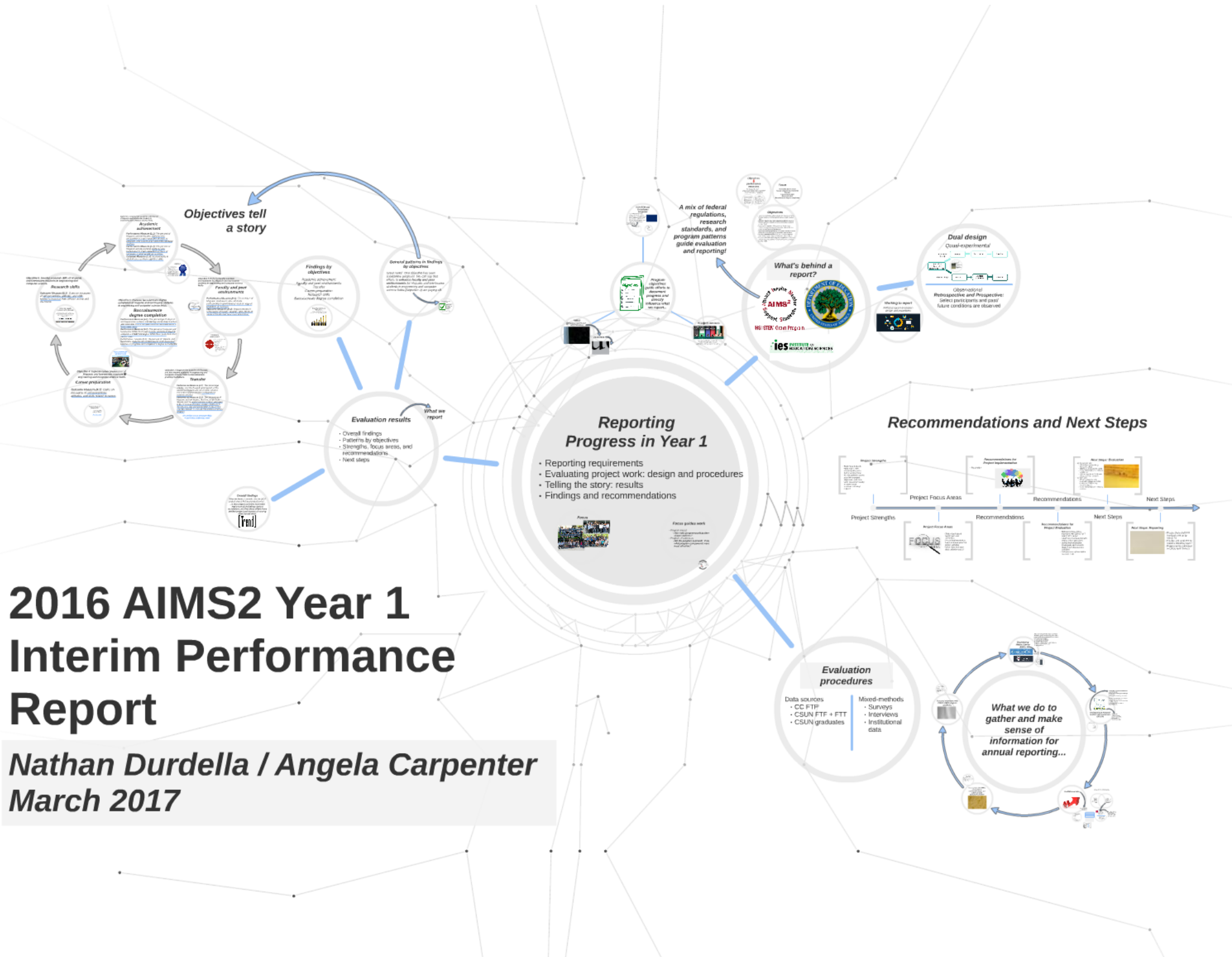


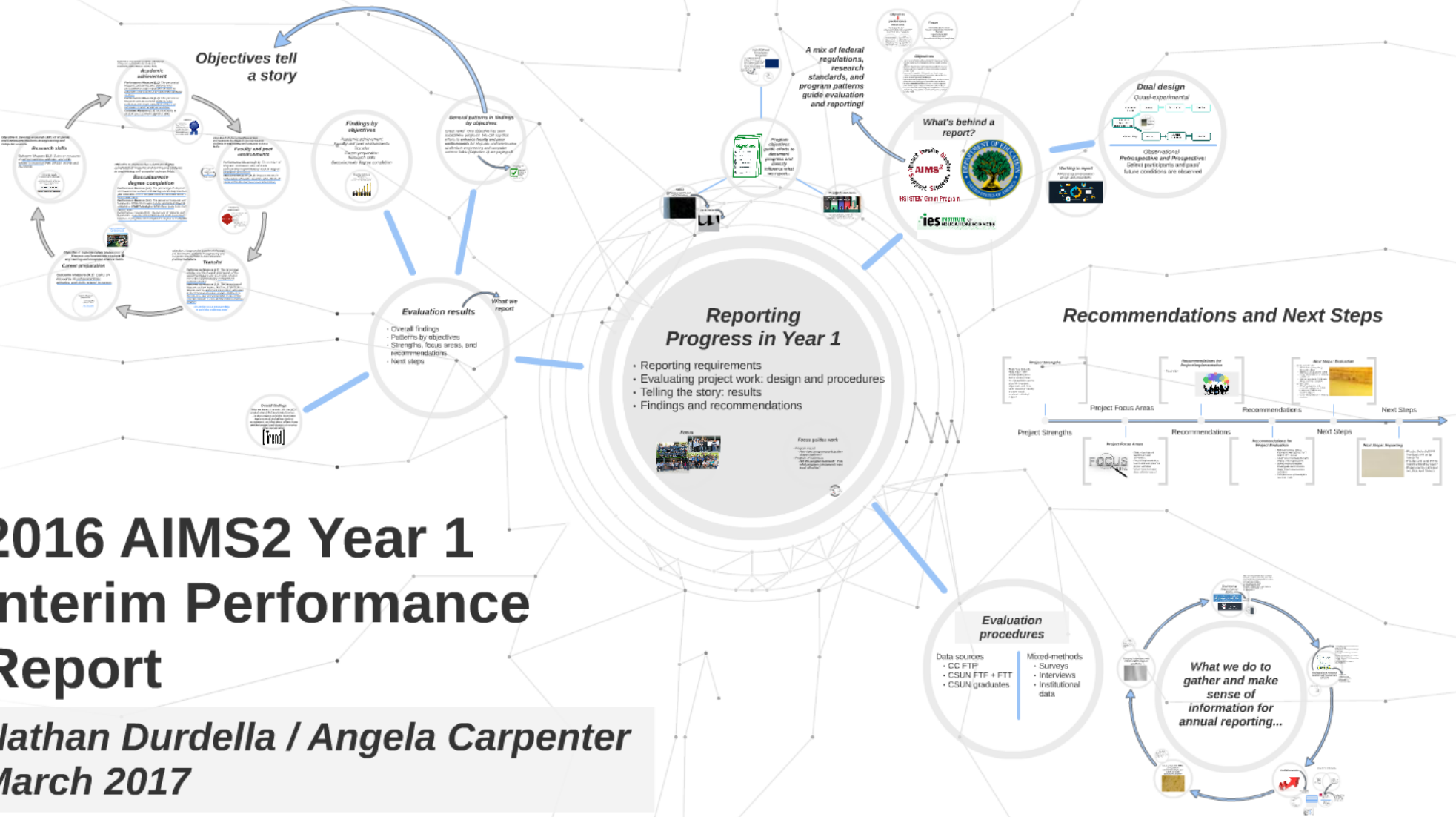
2016 AIMS2 Year 1 Interim Performance Report

