



Methods

This document accompanies
CEDER's 2021-2022 Evaluation
Report for the Kessler Scholars
Collaborative.



Evaluation
Aims



Evaluation
Design



Data Collection
& Analysis

Methods: Evaluation Aims

The University of Michigan School of Education Center for Education Design, Evaluation and Research's (CEDER) evaluation work in the 2020-21 and 2021-22 academic years were planned through an extensive consultative process with the Kessler Scholars Collaborative staff and site leads at participating institutions. The evaluation used developmental, formative, and summative approaches at the student level, program level, and Collaborative level.

DEVELOPMENTAL EVALUATION

The CEDER evaluation team documented the development of the Kessler Scholars Program at each of the six partner institutions and the development of the Collaborative as a whole. CEDER continued to refine shared definitions for activities and events, a shared measurement system, actionable and user-friendly data, and appropriate feedback loops for continuous program improvement. These included, but were not limited to, (1) creating effective structures for communicating evaluation goals, activities, and outcomes; (2) eliciting frequent feedback from partner institutions for continuous improvement, data collection and analysis procedures; and (3) building tools for program staff to use data to inform decision making.

FORMATIVE EVALUATION

Formative evaluation work informed the Collaborative on what elements of the program were working and where there were opportunities for growth. There were two goals for the formative evaluation in both years of the evaluation. The first goal was to understand how the core components of the Kessler Scholars Program were being implemented at all six partner institutions. This monitoring work included documenting key programmatic elements, staffing structures, and campus contexts. The second goal was tracking the implementation of the Kessler Scholars Program at each institution, identifying areas that needed improvement, and providing recommendations for how the Kessler Scholars Collaborative could support programs. These outcomes were communicated through data interpretation meetings and written formative and summative reporting.

SUMMATIVE EVALUATION

The final evaluation report documents emergent outcomes on key variables at the end of the 2021-22 academic year, prior to the 2022-23 expansion from six to 16 sites. This final report includes student-level, program-level, and Collaborative-level analyses. The report includes cross-site findings, including emerging best practices, key learnings, and initial recommendations for future programming.

Methods: Evaluation Design

EVALUATION QUESTIONS

The CEDER team designed the following evaluation questions to guide the evaluation during the 2021-22 academic year.

1) What is happening across the Collaborative?

a. What support does the Collaborative offer to participants at each of the partner sites?

b. What support should the Collaborative offer in the future as the program expands?

2) How does the Kessler/McGuire Scholars* Program look at each of the six sites?

a. What types of program activities are emerging across the six partner sites? How well attended are they? What is different across the Collaborative? How does what we are seeing map onto the proposed model? Are there gaps?

3) What are the students experiencing?

a. How do the findings from the student focus group interviews explain the survey findings (e.g., program satisfaction, leadership, self-efficacy, mattering, sense of belonging)?

b. How do student experiences as reported in the surveys differ at the cohort level or the institution level?

c. What challenges do Kessler Scholars face and what changes could be made to the program to address these?

**At St. Francis College, Scholars participate in the McGuire Scholars program and are referred to as McGuire Scholars.*

Methods: Evaluation Design

INDICATORS

CEDER developed sets of indicators that would allow us to measure outcomes at each level of our evaluation framework.

1 Collaborative Indicators



Examples

Site lead perceptions of the Collaborative and its goals.

Site lead opinions about the future role of the Collaborative.

Site lead participation in program working group and other Collaborative meetings and activities.

Successful development of a shared measurement system for program activities.

2 Program Indicators



Examples

Descriptions of program offerings.

Documentation of the staff and administrative structure of the program at each institution.

Staff perceptions of program goals and program development.

Site lead perceptions of the challenges and affordances provided by the program design and their institutional context.

3 Student Indicators



Examples

Student satisfaction with the program.

Student experiences in the program.

Student outcomes across the six program domains: college navigation and academic skill development; wellness and social-emotional development; self-awareness and social responsibility; leadership development; and career and professional development.

Methods: Data Collection & Analysis

Data collection for developmental, formative and summative evaluation included individual interviews with site leads, student surveys, student focus group interviews, activity tracker data, and meeting agendas and notes. In order to identify/develop surveys and interview protocols and to define key terms, CEDER conducted a literature review. CEDER also entered into data use agreements for sharing identifiable student data with five of the six institutions: University of Michigan, Syracuse University, Cornell University, St. Francis University, and Queens College. Johns Hopkins University declined to enter into a data use agreement but did allow CEDER to collect non-identifiable student data.

ACTIVITY DATA TRACKING

The CEDER team designed “tracker” spreadsheets to capture student activity data for each participating institution. To analyze data from the trackers, we first categorized the events that each institution offered for the 2021-22 academic year by audience type: first-year events, all-cohort events, peer mentor and mentee events, advisory board events, and other cohort-specific events.

The CEDER team conducted both an institution-level analysis and a Collaborative-wide analysis. The institution-level analysis included calculating the proportion of each type of event that the institution provided. The Collaborative-wide analysis included calculating the proportion of each type of event provided by all sites by tabulating each event type across all institutions and comparing that to the total number of events offered.

We also analyzed the proportion of events dedicated to each of the six program learning domains. Similar to our analysis of events by audience type, we tabulated the number of learning domains addressed by each event for the 2021-22 academic year. It was possible for events to address more than one learning domain, so the tabulated proportions by site could total more than 100%. We completed the same steps for the Collaborative-wide analysis of learning domains, where we tabulated the number of each domain address across all institutions as compared to the total number of events offered.

