

 **Ohio** **STRONG START**
TO FINISH



Data Implementation Forum Report

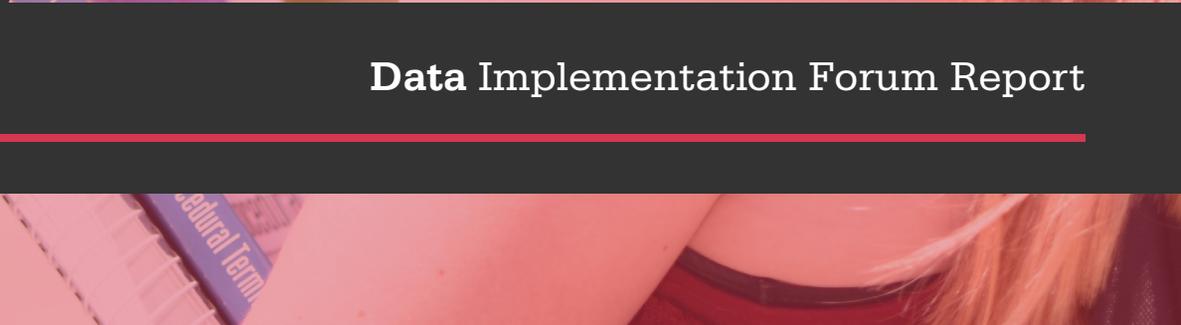




Table of Contents

Introduction.	4
Data Implementation Forum Charge.	6
Data Collection.	7
Challenges to Implementation.	9
Survey.	11
Recommendations.	13
Data Implementation Forum Members.	16

Introduction

The objective of the Ohio Strong Start to Finish (SSTF) initiative is to increase the number of students who pass both gateway mathematics and English courses by the completion of their first year in college. Eighteen community colleges and twelve universities have joined with the Ohio Department of Higher Education, the Inter-University Council, and the Ohio Association of Community Colleges to participate in the Ohio SSTF project.

At the outset of the SSTF project, participating institutions reported that 33% of their students completed the gateway mathematics and English courses by the end of the first academic year following enrollment (this percentage includes both full- and part-time students). The goal of the Ohio SSTF is to increase the number of students passing these gateway courses as part of a guided pathway within (by the completion of) their first academic year. Additionally, the Ohio SSTF project focuses on reducing the equity gap for students of color, students from economically disadvantaged backgrounds, students from rural areas, and students over the age of 25.

Five implementation forums have been created to provide recommendations to the Ohio SSTF leadership: The Data Implementation Forum, Equity and Inclusion Implementation Forum, Placement Implementation Forum, Co-requisite Implementation Forum, and Advising Implementation Forum. The membership in these forums represent the complete spectrum of public institutions of higher education in Ohio.

The goal of the Data Implementation Forum is to support the development and ongoing collection of student and course data across multiple institutions to advance strategies that increase student completion of their credit-bearing gateway mathematics and English in their first twelve months following matriculation. The Data Implementation Forum members represent all sectors of Ohio public higher education institutions – community colleges, university regional campuses, and both open admission and selective universities. These institutions enroll both traditional and non-traditional age students, in-state and out-of-state students, rural and urban students, continuously enrolled and returning students, as well as students who have and students who have not had access to college level courses as part of their

high school experience. The data collection is intended to include information that can be used to identify vulnerable populations for non-completion of math and English gateway courses, and to inform research about institutional interventions being implemented – how interventions are being done, who is passing math and English gateway courses and who is not.

In this report, we review the data that are currently available to support this work, as well as issues identified by members of the Data Implementation Forum and other Higher Education Information data reporters that present challenges to a comprehensive and ongoing statewide data collection. The report concludes with suggestions for addressing those challenges.

Acknowledgments

This report was compiled and written by Julie Carpenter-Hubin, with input from the members of the Data Implementation Forum for Ohio Strong Start to Finish and the Ohio Department of Higher Education.

This work was supported in part by Strong Start to Finish, Education Commission of the States. The views expressed in this publication are those of the author(s) and do not necessarily represent those of Strong Start to Finish, Education Commission of the States, its officers, or employees. Strong Start to Finish is an emerging network of committed postsecondary leaders and philanthropists, working together to change institutional practice and policy across the nation and bring equity to education. Our goal is to significantly increase the number and proportion of low-income students, students of color, and new and returning adults who succeed in college math and English and enter a program of study in their first year of college. For more information visit www.strongstart.org.