Nathan Durdella / Angela Carpenter
 March 2017



2016 AIMS2 Year 1 Interim Performance Report

Nathan Durdella / Angela Carpenter
March 2017



Reporting Progress in Year 1

- Reporting requirements
- Evaluating project work: design and procedures
- Telling the story: results
- Findings and recommendations

Focus



Focus guides work

- Program impact
 - How does program participation shape students?
- Program effectiveness
 - Did the program succeed? If so, what program components were most effective?



Focus



Focus guides work

- *Program impact*
 - ***How does program participation shape students?***
- *Program effectiveness*
 - ***Did the program succeed? If so, what program components were most effective?***



Reporting requirements

Performance reporting

- Performance reporting required after each project performance period
- Interim report required midway through first-year project period



Project performance periods

Year 1: Oct. 1, 2016 - Sept. 30, 2017
Year 2: Oct. 1, 2017 - Sept. 30, 2018
Year 3: Oct. 1, 2018 - Sept. 30, 2019
Year 4: Oct. 1, 2019 - Sept. 30, 2020
Year 5: Oct. 1, 2020 - Sept. 30, 2021

The annual performance report (APR) is due about 3 months after the end of a project period, usually in late Dec./early Jan.

= Year 1 APR due Dec. 2017/Jan. 2018

Year 1 APR Review and Presentation @ the AIMS2 December Meeting!

Specific reporting requirements



Each year, we must report on performance (Section A) and budget (Section B) -- a comprehensive look at what we have done to achieve our project objectives and what resources we have used in the process!

Performance reporting

- Performance reporting required after each project performance period
- Interim report required midway through first-year project period



*Project p
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The annual
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period, usu

Project performance periods



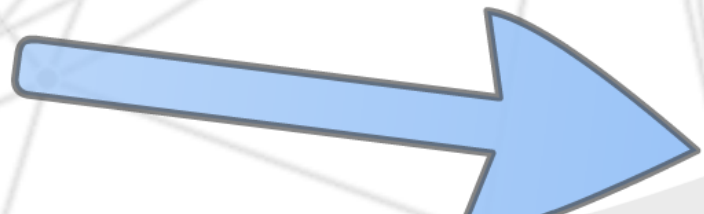
- Year 1: Oct. 1, 2016 - Sept. 30, 2017
- Year 2: Oct. 1, 2017 - Sept. 30, 2018
- Year 3: Oct. 1, 2018 - Sept. 30, 2019
- Year 4: Oct. 1, 2019 - Sept. 30, 2020
- Year 5: Oct. 1, 2020 - Sept. 30, 2021

The annual performance report (APR) is due about 3 months after the end of a project period, usually in late Dec./early Jan.

= Year 1 APR due Dec. 2017/ Jan 2018

DECEMBER		
Sunday	Monday	Tuesday
1	2	3
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31		

The annual performance report (APR) is due about 3 months after the end of a project period, usually in late Dec./early Jan.





= Year 1 APR
due Dec. 2017/
Jan. 2018

DECEMBER 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
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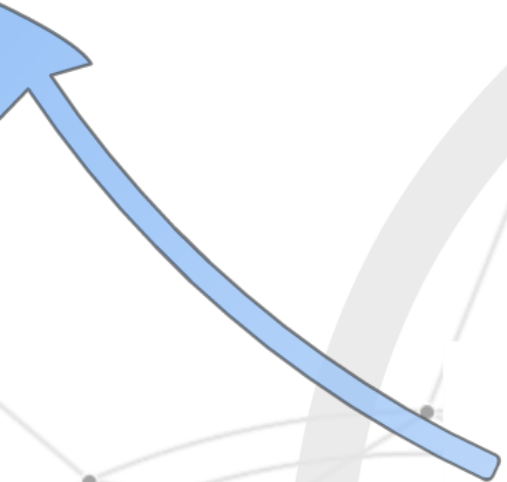
***Year 1 APR Review and Presentation
@ the AIMS2 December Meeting!***

Specific reporting requirements



Each year, we must report on performance (Section A) and budget (Section B) -- *a comprehensive look at what we have done to achieve our project objectives and what resources we have used in the process!*

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What's behind a report?

