

# Core Professional Development

Project STAIR

Technical Report #16

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## **Core Professional Development**

### **Purpose**

The purpose of this technical report is to describe the professional development (Core PD) for Year 2 (2019-2020) implementation of Project STAIR (Supporting Teaching of Algebra: Individual Readiness).

### **Method**

Core PD was divided into three days highlighting Data-Based Individualization (DBI), assessment, and instructional practices. Each day of Core PD, teachers received handouts, review prompts, interactive activities, and Core PD satisfaction surveys.

On the first day of Core PD, the Project STAIR team introduced teachers to the STAIR study purpose and overview. The Principal Investigators (PIs) and Graduate Research Assistants (GRAs) presented initial teacher assessment surveys including demographic information, teacher practices, and teacher beliefs. The initial teacher assessment surveys took approximately 60 minutes to complete. The PIs and GRAs presented a Project STAIR overview sharing a description of the model demonstration and overarching study goals. Core PD included key components of DBI, DBI assumptions, and the assessments to be used in the project. Teachers engaged in the content using embedded questioning prompts and interactive activities. Materials for this training included a packet of note-taking forms for teachers to utilize when learning about DBI, a handout identifying the key components of DBI, and a handout outlining the steps to fill out initial teacher assessment surveys (see Appendix A).

The second day of Core PD began with a review of DBI and an overview of Project STAIR assessments. The PIs and GRAs presented on DBI components describing progress monitoring, collecting diagnostic data, and decision-making based on student responsiveness.

Physical materials for the training included sample Star Math data graphs, sample Diagnostic Online Math Assessment (DOMA) results, examples of Algebra Readiness Progress Monitoring (ARPM) measures, and a Project STAIR Decision Flowchart. Teachers engaged with these materials to familiarize themselves with the reports and/or items on each assessment. Additional materials for this training included a form for interpreting DOMA diagnostic data and two samples of ARPM data. Presenters demonstrated a case example, inviting the teachers to participate in each step of the DBI process using the Project STAIR Decision Flowchart.

The third day of Core PD began with a review of the prior two days of professional development including DBI, the assessments to be used in the project, and the expectations for teacher and student participation. The PIs and GRAs began with a discussion of student participants utilizing the Screening Decision Making Form. Then, Core PD focused on mathematics content and instructional adaptations. Specifically, components of instructional delivery including explicit instruction, multiple representations, the use of precise mathematical language, and strategies including fluency building, problem-solving heuristics, and increasing motivation. Activities included opportunities for teachers to analyze and reflect on a lesson plan of their own, making and adapting the lesson plan to include either explicit instruction or multiple representations. Interactive Quick Response (QR) codes embedded in the Core PD linked teacher participants to Project STAIR tailored videos. These videos demonstrated expanded descriptions of instructional strategy content. Materials for this training included a packet of note-taking forms for teachers to use when learning about the practices and strategies as well as examples of interventions that the teachers sorted into examples and non-examples in small groups. Following Core PD, coaches supported teachers needing further assistance in DBI, Assessment, Instructional Practices, and decision making.