Data Implementation Forum Charge

As the goal of Ohio Strong Start to Finish is to increase student completion of their credit-bearing gateway mathematics and English in their first twelve months of matriculation, accurate and consistent collection of data is critical to the success of the initiative. The Data Implementation Forum is charged with developing collaborative solutions on the following items.

The Placement Implementation Forum is charged with developing collaborative solutions on the following items:

- Developing common definitions for data and metrics to ensure accuracy and consistency for reporting purposes;
- Ensuring validity of baseline and future data collection and reporting;
- Identifying gateway course completion in mathematics and English, inclusive of alternative credit approaches such as dual enrollment and Advanced Placement;
- Determining consistent ways to track participation and outcomes in co-requisite remedial approaches both in HEI and on campus; and
- Providing guidance to determine degree pathway participation and ways to track which mathematics and English courses are appropriate for each major.

The Data Implementation Forum will make recommendations for consistent practice for data management for the items mentioned above. Suggestions will include emerging best practices for campuses as well as identifying where changes may need to occur based on gaps in existing approaches and current technology. The Data Implementation Forum may also have recommendations for other data-related items that emerge and are germane to the goal of the initiative.

Data Collection

For ODHE and the Ohio public colleges and universities, the goal of the Strong Start to Finish Grant does not end when the grant project is completed. Thus, a sustainable data collection is necessary to continue tracking the relevant gateway course information at both the institution level and the state level. This ongoing data collection will allow us to better understand how gateway course timing and outcomes relate to an individual's success in the major, and to learn how our institutions can best support student success. This dataset should promote exploration of questions such as the following:

1. What are the counts and percentages of students who complete gateway math and English courses by completion method? Completion methods include in the classroom; on-line; AP credit; placement test; and as a segment of a more comprehensive course.
2. What percentage of new first-year students completes credit-bearing gateway mathematics and/or English courses prior to matriculation? When do they take the post-gateway math or English course required for their major, and how does that timing impact their success? Does this differ for full-time vs part-time students?
3. What percentage of new first-year students completes credit-bearing gateway mathematics and/or English courses within the first 12 months following matriculation? Does this differ for full-time vs. part-time students?
4. What percentage of new first-year students completes credit-bearing gateway mathematics and/or English courses after the first 12 months following matriculation? When do they proceed to the post-gateway math or English course(s) required for their major, and how does that timing impact their success? Does this differ for full-time vs part-time students?
5. Do students who complete a gateway course at one institution and enroll in the related course required for their major at another institution succeed at the same rate as students who take both courses at the same institution?

6. Given that the math gateway course can depend on the major, is it critical that students who change majors completed the gateway course required for their final major in the first year, or does completion of any gateway math course support success in the major math class?
7. How are the percentages of students enrolling in gateway courses in the first year changing over time, both collectively and by institution? How is the rate of success in major English and math classes changing over time, both collectively and by institution?
8. What, if any, is the relationship between the delivery strategy for the gateway courses and success in the related requirements for the major?
9. Is there a discernible success pattern for non-traditional students for English, math, or both?

In addition to the data currently collected through the HEI system, the following describes new variables that would need to be added to the current collections and the additional information they would provide.

- The Course Inventory file contains a record for each course included in a Course Enrollment file for the current term. This would be the appropriate file to add the variables “Gateway English Course” and “Gateway Mathematics Course.” The data definition should explain that any courses that can be counted in any major as gateway English or math classes are categorized as gateway courses in this file, but that not all courses categorized as gateway count as gateway in all majors.

- The Course Enrollment file contains a record for each enrollment in a degree-credit course, and in developmental education courses directly supporting degree-credit instruction, as of the census point. Following the addition of a variable that identifies gateway courses in the Course Inventory File, students who have taken a gateway course, though not necessarily the gateway course required for their major – could be identified, along with the term in which the course was taken and the course grade. Of course, identification of students who have taken gateway courses also allows for identification of students who have not enrolled in gateway courses. Because students who have not enrolled in gateway courses may or may not have received gateway course credit through some other means, this will not, however, clarify in every case whether a student has received gateway course credit.
- The Student Entrance file currently records whether each student is “Underprepared for College Math” and “Underprepared for College English,” with “Not reported or Unknown” as a possible response. Similarly, the following could be added:
 - » Gateway English requirement met prior to matriculation
 - If yes, then method (list possible methods)
 - » Gateway mathematics requirement met prior to matriculation
 - If yes, then method (list possible methods)