Attract Inspire Mentor
AIMS²
Support Students

HSI STEM Grant Program



Workin
AIMS2 pro
design a



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A mix of federal regulations, research standards, and program patterns guide evaluation and reporting!

HSI-STEM and Articulation Programs

(1) increase the number of Hispanic/low-income students attaining degrees in STEM fields; and (2) develop model transfer and articulation agreements between two-year and four-year institutions in STEM fields.

Program purposes look familiar, right?



Program objectives guide efforts to document progress and directly influence what we report...

AIMS2

Historical contexts and current practices



2011-2016

Research standards



See the newly released WWC Procedures and Standards Handbook, Version 3.0, for a comprehensive guide to the WWC.

Quasi-experimental design of a matched sample with baseline equivalence and pre-/post-test survey

HSI-STEM and Articulation Programs

(1) increase the number of Hispanic/low-income students attaining degrees in STEM fields; and (2) develop model transfer and articulation agreements between two-year and four-year institutions in STEM fields.



Program purposes look familiar, right?



Standard set of performance measures



Competitive program priorities

- Competitive Preference Priority (2)
USDE HSI-STEM Program =
 - **Moderate evidence of effectiveness**
 - **Test participants prior to and after participation AND compare to a test of non-participants across multiple sites directly related to target population!**



Standard set of performance measures

4. Performance Measures: The Secretary has established the following key performance measures for assessing the effectiveness of the HSI STEM and Articulation Program:

a. The percentage change, over the five-year grant period, of the number of Hispanic and low-income full-time STEM field degree-seeking undergraduate students enrolled.

b. The percentage of Hispanic and low-income first-time, full-time STEM field degree-seeking undergraduate students who were in their first year of postsecondary enrollment in the previous year and are enrolled in the current year who remain in a STEM field degree/credential program.

c. The percentage of Hispanic and low-income first-time, full-time degree-seeking undergraduate students enrolled at four-year HSIs graduating within six years of enrollment with a STEM field degree.

d. The percentage of Hispanic and low-income first-time, full-time degree-seeking undergraduate students enrolled at two-year HSIs graduating within three years of enrollment with a STEM field degree/credential.

e. The percentage of Hispanic and low-income students transferring successfully to a four-year institution from a two-year institution and retained in a STEM field major.

f. The number of Hispanic and low-income students participating in grant-funded student support programs or services.

g. The percent of Hispanic and low-income students who participated in grant-supported services or programs who successfully completed gateway courses.

h. The percent of Hispanic and low-income students who participated in grant-supported services or programs in good academic standing.

i. The percent of Hispanic and low-income STEM field major transfer students on track to complete a STEM field degree within three years from their transfer date.

j. The percent of Hispanic and low-income students who participated in grant-supported services or programs and completed a degree or credential.

5. Continuation Awards: In making a continuation award under 34 CFR 75.253, the Secretary considers, among other things: whether a grantee has made substantial progress in achieving the goals and objectives of the project; whether the grantee has expended funds in a manner that is consistent with its approved application and budget; and, if the Secretary has established performance measurement requirements, the performance targets in the grantee's approved application.

Competitive program priorities

- Competitive Preference Priority (2)
USDE HSI-STEM Program =

- **Moderate evidence of effectiveness**

- *Test participants prior to and after participation AND compare to a test of non-participants across multiple sites directly related to target population!*



Research standards



Quasi-experimental design of a matched sample with baseline equivalence and pre-/post-test survey

