class, but can be completed prior to the start of the course.	Same reason as previous item!	
	Student Pre-Course Survey <b>Only required for site-testers invited to collect Student Data.</b>	<b>YOU:</b> <ul style="list-style-type: none"> <li>scan and send completed Consent Forms for <b>participating students</b>, so that we can establish the Pre-Course Survey for your course</li> </ul> <b>WE:</b> <ul style="list-style-type: none"> <li>set up all surveys to send to students via Qualtrics.</li> </ul> <p>As needed, <b>WE</b> work with <b>YOU</b> to send reminders to students.</p>	<ul style="list-style-type: none"> <li>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.</li> <li>Student surveys should be completed <b>within seven days</b> of the start of the course to be used as project data.</li> </ul>	<p>In addition to basic demographic information, this survey collects data related to our research on the influence of student engagement with PSPs on:</p> <ul style="list-style-type: none"> <li>student views of the nature of mathematics;</li> <li>likelihood to complete additional mathematics courses / retention in a mathematics major program</li> </ul>	
	Instructor Pre-Course Survey	<b>YOU:</b> <ul style="list-style-type: none"> <li>complete an online Instructor Pre-Course Survey.</li> </ul>	<ul style="list-style-type: none"> <li><b>WE</b> will send you the link at least two days prior to the start of your semester.</li> <li>Survey should be completed no later than the <b>end of the first week</b> of class, but can be completed prior to the start of the course.</li> </ul>	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
During and Immediately Following Implementation of a PSP	Student PSP Work Samples <b>Only required for site-testers invited to collect Student Data.</b>	<b>YOU</b> <ul style="list-style-type: none"> <li>select a small sample of <b>participating students</b> (all student work for classes with ten or fewer students; 20% of the participating student group up to a maximum of ten students for larger classes);</li> <li>make a copy of all written PSP work completed by selected students;</li> <li>scan and email collected PSP Work Samples to <a href="mailto:triumphs.research@gmail.com">triumphs.research@gmail.com</a>;</li> <li>for each work sample, please also provide information concerning whether student PSP work was completed outside of class, or in class with other students.</li> </ul>	<ul style="list-style-type: none"> <li>Collect work samples while the PSP is being completed in class;</li> <li>Email scanned copies to us <b>within two weeks</b> of completing the PSP.</li> </ul>	Analysis of these work samples will: <ul style="list-style-type: none"> <li>assist PSPs authors with project revisions;</li> <li>provide data on the impact of engagement with PSPs on student learning of mathematics.</li> </ul>	Student PSP work samples involve little or no time commitment from students, as these are part of their required course work.  Please <b>ask participating students</b> to <b>include their student code</b> on their submitted work (or write their codes on their work yourself after submission). <b>WE</b> will then redact names upon receipt.
	Student Post-PSP Survey <b>Only required for site-testers invited to collect Student Data.</b>	<b>YOU</b> <ul style="list-style-type: none"> <li>inform us by email with the date when PSP implementation is completed.</li> </ul> <b>WE</b> <ul style="list-style-type: none"> <li>send your <b>participating students</b> the survey link.</li> </ul> As needed, <b>WE</b> work with <b>YOU</b> to send reminders to students.	<ul style="list-style-type: none"> <li>Email us as soon as you have a firm idea about when PSP implementation will be done, and <b>no later than two days prior</b> to the date on which you will collect the last of any work that students complete on the PSP.</li> <li>The student surveys will be set up to open on the day following your collection of any final student work on the PSP, and remain open <b>for ten days</b> after that date.</li> </ul>	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 should be completed twice by participating students: once after the first PSP is implemented, and again after the last PSP is implemented.  <i>(There is no need for students to complete this survey more than twice.)</i>
	Instructor PSP Implementation Report	<b>YOU</b> <ul style="list-style-type: none"> <li>complete a PSP Implementation Report (<a href="#">available on the TRIUMPHS website</a>), including a daily log for longer PSPs;</li> <li>e-mail completed report to <a href="mailto:janet.barnett@csupueblo.edu">janet.barnett@csupueblo.edu</a>.</li> </ul>	Report should be returned <b>within two weeks</b> of completing the PSP in class.	Analysis of these reports will: <ul style="list-style-type: none"> <li>assist PSPs authors with project revisions;</li> <li>provide data related to evaluation of the effectiveness of TRIUMPHS development cycle.</li> </ul>	A separate report is requested for each PSP implemented.

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