UNIVERSITY OUTREACH COUNCIL

Program Evaluation and Assessment
WP Program Evaluation: Challenges, Opportunities & Ambitions

Carla O’Connor, Director
Felecia Webb, Program Evaluation Specialist
O’Shai Robinson, Data Manager
Wolverine Pathways...

- **a supplementary college preparatory program**
  - 633 students across 133 schools
  - Contact hours per year: @140 – 200 (17.5 to 25 days)
  - Contact hours over course of program:
    - 7th grade admit: 816 hours (102 days over 6 years)
    - 9th grade admit: 666 hours (83+ days over 4 years)

- **cannot compensate for structured educational inequalities**

- **can strategically intervene**
Where Seeking to INTERVENE?

- Academic knowledge/achievement (including SAT performance)
- Academic identity and orientations
- School choice(s) and behaviors
- College preparatory knowledge, choices, and activity
- College application behaviors and content

- College admission
Where Seeking to INTERVENE?

ALSO OF INTEREST…

- pedagogy and instruction
- social networks and supports
- U-M completion
Assessing for Continuous Improvement

- Assessing WHERE and HOW our interventions might be/have been most effective?
  - What is the impact of what we are doing?
  - What (else) should we be doing? Doing instead? Doing differently?
Complications...

- **Effects of interest are many!**

- **Effects on whom varies**
  - Scholars; Parents/Guardians; Educators

- **Effects must also be evaluated “in reverse”**
  - Backward mapping is essential

- **Effects need to be disentangled**
  - Coterminous influences
Target Population

7th and 9th grade students who have demonstrated academic potential residing in 3 school districts in SE Michigan (Ypsilanti, Southfield, and Detroit). Students continue with WP through high school graduation.

Gaps in Services/Needs

Despite its long-term commitment to issues of equity and diversity, the number of underrepresented students at the University of Michigan, Ann Arbor remains relatively low.

Research indicates that existing disparities in educational outcomes can, in part, be attributed to unequal access to summer learning opportunities. Furthermore, collaborative parental engagement in such programming has been shown to positively impact student educational outcomes.

Based on the success of a similar university pipeline program, we expect a significant proportion of students who successfully complete the WP program will apply, be admitted, and matriculate to U-M.

Recruitment

Participants with demonstrated academic and leadership potential and who meet program eligibility criteria will be encouraged to apply. Recruitment strategies include, but are not limited to, online advertising and school and community presentations by WP staff.

Financial/Other Resources

- WP program staff
- Institutional and Community Collaborations

<table>
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<th>Planned Activities</th>
<th>Expected Outcomes</th>
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<td><strong>Curriculum and Pedagogy</strong></td>
<td><strong>Summer Internship and Opportunities</strong></td>
<td><strong>College Preparation</strong></td>
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Curriculum and Pedagogy

- Provide academic advising, college essay feedback, and targeted SAT test preparation
- Provide college preparation workshops promoting strong self-efficacy, positive self-concept, goal setting, and an understanding of the higher education experience.
- Provide parents with information regarding college preparation specific to their child’s grade level. Presentations include information critical to school choice, course selection and the importance of parent advocacy.

3 Of the 2014 Rutgers Future Scholars cohort of 163 seniors, 97 students enrolled at a Rutgers University campus.
**Target Population**
7th and 9th grade students who have demonstrated academic potential residing in 3 school districts in SE Michigan (Ypsilanti, Southfield, and Detroit). Students continue with WP through high school graduation.

**Gaps in Services/Needs**
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Based on the success of a similar university pipeline program, we expect a significant proportion of students who successfully complete the WP program will apply, be admitted, and matriculate to U-M.

**Recruitment**
Participants with demonstrated academic and leadership potential and who meet program eligibility criteria will be encouraged to apply. Recruitment strategies include, but are not limited to, online advertising and school and community presentations by WP staff.