AIMS2

Historical contexts and current practices



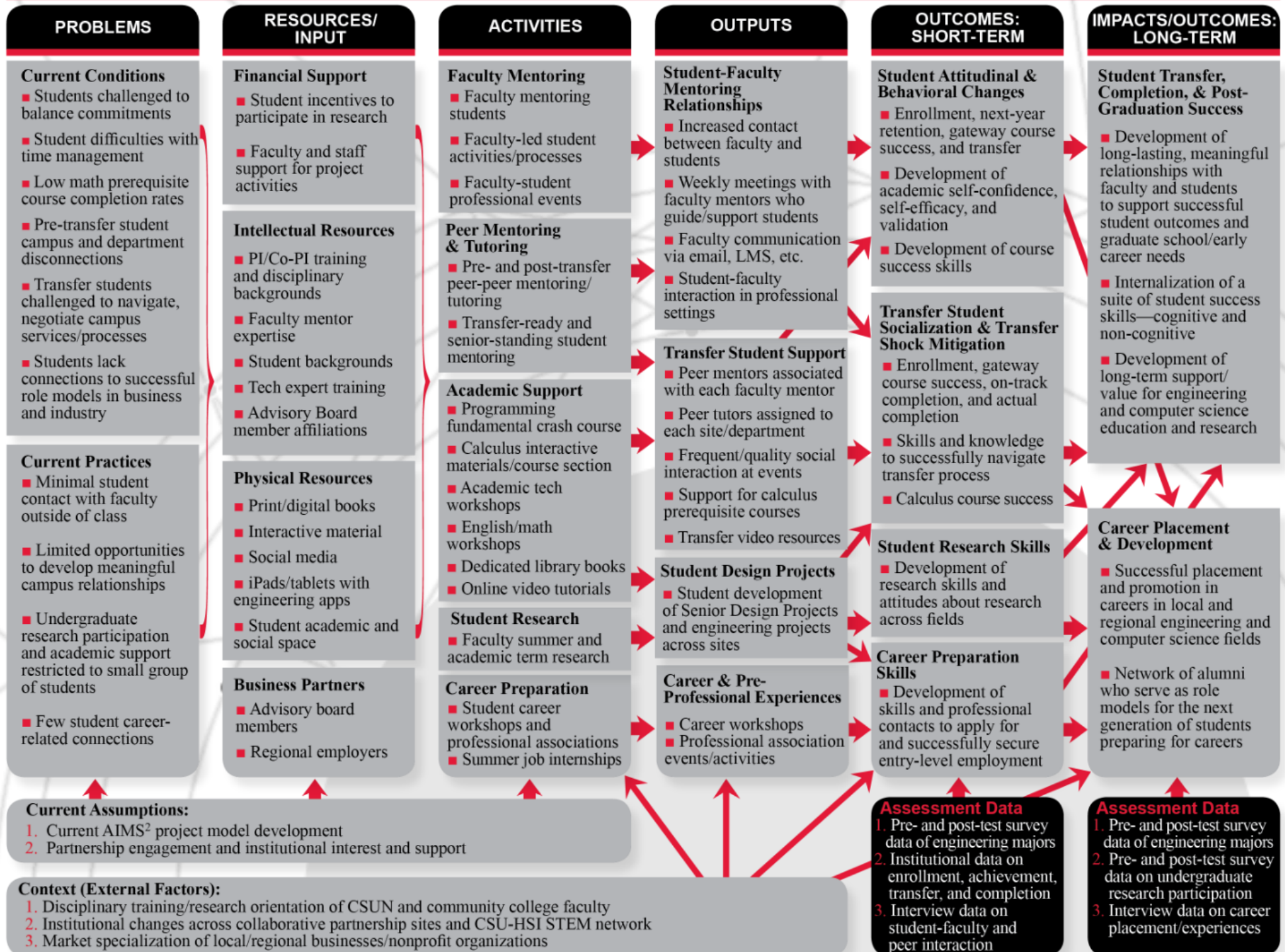
2011-20

LOGIC MODEL FOR BRIDGING THE GAP - E		
PROBLEMS	RESOURCES/ INPUT	ACTIVITIES
<p>Current Conditions</p> <ul style="list-style-type: none"> Students challenged to balance commitments Student difficulties with time management Long multi-precipitate course completion rates Pre-rate for student groups and department disclosures Transfer students challenge to navigate complex campus service processes Students lack connections to successful role models in business and industry 	<p>Financial Support</p> <ul style="list-style-type: none"> Student incentives to participate in research Faculty and staff support for project activities <p>Intellectual Resources</p> <ul style="list-style-type: none"> PLC+PI learning and disciplinary background Faculty mentor expertise Student backgrounds Tech expert training Advisory Board member attention 	<p>Faculty Mentoring</p> <ul style="list-style-type: none"> Faculty mentoring students Faculty-led student activities/processes Faculty-student professional events <p>Peer Mentoring & Tutoring</p> <ul style="list-style-type: none"> Pre- and post-transfer peer mentoring tutoring Transfer-ready and access-ready student mentoring
<p>Current Practices</p> <ul style="list-style-type: none"> Minimal student contact with faculty outside of class Limited opportunities to develop meaningful campus relationships Undergraduate research participation and academic support 	<p>Physical Resources</p> <ul style="list-style-type: none"> Principal digital books Interactive material Social media iPads/tablets with engineering apps Student academic and social spaces 	<p>Academic Support</p> <ul style="list-style-type: none"> Programmatic fundamental track course Calculus interactive materials/course section Academic tech workshops Dedicated library beats Online video tutorials <p>Student Research</p> <ul style="list-style-type: none"> Faculty summer and academic term research



2011-2016

LOGIC MODEL FOR BRIDGING THE GAP: ENHANCING AIMS² FOR STUDENT SUCCESS





Program objectives guide efforts to document progress and directly influence what we report...

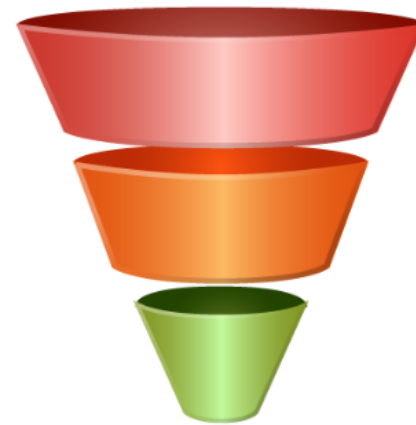
Objectives
The Department of Education has set the following objectives for the Hispanic and low-income students in engineering and computer science fields:
• Improve academic achievement of Hispanic and low-income students in engineering and computer science fields.
• Enhance faculty and peer environments for Hispanic and low-income students in engineering and computer science fields.
• Improve the transfer of Hispanic and low-income students in engineering and computer science fields to baccalaureate-granting institutions.
• Improve career preparation of Hispanic and low-income students in engineering and computer science fields.
• Develop research skills of Hispanic and low-income students in engineering and computer science fields.
• Increase baccalaureate degree completion of Hispanic and low-income students in engineering and computer science fields.



Objectives

- Improve **academic achievement** of Hispanic and low-income students in engineering and computer science fields.
- Enhance **faculty and peer environments** for Hispanic and low-income students in engineering and computer science fields.
- Improve the **transfer** of Hispanic and low-income students in engineering and computer science fields to baccalaureate-granting institutions.
- Improve **career preparation** of Hispanic and low-income students in engineering and computer science fields.
- Develop **research skills** of Hispanic and low-income students in engineering and computer science fields.
- Increase **baccalaureate degree completion** of Hispanic and low-income students in engineering and computer science fields.