Challenges to Implementation

Data reports for SSTF were initially collected in fall 2018. The first step in reporting gateway course completion data is the identification at the institution level of courses deemed as “gateway.” This is complex for a number of reasons:

- While most majors require a non-remedial composition course as the gateway English course, gateway mathematics courses may vary by major. Thus, there is a difference between knowing whether a student has taken any gateway math course vs. the gateway math course required for that student’s particular major. Furthermore, if a student changes from one major to another, that student could be required to complete a new, additional gateway course.
- Courses taken at the reporting institution within a set time frame are easily reported in a consistent manner. However, transfer credit, placement exam credit, and credit for courses that have been renamed and renumbered over time may be more difficult to map as gateway course credit. As with many new data collections, consistent historical data is currently unlikely to be available across all institutions. Courses and course numbering are revised over time, and it would take intensive effort and collaboration with English and mathematics departments to create the historical dataset.
- Transfer and placement exam credit may not be received and entered into institutional systems in time for the credit to appear as achieved in the student’s first year. While enrollment in a course that is taken in person or on-line at an institution is recorded upon enrollment and the grade is recorded at the end of the

enrollment term, recording of credit received through other methods such as transfer, placement, or AP may be delayed as the submission of the credit information is not under the control of the credit-granting institution.

- The goal of increasing completion of gateway courses in the first year may be clear and appropriate for full-time, traditional students, but that goal may need to be adjusted for part-time, returning, or non-traditional-age students.

“The best is the enemy of the good,” a quotation often attributed to Voltaire, seems quite appropriate to apply to this discussion. Imperfect but good data will help ODHE know whether rates of first-year gateway math and English completion appear to be improving on campuses. Higher education researchers are not unaccustomed to working with less-than-perfect datasets, and can develop analyses and theories that take these imperfections into account. The data are very likely to improve over time, especially if institutional researchers and data reporters continue to discuss the data issues and the student outcomes reflected in the research.

Survey

Survey of Ohio Public College and University Data Collection and Reporting Practices

To identify the data collection and reporting policies and practices, including relevant data definitions, at the Ohio public institutions of higher education, the Data Implementation Forum created and distributed a survey to determine the availability or potential availability of English and mathematics gateway course data. In addition, the survey asked respondents to list any research questions related to gateway English and mathematics courses that they thought could be important to explore. An initial version of the survey was distributed to and completed by members of the SSTF Data Implementation Forum. Following the collection of data from this group, minor revisions were made to the survey and it was administered to the Ohio Higher Education Information (HEI) System data providers.

Ten institutions participated in the survey of Data Implementation Forum members, and 23 institutions responded to the slightly revised survey of HEI System data providers. While there was some overlap of institutions between the two surveys, we received responses to many of the same questions from 26 colleges and universities.

All but three institutions responded that they have access to the data they need in order to report whether a student's transfer credit for English satisfied their gateway course requirement, and after a brief email conversation with one of the three that responded negatively, that institution agreed that it does have such access. All but four institutions responded that they have access to the data

they need in order to report whether a student's transfer credit for mathematics satisfied their gateway course requirement.

Twenty-four of the 26 institutions reported that all courses identified by their institution as gateway English or mathematics courses could be reported to the HEI data system if a flag was added to the Course Inventory file.

Five institutions responded that they do not have access to the data they need in order to report whether a student satisfied their gateway English course through a placement test; nor do those five have the data to report whether a student satisfied his or her gateway mathematics course through a placement test.