**Financial/Other Resources**
- WP program staff
- Institutional and Community

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**Wolverine Pathways Program Logic Model**

**Individual and System Conditions**

**Major Program Components**

**Planned Activities**
- Provide developmentally appropriate, instruction covering English, mathematics, science, and social studies
- Hire certified classroom teachers to serve as primary instructional staff. Provide professional development and training to instructional staff.
- Sponsor students to attend extant U-M pre-collegiate summer programming (e.g., Earth Camp, ArcStart, D-Rise)
- Collaborate with U-M academic units to offer summer enrichment opportunities designed specifically for WP students (e.g., Engineering Pathways, Pathways to Pharmacology, Film, Television & Media Camp)
- Provide summer internships with local businesses and corporations across various fields, as well as with U-M faculty and research groups.
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**Expected Outcomes**

**Short-term**
- Increased Academic Knowledge and Achievement
- Positive Academic Identity and Attitudes
- Improved Test-taking skills/strategies
- Increased Understanding of Educational Options
- Increased Knowledge and Motivation to attend College
- Improved Pedagogy and Instruction among Teachers

**Intermediate**
- Improved Academic Competencies
- Cultivated Disciplinary Exposure and Interests
- Improved SAT Performance
- Increased College Preparatory Behavior
- Increased Interest in U-M
- Enhanced College Application Profile/Materials
- Expanded Social Networks and Supports

**Long-Term**
- Increased number of students admitted and enrolled at U-M (from target school communities)
- Increased admissibility of program participants to competitive institutions

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#### Recruitment

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#### Financial/Other Resources

- WP program staff
- Institutional and Community Fundraising
- Collaboration with community partners and local businesses
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#### Expected Outcomes

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Available & Pending Data

- Annual surveys of WP scholars and of parent/guardians
- High school transcripts & middle school report cards
- SAT Scores
- End-Session educator assessments of scholar performance and engagement
- End-Session scholar course evaluations
- End-Session site evaluations
- Pre- and post- assessments for math courses
- Math identity assessments
- Post participation feedback on select events
- Self-report of college application, admission, and matriculation information

- NEW Pilot of alumni survey
What can we know...

- Changes in SAT scores
- GPAs consistent with U-M OUA
- Identify growth since entry in program
- Predictive analyses of admissions to U-M
What do we ultimately want to know...

What is our “value added”?

Community
School
Teachers
Family
Scholar
The Center for Education Design, Evaluation, and Research (CEDER)

Victoria Bigelow

Evaluation Coordinator, School of Education
Putting the Logic in Logic Models

Victoria Bigelow, PhD
Overview of Logic Models
“A logic model is a systematic and visual way to present and share your understanding of the relationships among the resources you have to operate your program, the activities you plan, and the changes or results you hope to achieve.”

(W.K. Kellogg Foundation, 2004)
How to Read a Logic Model

Certain resources are needed to operate your program

If you have access to them, then you can use them to accomplish your planned activities

If you accomplish your planned activities, then you will hopefully deliver the amount of product and/or service that you intended

If you accomplish your planned activities to the extent you intended, then your participants will benefit in certain ways

If these benefits to participants are achieved, then certain changes in organizations, communities, or systems might be expected to occur

Resources/Inputs ➔ Activities ➔ Outputs ➔ Outcomes ➔ Impact

Your Planned Work

Your Intended Results
Sample Logic Model
Freshman Year Logic Model

Inputs
1.1 Target Population
Underserved youth in Detroit, 4-year cohort model, starting in 9th grade and continues through 12th grade.

1.2 Current Cohort Capacity
Currently in 5th year of implementation. Cohort consists of 27 9th grade students.

1.3 Statement of Need
Youth need support to maintain GPA, graduate high school, aspire to college, meet behavioral expectations, and an opportunity to build relationships with trusting adults.

1.4 Scholarship
Upon completion and successful maintenance of program standards regarding GPA, graduating high school, conduct in school, and program attendance, participants receive up to $5,000 in college scholarship.

1.5 Funding
Diversified model consisting of portions of sales from clothing company, private donations from individual and corporate funders, and grant funding.

Activities
2.1 Weekly Workshops
Staff will meet with students every Friday and conduct a module regarding the 9th Capstone Project of developing a marketing/advertising campaign. Students are given ongoing opportunities to give public presentations. Students will also participate in a community service project throughout the year.

2.2 Excursions
Staff will organize 3-4 excursions to partner businesses to cover topics in visioning, action planning, and personal finance.

2.3 Mentorship
Students will meet with undergraduate mentors and business professional mentors weekly throughout the school year.