Focus



Academic achievement
Faculty and peer environments
Transfer

Career preparation
Research skills
Baccalaureate degree completion

Objectives



performance measures

Developed by USDE +
articulated in 2016 HSI-STEM RFP
= common set of measures

Community colleges

- % Hispanic and low-income students in project who successfully completed gateway courses
- % Hispanic and low-income students in project in good academic standing
- Number of Hispanic and low-income students in project
- % and number of Hispanic and low-income, full-time STEM students enrolled
- % Hispanic and low-income, first-time STEM students in 1st year in previous year = enrolled in 2nd year in STEM program

CSUN

- % Hispanic and low-income students in projects who successfully completed gateway courses
- % Hispanic and low-income students in project in good academic standing
- Number of Hispanic and low-income students in project
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- % of Hispanic and low-income student transfers in STEM
- % of Hispanic and low-income STEM transfer students on track to complete degree after 3 years
- % of Hispanic and low-income students in project who completed a degree

Fac

Bacc



Community colleges

- % Hispanic and low-income students in project who successfully completed gateway courses
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- % Hispanic and low-income, first-time STEM students in 1st year in previous year = enrolled in 2nd year in STEM program

- % Hispanic projects
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- % Hispanic in good
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4. Performance Measures: The Secretary has established the following key performance measures for assessing the effectiveness of the HSI STEM and Articulation Program:

a. The percentage change, over the five-year grant period, of the number of Hispanic and low-income full-time STEM field degree-seeking undergraduate students enrolled.

f. The number of Hispanic and low-income students participating in grant-funded student support services.

g. The percent of Hispanic and low-income students participating in grant-supported services who successfully completed gateway courses.

CSUN

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STEM and Articulation Program:
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j. The percent of Hispanic and low-income students who participated in grant-supported programs and completed a STEM field degree.

5. The Secretary shall award

under the grant program

the following

as follows

the following

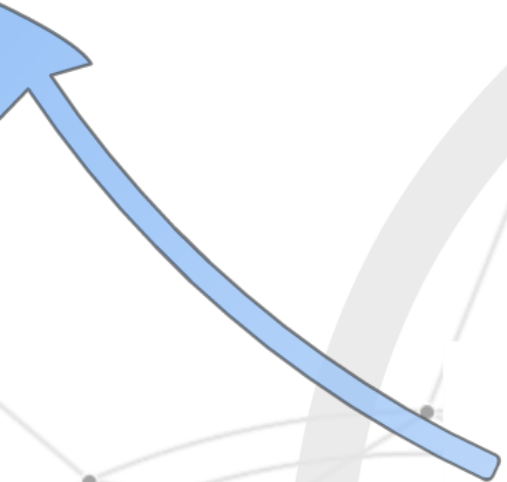
the following

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the following



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What's behind a report?

Attract Inspire Mentor
AIMS²
Support Students

HSI STEM Grant Program



Workin
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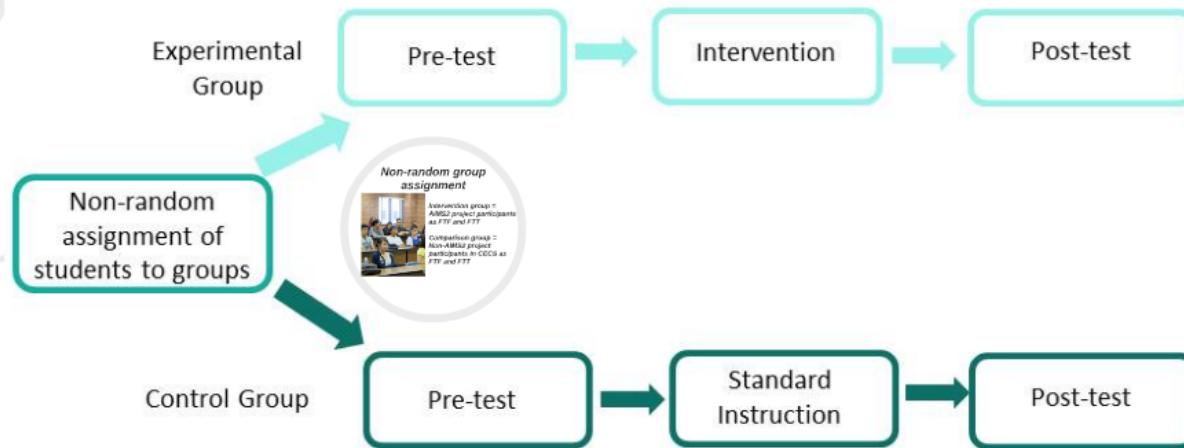
Working to report

*AIMS2 program evaluation
design and procedures*



Dual design

Quasi-experimental



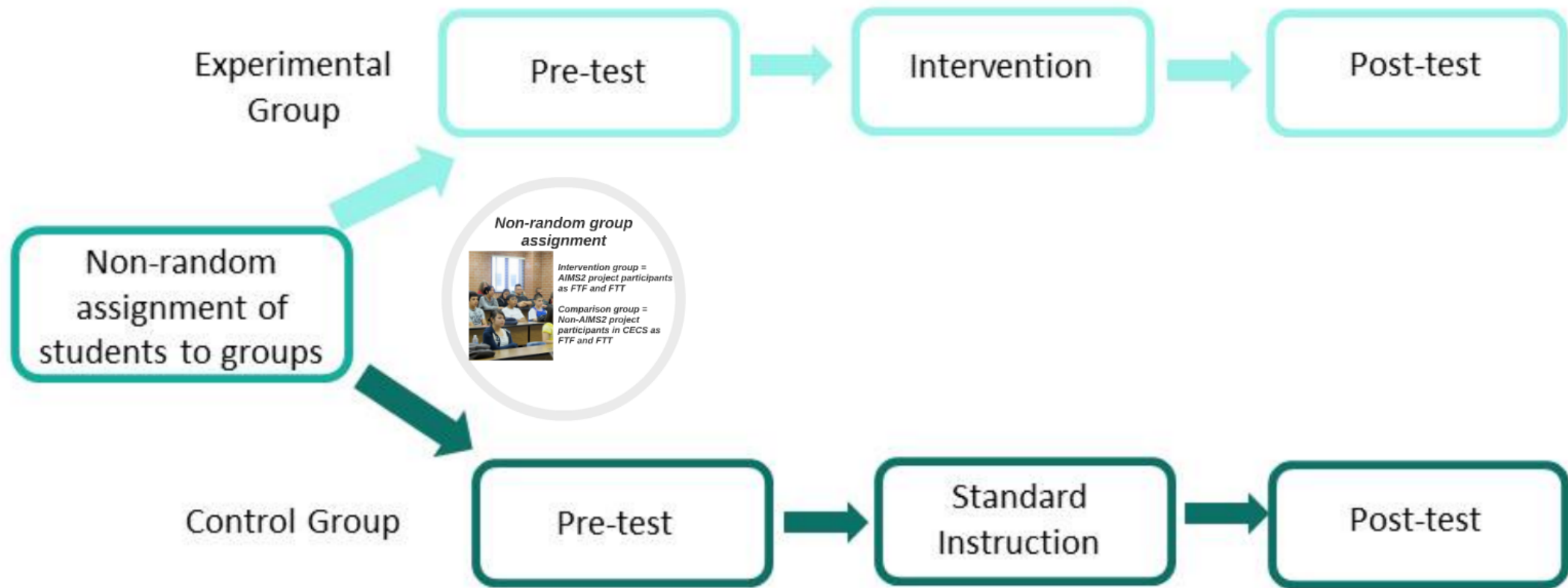
Observational
Retrospective and Prospective:
Select participants and past/
future conditions are observed