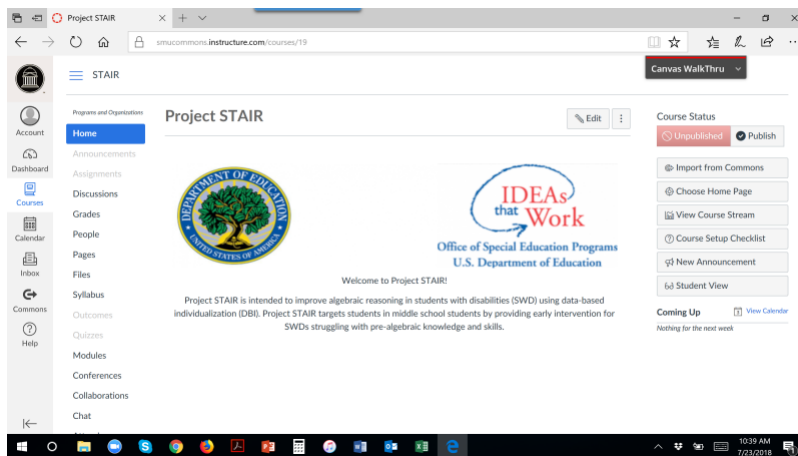
## Appendix A

*\*\*A Panopto Video could be created instead of this handout if Virtual PD*

### STAIR CORE PD Day 1: *Steps for Accessing Initial Teacher Assessments*

#### Step 1: Login in CANVAS

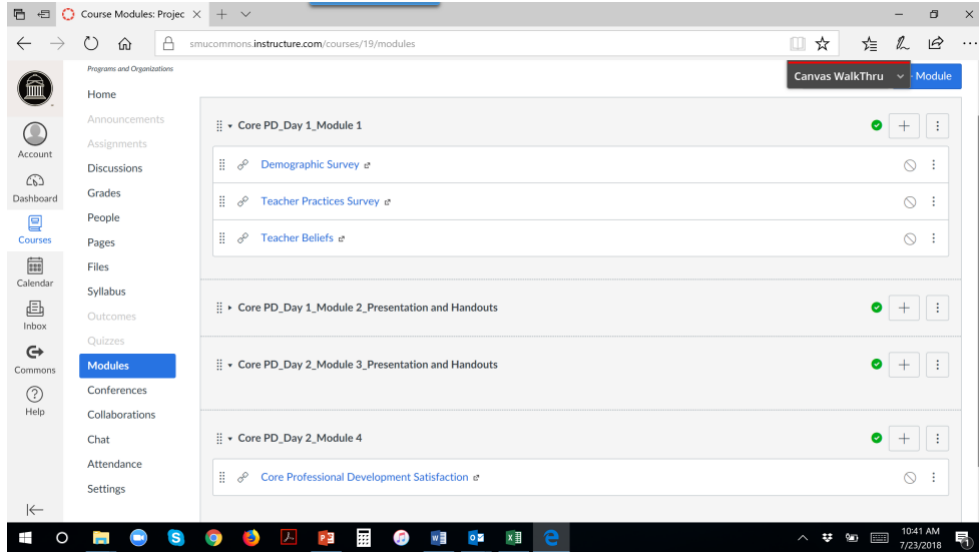
Login Information: *(insert login info here)* and you will be taken to the home page (see below)



Step 2: Click on Modules (left hand side of the home page) and you will see CORE PD\_DAY 1\_MODULE 1

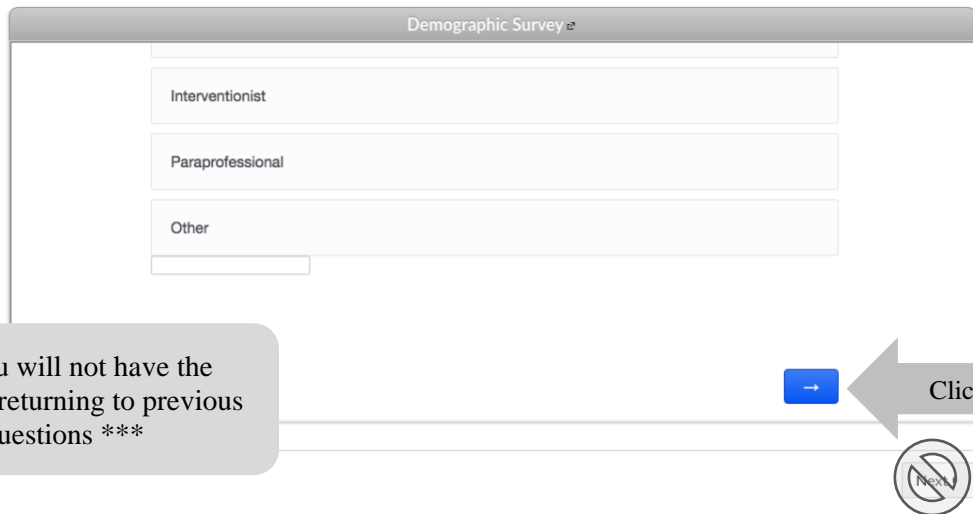
You will see 4 Module links

- 1) Demographic Survey
- 2) Teacher Practices Survey
- 3) Teacher Beliefs
- 4) IKAT Assessment