About one-third of the respondents reported that some undergraduate programs at their institution do not require any English classes in a student's first year, and all but three reported that some undergraduate programs at their institution do not require any math classes in a student's first year. The survey asked whether the respondent's institution has identified undergraduate programs that do not require English – and in a separate question, mathematics – in the first year and could provide a listing, and most respondents replied in the negative

Recommendations

Recommendation 1

ODHE add the following variables to its regular data collections:

- Course Inventory File: Gateway Course –Yes or No. While this will not inform users as to whether the particular course fulfills the gateway requirement for a particular major, it would support research comparing the retention and success of students who take any English or math gateway course in the first year and/or first 30 credit hours with the retention and success of students who do not.
- Student Entrance file currently records whether each student is “Underprepared for College Math” and “Underprepared for College English,” with “Not reported or Unknown” as a possible response. Similarly, the following could be added:
 - » Gateway English requirement met prior to matriculation
 - Yes – select method (AP credit, CCP, transfer)
 - No
 - Not reported or Unknown
 - » Gateway mathematics requirement met prior to matriculation
 - Yes – select method (AP credit, CCP, transfer)
 - No
 - Not reported or Unknown

ODHE should evaluate the percentage of “Not reported or Unknown” responses for the additions to the Student Entrance file initially and going forward. Persistent high percentages of this response may indicate the need for a separate data collection to distinguish these variables as ones for which institutions will not be held accountable for 100% accuracy.

Recommendation 2

Following the addition and first collection of the variables listed in Recommendation 1, ODHE convene a panel of institutional research leaders to discuss whether these additions are sufficient and to evaluate the additional reporting burden.

Recommendation 3

Data analysis begins with the most homogeneous group having the most straight-forward data – the first-time full-time freshman cohorts. If one or more institutions have confidence in the data describing other groups, additional analyses could be undertaken and the results compared with the traditional age student results.

Recommendation 4

ODHE clarify to institutions that good but imperfect data are acceptable, and that they will be held accountable neither for the inability to report data that do not exist nor for reporting data erroneously because correct data were not available (e.g. reporting that a student did not complete a gateway course in the first year because the course was taken at another institution and didn’t transfer until year two). This needs to be clear to senior leadership as well as to institutional researchers and data reporters.

Recommendation 5

ODHE consider how best to conduct research to address additional questions raised by Forum members as part of the initial survey. These questions are as follows:

- Do all students (full-time and part-time) benefit from taking math or English in their first year? Their first semester? Do some students benefit from waiting to take math until the massive transition that accompanies the first semester (or first year) has passed? Part of the argument behind SSTF encouraging students to take their gateway courses their first year is just that: a benefit from taking these courses earlier, while material is fresh (or because it is a prerequisite), rather than later. However, part of it has to do with not putting unnecessary developmental courses (hurdles) up on the path to a student’s gateway course. These aren’t necessarily the same thing: Having

one (or multiple) developmental course(s) that is/are hurdle(s) isn't exactly the same "impact" as just waiting to take math. Perhaps non-calculus bound or non-algebra track students may not need to take math the first year, because some of the material taught in the gateway courses aren't concepts as easily forgotten as algebra and calculus.

- What is the impact of College Credit Plus on success in English and math? Can we compare the year of high school graduation to the gateway completion year to understand whether completion through CCP has a different outcome than completing post-high school graduation?
- How does the outcome in the English or math course required for the major differ for a student who fails the gateway class in the first semester but passes in the second versus a student who passes the gateway class in the first semester? From a student who passes the gateway class after the first year?

ODHE should consult with institutional researchers and with higher education faculty focused on undergraduate student success to support relevant ongoing research.

Data Implementation Forum Members

Megan Bolter, Shawnee State University

Chris Doll, Central Ohio Technical College

Anne Foster, Ohio Association of Community Colleges

Martha Geiger, University of Cincinnati Blue Ash

Bob Haas, Marion Technical College

Amanda Herb, Washington State Community College

Linda Katunich, The Ohio State University

Cody Loew, Cincinnati State Technical and Community College

Julie Quinonez, The University of Toledo

Regina Randall, Columbus State Community College

Kjera Seregi, Kent State University

Chris Shaffer, Shawnee State University

Loralyn Taylor, Ohio University

Craig This, Wright State University

Peter Trumpower, Stark State College

Barbara Wharton, Ohio University

Julia Carpenter-Hubin, Ohio SSTF Data Implementation Forum Facilitator

Jane Dockery, former Ohio SSTF Data Implementation Forum Facilitator

Thomas Sudkamp, Ohio SSTF Director, Ohio Department of Higher Education

Kathleen Cleary, former Ohio SSTF Director, Ohio Department of Higher Education

Jill Dannemiller, SSTF Representative, Ohio Department of Higher Education

Brett Visger, SSTF Representative, Ohio Department of Higher Education

Stephanie Davidson, SSTF Representative, Ohio Department of Higher Education