to report
am evaluation
l procedures



Dual design

Quasi-experimental



Observational

Non-random group assignment



***Intervention group =
AIMS2 project participants
as FTF and FTT***

***Comparison group =
Non-AIMS2 project
participants in CECS as
FTF and FTT***

```
graph LR; A[Control Group] --> B[Pre-test]; B --> C[Standard Instruction]; C --> D[Post-test]
```

Control Group

Pre-test

Standard
Instruction

Post-test

Observational
Retrospective and Prospective:
Select participants and past/
future conditions are observed

Evaluation procedures

Data sources

- CC FTF
- CSUN FTF + FTT
- CSUN graduates

Mixed-methods

- Surveys
- Interviews
- Institutional data

Planning for personal interviews

Personal interviews
CSUN AIMS
graduates



What we do to gather and make sense of information for annual reporting...

Engineering Majors Survey (EMS)

ENGINEERING MAJORS SURVEY

epicenter

work in their baccalaureate/early careers- with sections as follow:
1. current plan of study;
2. school experiences;
3. beliefs, expectations, and interests;
4. future career goals; and
5. background

CSUN students

EMS work in data

Personal Interviews with CSUN AIMS2 program graduates

Having for Personal Interviews

Undergraduate Research Student Self-Assessment (URSSA)

URSSA asks respondents about their:
1. research skills;
2. conceptual knowledge and linkages in their field;
3. deeper understanding of the work of science;
4. growth in confidence and adoption of the identity of scientists;
5. preparation for a career or graduate school in science;
6. understanding of career or educational path.

Subset of students from CCs + CSUN who participate in faculty research

Focus groups with AIMS2 participants at community colleges and CSUN and math participants at CSUN

Preparing for focus groups

Institutional data

A closer look at institutional data

Match to SISP & URSSA survey data sets

Assess progress on project performance measures

CC + CSUN students

These are the Agencies that we deal from our community college institutional research office for the annual performance report



Engineering Majors Survey (EMS)

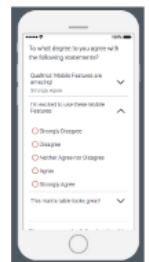





CSUN students

- interests, goals and work in their baccalaureate with sections as follows:
1. current plan of study
 2. school experience
 3. beliefs, expectations
 4. future career goals
 5. background

EMS work to date

- Adapting instrument to meet unique program needs for AIMS2
- Adding program participation section with items related to AIMS2 project activities
- Inputting items in Qualtrics, a web-based survey platform
- Secured IRB approval





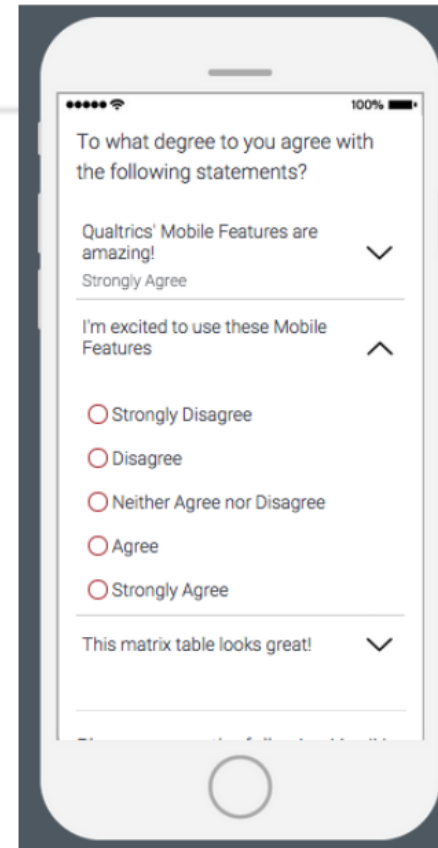
CSUN **students**

EMS asks respondents about behaviors, interests, goals around doing innovative work in their baccalaureate/early careers-- with sections as follow:

- 1. current plan of study;***
- 2. school experiences;***
- 3. beliefs, expectations, and interests;***
- 4. future career goals; and***
- 5. background***

EMS work to date

- Adapting instrument to meet unique program needs for AIMS2
- Adding program participation section with items related to AIMS2 project activities
- Inputting items in Qualtrics, a web-based survey platform
- Secured IRB approval





Undergraduate Research Student Self-Assessment (URSSA)

- in their field;*
- 3. deeper understanding of science;*
- 4. growth in confidence of the identity of scientist;*
- 5. preparation for a career in science;*
- 6. understanding of career educational path.*

Subset of students from CCs + CSUN who participate in faculty research



**Subset of
students from
CCs + CSUN who
participate in
faculty research**



URSSA asks respondents about their:

- 1. research skills;***
- 2. conceptual knowledge and linkages in their field;***
- 3. deeper understanding of the work of science;***
- 4. growth in confidence and adoption of the identity of scientist;***
- 5. preparation for a career or graduate school in science;***
- 6. understanding of career or educational path.***

Updates to URSSA



- Adapting web-based instrument to use in AIMS2 program contexts
- Adding items on AIMS2 program participation
- Material approved for use by IRB

Institutional data




**CC + CSUN
students**

Institutional data

CSUN College of Engineering and Computer Science
2016 ENG STEWARDSHIP Grant Project
Project Objectives and Measures by Institution and Assessment Method

Objective and Measures	Institution
Objective 2: Improve the academic achievement of Hispanic and low-income students in engineering and computer science. Performance Measure (2.1): The percent of Hispanic and low-income students who participated in grant-supported services or programs who successfully completed gateway courses.	CSUN, GCC, Me... The
Performance Measure (2.2): The percent of Hispanic and low-income students who participated in grant-supported services or programs in good academic standing.	CSUN, GCC, Me... GCC, Me...
Outcome Measure (2.3): Improvement in student success (retention/graduation).	CSUN, GCC, Me... From groups led by CSUN and faculty from both CSUN and CSUN and associated centers.



CC + CSUN students

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Project Obj

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Objective 1: Improve the academic ach

Project Management (1) T

A closer look at institutional data

***Match to
EMS &
URSSA
survey data
sets***



***Assess
progress on
project
performance
measures***

	Assessment
inter science fields.	
	Institutional Data
	Program Data
	Institutional Data
	Program Data
	EMS (CSUN)
	Focus Groups
	Program Data
computer science fields.	
	Program Data
	EMS (CSUN)
	Focus Groups
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ds to baccalaureate-	
	Institutional Data
	Institutional Data
ce fields.	
	EMS (CSUN)
	Focus Groups
	Program Data
	URSSA
	Focus Groups
	Program Data
computer science	
	Institutional Data
	Institutional Data
	Institutional Data
	Program Data



- % Hispanic and low-income students in project who successfully completed gateway courses
- % Hispanic and low-income students in project in good academic standing
- Number of Hispanic and low-income students in project
- % and number of Hispanic and low-income, full-time STEM students enrolled
- % Hispanic and low-income, first-time students in 1st year in previous year = enrolled in 2nd year in STEM program



- % Hispanic and low-income students in projects who successfully completed gateway courses
- % Hispanic and low-income students in project in good academic standing
- Number of Hispanic and low-income students in project
- % and number of Hispanic and low-income, full-time STEM students enrolled
- % of Hispanic and low-income student transfers in STEM
- % of Hispanic and low-income STEM transfer students on track to complete degree after 3 years
- % of Hispanic and low-income students in project who completed a degree

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***These are the figures
that we need from your
community college
institutional research
office for the annual
performance report!***

NS

CSUN College of Engineering and Computer Science
2016 HSI-STEM/AIMS³ Grant Project
Project Objectives and Measures by Institution and Assessment Methods

Objectives and Measures	Institutions	Assessment
<i>Objective 1: Improve the academic achievement of Hispanic and low-income students in engineering and computer science fields.</i>		
Performance Measure (1.1): The percent of Hispanic and low-income students who participated in grant-supported services or programs who successfully completed gateway courses.	CSUN, COC, GCC, Moorpark, Pierce	Institutional Data Program Data
Performance Measure (1.2): The percent of Hispanic and low-income students who participated in grant-supported services or programs in good academic standing.	CSUN, COC, GCC, Moorpark, Pierce	Institutional Data Program Data
Outcome Measure (1.3): Improvements in student success (non-cognitive) skills.	CSUN, COC, GCC, Moorpark, Pierce: <i>Focus groups led by CSUN evaluation team with coordination by CSUN CECS and community colleges.</i>	EMS (CSUN) Focus Groups Program Data
<i>Objective 2: Enhance faculty and peer environments for Hispanic and low-income students in engineering and computer science fields.</i>		
Performance Measure (2.1): The number of Hispanic and low-income students participating in grant-funded student support programs or services.	CSUN, COC, GCC, Moorpark, Pierce	Program Data
Outcome Measure (2.2): Improvements in self-reports of quality, quantity, and effects of student-faculty and peer-peer interaction.	CSUN, COC, GCC, Moorpark, Pierce: <i>Focus groups led by CSUN evaluation team with coordination by CSUN CECS and community colleges.</i>	EMS (CSUN) Focus Groups Program Data
<i>Objective 3: Improve the transfer of Hispanic and low-income students in engineering and computer science fields to baccalaureate-granting institutions.</i>		
Performance Measure (3.1): The percentage change, over the five-year grant period, of the number of Hispanic and low-income, full-time STEM field degree-seeking undergraduate students enrolled.	CSUN, COC, GCC, Moorpark, Pierce	Institutional Data
Performance Measure (3.2): The percentage of Hispanic and low-income, first-time STEM field degree-seeking undergraduate students who were in their first year of postsecondary enrollment in the previous year and are enrolled in the current year who remain in a STEM field degree/credential program.	COC, GCC, Moorpark, Pierce	Institutional Data
<i>Objective 4: Improve career preparation of Hispanic and low-income students in engineering and computer science fields.</i>		
Outcome Measure (4.1): Gains on measures of self-perceptions, attitudes, and skills related to career.	CSUN, COC, GCC, Moorpark, Pierce: <i>Focus groups led by CSUN evaluation team with coordination by CSUN CECS and community colleges.</i>	EMS (CSUN) Focus Groups Program Data
<i>Objective 5: Develop research skills of Hispanic and low-income students in engineering and computer science.</i>		
Outcome Measure (5.1): Gains on measures of self-perceptions, attitudes, and skills related to research from URSSA survey and interviews.	CSUN, COC, GCC, Moorpark, Pierce: <i>Focus groups led by CSUN evaluation team with coordination by CSUN CECS and community colleges. Web-based URSSA led by CSUN evaluation team for selected student participants in CSUN faculty research.</i>	URSSA Focus Groups Program Data
<i>Objective 6: Increase baccalaureate degree completion of Hispanic and low-income students in engineering and computer science fields.</i>		
Performance Measure (6.1): The percentage of Hispanic and low-income students transferring successfully to a four-year institution from a two-year institution and retained in a STEM field major.	CSUN	Institutional Data
Performance Measure (6.2): The percent of Hispanic and low-income STEM field major transfer students on track to complete a STEM field degree within three years from their transfer date.	CSUN	Institutional Data
Performance Measure (6.3): The percent of Hispanic and low-income students who participated in grant-supported services or programs and completed a degree or credential.	CSUN	Institutional Data Program Data