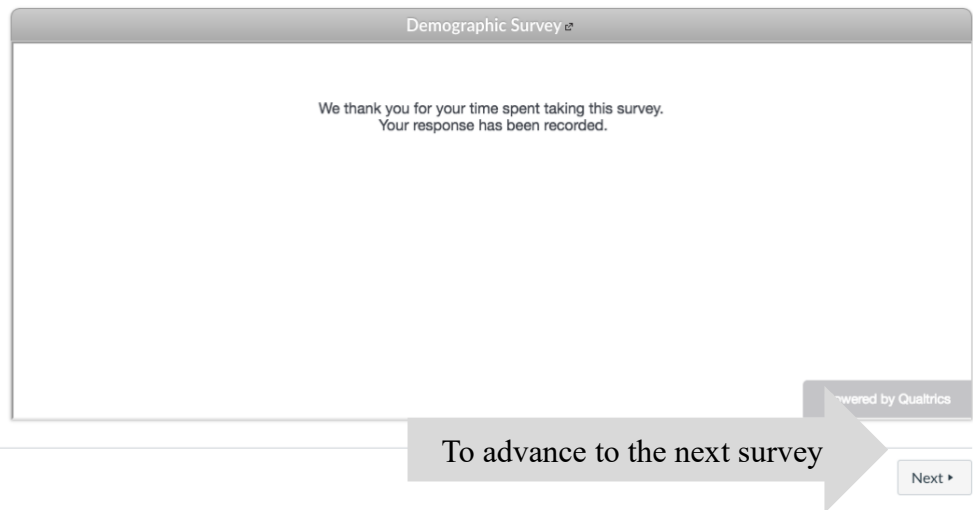
Step 3: You will begin with the demographics survey.  
*See below for specific notes about working your way through the links*

To advance to the next question:

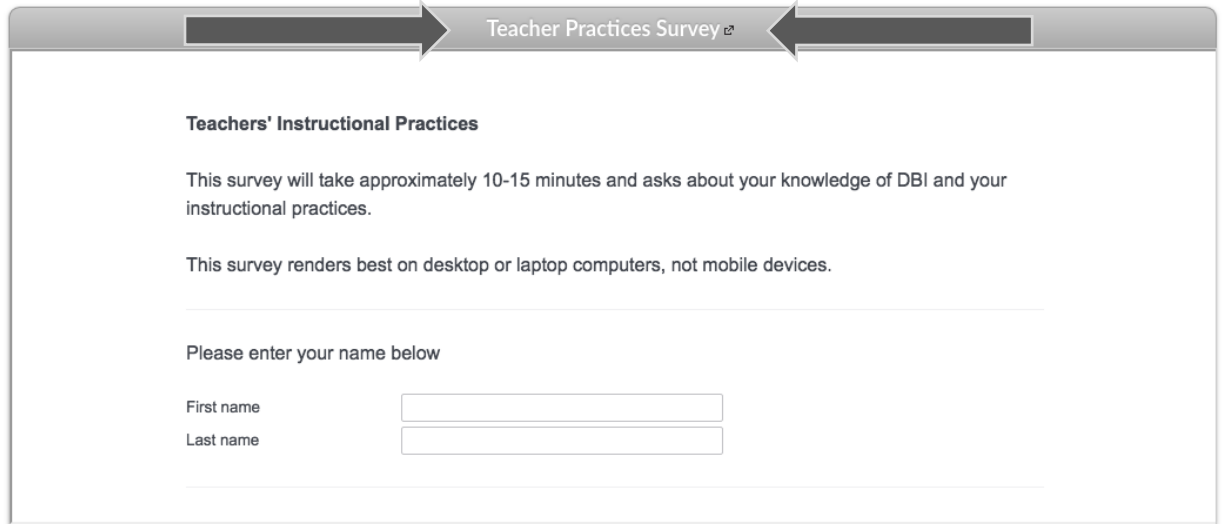


\*\*\* you will not have the option of returning to previous questions \*\*\*

To advance to the next survey:



You will know you are in a new survey when you see the title at the top change:



The screenshot shows a survey interface with a grey header bar containing the title "Teacher Practices Survey" with a small external link icon. Below the header, the main content area has a white background and contains the following text:

**Teachers' Instructional Practices**

This survey will take approximately 10-15 minutes and asks about your knowledge of DBI and your instructional practices.

This survey renders best on desktop or laptop computers, not mobile devices.

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Please enter your name below

First name

Last name

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