ESC Evaluation Services Center

Evaluation Plan
by
The University of Cincinnati Evaluation Services Center
for
Community Connectors Proposal

Prepared for

Institute of Youth Development and Excellence

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UNIVERSITY OF Cincinnati

After-School Mentoring Program Evaluation Plan

Evaluation Services Center

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IYDE After-School Mentoring Program
Program Overview

The proposed Institute of Youth Development and Excellence (IYDE) weekly after-school 1-on-1 mentorship site-based program will be conducted in two Cincinnati Public Schools (CPS): Shroder School and Academy for Multilingual Immersion Studies (AMIS) across three years and intends to serve a total of 240 student. The ultimate objectives of this intensive mentoring program are to improve middle and high school students' academic, behavioral, and work readiness outcomes.

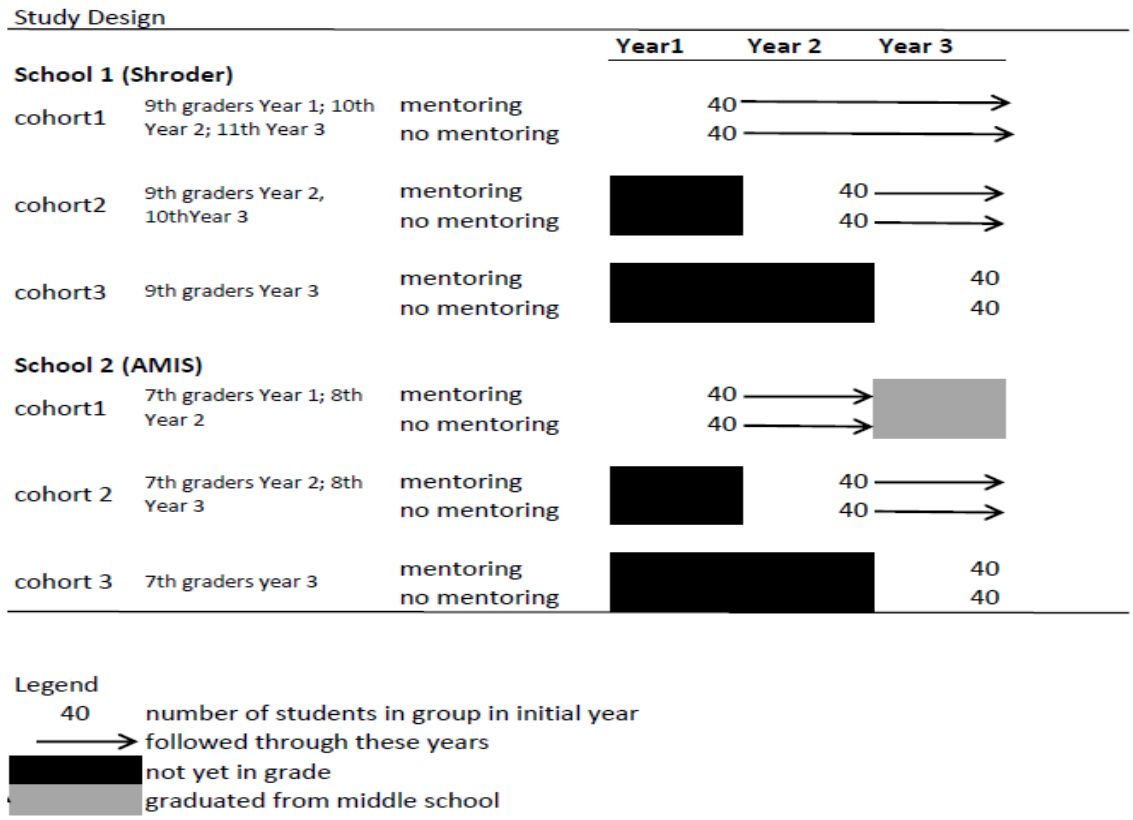
Evaluation Plan

If funded, the University of Cincinnati Evaluation Services Center (UCESC) will serve as the external evaluator of the proposed project. The UCESC is a research and evaluation center that has been in operation since 1996. The Center employs a collaborative model of evaluation and has provided comprehensive evaluation and assessment services to schools and school districts, state departments of education and health, professional development providers, early care and education providers, social service organizations, university programs, and various city, county, state, and community agencies and departments. UCESC offers a full range of services that are tailored to fit the unique evaluation, assessment, and research needs of education and education-related human services organizations. As part of this project's resources, UCESC will host on its server all the online surveys for students and achievement data provided by the Program Administrator at each of the schools. The UCESC will conduct all data analysis and preparation of annual reports.

Design overview. This evaluation will include both process/formative and outcomes/summative components. The evaluation plan will utilize both quantitative and qualitative data. To determine whether the program is on track with positively impacting the lives of the students and to gain insights into needed supports of the program participants, self-reported data from students, mentors, and key program personnel self-reports about their experiences with the program as well as documentation about engagement and activity implementation will be collected and analyzed. For the outcomes/summative component, this evaluation will employ an experimental pre-post multiple cohort treatment-control design including quantitative data from students and qualitative data from a subset of students exposed to the program the longest (3 years in one school and 2 years in the other school), mentors, and key program personal (e.g., program administrators).

The study design depicted below includes three cohorts of students across two schools. Each cohort has one group of students who will receive the mentoring programming (n=40 per cohort per school; N=240 total across three years) and one group of students who will not receive the program (n=40 per cohort per school; N=240 total across three years). Students who assent and provide parental consent will be *randomized* to either receive the program or not. Students receiving mentoring will vary in the number of years of program exposure. With this design, from each school a

maximum of 120 students are expected to receive at least one year of programming, 80 students are expected to receive at least 2 years of programming, and 40 are expected to receive three years of programming (assuming no attrition).