Methods: Data Collection & Analysis

FALL 2021 & SPRING 2022 SURVEYS

CEDER distributed surveys to students at each of the six sites via Qualtrics at the beginning of the Fall 2021 semester and Spring 2022 semester. Questions on these surveys were grounded in existing literature and designed to measure outcomes of interest, such as sense of belonging and self-efficacy.

To analyze changes reported over time, we first identified the group of scholars who completed both the fall 2021 and spring 2022 surveys.

| Institution | Fall 2021 Survey Takers | Fall 2021 Completion Rate | Spring 2022 Survey Takers | Spring 2022 Completion Rate | Students Who Took Both Surveys |
|--------------------------|-------------------------|---------------------------|---------------------------|-----------------------------|--------------------------------|
| Cornell | 48 | 80% | 35 | 60% | 30 |
| Johns Hopkins University | 23 | 79% | 14 | 50% | 14 |
| Queens College | 36 | 97% | 22 | 59% | 22 |
| St. Francis College | 65 | 78% | 52 | 63% | 47 |
| Syracuse University | 29 | 94% | 27 | 87% | 27 |
| University of Michigan | 145 | 95% | 118 | 78% | 113 |
| Total | 346 | 87% | 268 | 66% | 253 |

Methods: Data Collection & Analysis

FALL 2021 & SPRING 2022 SURVEYS, CONT.

With this sample of participants, we combined related items into separate scale scores. For example, we used three related items to create a scale measuring sense of belonging to the Kessler Scholars Program. Some sets of items in the survey came from externally validated survey scales. The CEDER team conducted factor analyses on student responses to the fall 2021 and spring 2022 surveys to confirm and refine factors for the Kessler Scholars Program student population. For item sets from validated scales, we used our factor analyses to calculate scale scores.

With the scale scores created, we tested the differences from the fall 2021 survey to the spring 2022 survey for statistical significance. We used multiple methods to test this significance in order to examine the sensitivity of the results to the choice of method. First, we conducted paired t-tests. Because a t-test relies on the underlying data having a normal distribution, we also used a sign test. Results of the sign test differed from results of the t-test in cases when the distribution of scale scores was skewed. We selected the scales that had significant sign tests or significant t-tests for a regression analysis. Finally, we included the scale scores we identified in a regression analysis to account for differences in changes between the fall 2021 and spring 2022 surveys that might arise in association with student characteristics. For example, an increase or decrease in a scaled score could be associated with racial identity, because URM students may have had different experiences than non-URM students between the fall 2021 survey and the spring 2022 survey. A regression framework made it possible for us to examine the average change in reported scores when comparing students with common characteristics.

Methods: Data Collection & Analysis

KESSLER PROGRAM SITE LEAD INTERVIEWS

In October 2021, the CEDER team conducted individual interviews with the Kessler Scholars Program site lead at each of the six institutions in the Collaborative. The staff interviews had three main aims.

- To capture program goals, objectives, and activities across partner institutions
- To understand what challenges and opportunities programs are facing as they are being developed and implemented
- To reveal potential ways for the Collaborative to support program-level efforts

In total, the CEDER team conducted six site lead interviews, each lasting about one hour. The CEDER team conducted and recorded the interviews on Zoom. After the videos were transcribed, the CEDER team coded each transcript using Dedoose. The team used deductive and inductive analyses to identify themes and patterns in the data.

Methods: Data Collection & Analysis

STUDENT FOCUS GROUP INTERVIEWS

In February and March 2022, the CEDER team hosted 12 focus groups for Kessler and McGuire Scholars across the six colleges and universities in the Kessler Scholars Collaborative. The focus groups had six main aims.

Student Level Aims:

1. To understand student experience with the program
2. To explore how students' identities intersect with their experiences
3. To develop our understanding of student outcomes

Program Level Aims:

1. To drive improvements on the institutional level
2. To inform the growth of the collaborative
3. To explore cross-site student engagement opportunities

Methods: Data Collection & Analysis

STUDENT FOCUS GROUP INTERVIEWS, CONT.

Across the six institutions in the Kessler Scholars Collaborative, 46 Scholars participated in the focus groups. The CEDER team hosted a focus group specifically for first-year students at each institution. At five institutions, the CEDER team hosted a focus group for students in their second, third or fourth year of the Kessler Scholars Program. Each focus group lasted about one hour. At all institutions, more women participated than men. The Kessler Scholars Program has a larger proportion of women, so this difference in participation by gender reflected the program's demographics.

The CEDER team worked with graduate students at the University of Michigan enrolled in a qualitative methods class to conduct and record the focus groups on Zoom. After the videos were transcribed, the CEDER team coded each transcript using Dedoose qualitative analysis software. The CEDER team conducted a largely deductive analysis to identify themes and patterns in the data.

| Institution | Total Participants | First-Years | Second-Years + |
|--------------------------|--------------------|-------------|----------------|
| Cornell University | 7 | 2 | 5 |
| Johns Hopkins University | 4 | 2 | 2 |
| Queens College | 6 | 3 | 3 |
| St. Francis College | 7 | 0 | 7 |
| Syracuse University | 6 | 3 | 3 |
| University of Michigan | 16 | 5 | 11 |
| Total | 46 | 15 | 31 |