Outputs
3.1 Weekly Workshops
Workshop attendance, assessments, pre/post survey data, focus group data, school performance data, final capstone project, student presentations

3.2 Excursions
Excursion attendance, topic(s), location, presenter(s), pre/post student survey data, focus group data

3.3 Mentorship
Frequency of mentorship, mentor survey, pre/post student survey data, focus group data

Outcomes
4.1 Educational
a. Improve academic achievement (grades, test scores)
b. Improve attitudes and behaviors (understanding importance of grades, attendance, detentions, suspensions)
c. Increase educational aspirations and improve goal setting
e. Increase computer literacy

4.2 Professional Development
a. Increase teamwork collaboration, communication, trust among group members and mentors
b. Develop career interests
c. Develop beginning relationship with mentors

4.3 Leadership through Service
a. Participate in volunteering/giving back to the community
b. Adopt leadership positions in school or participate in extracurricular activities

4.4 Self-Agency
a. Increase risk-taking, confidence, creativity, design thinking and entrepreneurship

4.5 Intercultural Intelligence
a. Become more open minded and better understand the importance of diversity
Considerations of Developing Logic Models

- When starting the development of a logic model, **start with your outcomes/goals and assumptions**

- Logic models should change over time to reflect best thinking and **current evidence**

- Multiple stakeholders should be involved in the development of a logic model and it should be an **iterative process** - this will help with quality and meaning
KEEP IN TOUCH!
CEDER.SOE.UMICH.EDU

Victoria Bigelow
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Office of Enrollment Management

Steve Lonn

Director of Data, Analytics and Research,
Enrollment Management
Measuring the Impact of Educational Outreach Using the National Student Clearinghouse

Steven Lonn
Director of Data, Analytics, and Research
"Impact" Beyond U-M

- Many outreach programs have missions beyond U-M enrollment (e.g., broad college access)

- U-M is highly selective, so multiple factors may limit enrollment

- Sensitivity around admissions & acceptance rates
  - Enrollment a bit more innocuous and is available under most institutions' "directory information" FERPA policy
What "Impact" Are We Talking About?

- College enrollment in the U.S.
  - 2-year vs. 4-year
  - Private vs. Public
  - Institutional types / locations

- Degree attainment
  - Bachelor's
  - Master's
  - Doctoral / Professional
Established in 1993 to originally track enrollment for student loan borrowers and determine deferment eligibility.

Has now grown to be a de-facto national enrollment tracking data database.
  - Over 3,600 institutions – about 95% of all U.S. postsecondary enrollment

Educational reporting, data exchange, verification services
What Data Does NSC Provide?

- College name & location
  - Private / public
  - 2-year / 4-year
- Dates of enrollment
- Enrollment status
- Class level
- Major / program (if avail)
- Degree date(s) & title
What Information Would I Need to Provide to NSC?

Each student's:
- Full legal name
- Date of birth
- Sex
- Cohort identifier
- Search date (all enrollment subsequent to that date)
Okay, I Got Some NSC Data! Now What?

● Variety of quasi-experimental ways to measure impact on college enrollment.
  ○ Control / Treatment groups
  ○ Propensity score matching
  ○ Differences pre / post program creation with target population
  ○ Changes in enrollment patterns over time
  ○ Etc.
Example: HAIL Scholarship Experiment
High-Achieving Students in Michigan in 2014 (Pre-HAIL)

Notes: Source: Michigan administrative data and National Student Clearinghouse data. Sample is 11th grade students in Michigan public schools in 2013 who meet HAIL GPA and ACT criteria. College enrollment measured at first institution attended in fall 2014.
Example: HAIL Scholarship Experiment

First Two Years of HAIL (2016 & 2017)
How Do I Participate in NSC?

- CEO serving as coordinating office to help minimize license costs
- If interested, please contact Dr. Kim Lijana <klijana@umich.edu> and include:
  - Program name & description
  - Approx. annual number of students
  - Anticipated number of requests per year (e.g., once each year, initial enrollment, 4-year, and 6-year cohorts)
  - Available budget to help offset costs
  - Other pertinent details
Thank You!

Steven Lonn, PhD
Director of Data, Analytics, and Research

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Closing + Next Steps
UPCOMING UOC

DATE CHANGE:
TUESDAY
March 10th, 2020

Sharing Your Outreach Story!
SAVE THE DATE

Summer Summit Brown Bag Lunch:
Tips for Hiring for Your Summer Programs

Friday, February 21
12:00 PM - 1:30 PM
THANK YOU!