Four <u>evaluation questions</u> motivate this study: two pertain to program process and two to program outcomes. :

For process:

1. How do students and mentors perceive the program based on their reported experience with the program over time?
2. To what extent has the program adhered to its implementation plan (specified by program activities) as reported by key program personnel (e.g. project documentation, interviews).

For outcomes:

3. To what extent do students who engage in an intensive mentoring program perform better than students with similar characteristics who do not engage in the program?
4. To what extent does student performance vary as a function of how many years students are engaged in the intensive programming? Note: "Student performance" is defined in this evaluation in terms of student school record data and acquired skills and behaviors based on the Community Connectors Core Principles.

Process data collection and analyses. Part of UCESC's collaborative effort is to work with program personnel (one at each school) who will collect internal data. To inform the process evaluation, the Program Administrator at each school will document the program plans, process, and implementation and will collect parent end-of-year satisfaction data. These data will be shared with UCESC. Furthermore, UCESC will conduct focus groups with students and mentors as well as interviews with key program personnel including two Program Administrators, one at each school. The mentor and student end-of-year satisfaction online survey will also inform the program process evaluation question. Qualitative data analysis will involve thematic analysis whereby emergent themes are coded. Where appropriate, quantitative process data collected by program administrators will be triangulated with qualitative focus group and interview data. **Indicators of success** specific to process evaluation questions – collected via surveys, program administrator documentation, focus groups, and interviews – include:

- Mentor satisfaction with mentorship training; related key constructs from focus group data;
- Student and mentor evaluation scores for program activities;
- Student and mentor scores of mentor/mentee relationships; related key constructs from focus group data;
- Parent satisfaction score of their child enrolled in the mentorship program;
- Key constructs from program personnel interviews and project documentation indicating adherence to program plans, lessons learned, and adjustments for program improvements.

Outcome data collection and analyses. The two outcomes evaluation questions will be addressed using quantitative survey assessment data collected twice a year from both mentored and non-mentored students. Furthermore, Program Administrators will collect data on mentor training and contact hours on a monthly basis, as well as student school records regarding applicable graduation rates, achievement grades, truancy rates, and discipline data. These data will be provided to UCESC when student post-assessment data are collected at the end of the academic year. **Indicators of success** specific to outcome evaluation questions – collected via surveys, program administrator documentation, school achievement data, focus groups, and interviews – include:

- Scores on the five key Community Connectors Core Principles based on student pre- and post-assessment surveys (goal setting; life skills and pathways to achievement with decision making and critical thinking; building character with risky health behavior prevalence; sense of resiliency; positive values, hope, and identity) and related evolving key constructs based on focus group, interview, and documentation data;
- Differentiation of student performance as a function of student engagement in the program;
- Cumulative program satisfaction results and program reviews from all program stakeholders (students, mentors, parents, program personnel).

Quantitative data will be analyzed for each school separately. Within each school, mean scores on indicators of success will be compared between mentored and

non-mentored students using independent sample t-tests. These analyses will be conducted separately by number of years of program exposure. Multivariate ANOVA will be conducted to assess whether length of programming is related to varying levels of change in indicators of success including posthoc least squares means pairwise tests to isolate dosage effects. Student characteristics that may explain systematic attrition will be used in multivariate analyses to statistically adjust for confounding.

Identifiers. Each mentor and each student will be given unique numeric identifiers (Study IDs) to prevent duplicate counts and to link data across time. Also, each mentor-student pair will have a unique identifier. The Program Administrator will provide UCESC with de-identified achievement data by student using unique numeric identifiers. Pre-assessments (beginning of academic year, September) and post-assessments (end of academic year, May) will be collected among students via an online program (Qualtrics). The Program Administrator will assist students enter their Study IDs. Students will also provide additional information (birth date, zipcode, last four digits of social security number) as further verification of matching pre- and post-assessments in the event that Study IDs are incorrectly entered. Matching pre- and post-assessment data is essential for measuring mentoring program goal progress across time.

Anticipated barriers to successful evaluation. All evaluations are vulnerable to barriers. Here we focus on three major potential barriers and strategies to reduce their impact on the proposed study. First, missing data may have several sources (e.g. imbalanced mentor-mentee matches –untimely termination of mentor commitment, participant attrition, incomplete surveys, incomplete mentor or\and/or program personnel reports). Program administrators will be proactive in *retention efforts* by frequently in checking in with mentors and student mentees about the status of their relationship and match within the first month of the assignment and monthly thereafter. Data on characteristics that may explain systematic differences between retained pairs and incomplete pairs will be collected via surveys and used for *statistical adjustments* (see above). Missing qualitative data will be analyzed within the corresponding changes or adjustments in their related contexts.

Second, self-selection occurs whereby participants of a study systematically differ from nonparticipants – either those who never enter the study (a result of voluntary nature of the consenting process) or those who attrit (systematic reasons for leaving a study early). Self-selection may result in reduced generalizability of findings. The Program Administrator in each school will actively *recruit* all students within the school and encourage all of them to obtain parental permission. Once enrolled in the study, *randomizing* students to treatment and control groups minimizes the likelihood of groups systematically differing on characteristics. The Program Administrator will regularly check in with mentor and mentee pairs to *retain* both. Furthermore, *statistical adjustments* for attrition will be used as necessary to address systematic differences.

Third, confounding occurs when factors external to the program may be responsible to observed changes. This threatens the internal validity of the study (the

confidence with which one can assert with that improved outcomes are attributable to mentoring and not other factors like maturation, history, parenting, good teaching etc.). The *experimental* design used in this evaluation introduces a counterfactual that minimizes confounders as viable explanations for effects. This is the most robust design available to maximize internal validity.