Note: Bolded items denote objectives that community colleges produce for reporting purposes.

Performance measures for community colleges

- % Hispanic and low-income students in **project** who successfully completed gateway courses (1.1)
- % Hispanic and low-income students in **project** in good academic standing (1.2)
- Number of Hispanic and low-income students in **project** (2.1)
- % and number of Hispanic and low-income, full-time STEM students enrolled (3.1)
- % Hispanic and low-income, first-time STEM students in 1st year in previous year = enrolled in 2nd year in STEM program (3.2)

Project data + institutional data
= only students participating in project at the college

Institutional data
= all Hispanic and low-income students enrolled at the college

Gateway courses = defined by your institution!

Institutional data production

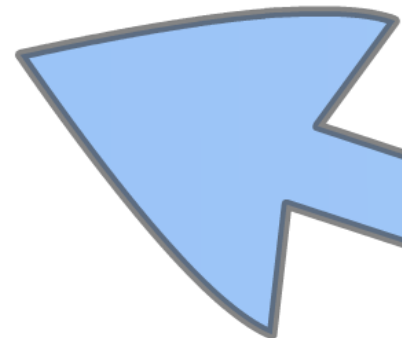
- Consulted CSUN's IR office and discussed performance measures
- Shared IRB materials and project objectives with CC project leads



***We're available to support data
requests to IR offices on your
campus!***



***Focus groups with AIMS2
participants at
community colleges and
CSUN and math
participants at CSUN***



Preparing for focus groups

- Developing math and AIMS2 focus group protocols
- IRB approved protocol, recruitment material, and consent form
- Currently working with project leads @ Moorpark College and with CSUN's Math 150A/L group to conduct pilot focus groups



***Personal interviews with
CSUN AIMS2 program
graduates***



Planning for personal interviews

- Updated interview protocol from Spring 2016 pilot study
- Developing an empirical literature review to guide data collection
- IRB approved: interview protocol, recruitment material, and consent form
- ***Starting participant recruitment for interviews!***



Evaluation results

- Overall findings
- Patterns by objectives
- Strengths, focus areas, and



***What we
report***

Evaluation results

- Overall findings
- Patterns by objectives
- Strengths, focus areas, and recommendations
- Next steps

***What we
report***

Overall findings

*What we know six months into the 2016 project award, first-year project period...
...is that project activities have been implemented, including student recruitment, and that these efforts have yielded project participants at varying rates across sites.*

[Trend]

Findings by objectives

*Academic achievement
Faculty and peer environments
Transfer
Career preparation
Research skills
Baccalaureate degree completion*

Exploring patterns by objectives...

...means considering performance measures associated with objectives...



Exploring patterns by objectives...

...means considering performance measures associated with objectives...



General patterns in findings by objectives

*Great news! One objective has seen substantive progress! We can say that efforts to **enhance faculty and peer environments** for Hispanic and low-income students in engineering and computer science fields (Objective 2) are paying off.*

**Project participants
increase!**



Specifically, the number of Hispanic and low-income students participating in grant-funded student support programs or services has increased!

Performance Measure (2.1)



Project participants increase!



***Specifically, the number
of Hispanic and low-
income students
participating in grant-
funded student
support programs or
services has
increased!***

Performance Measure (2.1)



***Objectives tell
a story***

ay

Objectives tell a story

Objective 1: Improve the academic achievement of Hispanic and low-income students in engineering and computer science fields.

Academic achievement

Performance Measure (1.1): The percent of Hispanic and low-income students who participated in grant-supported services or programs who successfully completed gateway courses.
Performance Measure (1.2): The percent of Hispanic and low-income students who participated in grant-supported services or programs in good academic standing.
Outcome Measure (1.3): Improvements in student success (non-cognitive) skills.

Patterns

No performance measure data reported by the IAG, but lots of activities related to academic achievement have been implemented!



Objective 2: Enhance faculty and peer environments for Hispanic and low-income students in engineering and computer science fields.

Faculty and peer environments

Performance Measure (2.1): The number of Hispanic and low-income students participating in grant-funded student support programs or services.
Outcome Measure (2.2): Improvements in self-reports of quality, quantity, and effects of student-faculty and peer-peer interaction.



Increase in participants!

Current student participant headcount by site:
 - COC = 33
 - CMC = 26
 - CAC = 24
 - CSD = 120
 - CASH = 16 participants reported to date.
 Note: all activities of 12 districts in degree, 2014

PARTICIPANTS

Objective 6: Increase baccalaureate degree completion of Hispanic and low-income students in engineering and computer science fields.

Baccalaureate degree completion

Performance Measure (6.1): The percentage of Hispanic and low-income students transferring successfully to a four-year institution from a two-year institution and retained in a STEM field major.
Performance Measure (6.2): The percent of Hispanic and low-income STEM field major transfer students on track to complete a STEM field degree within three years from their transfer date.
Performance Measure (6.3): The percent of Hispanic and low-income students who participated in grant-supported services or programs and completed a degree or credential.

Program completion data to be reported to date after end of 2014-15!



Objective 3: Improve the transfer of Hispanic and low-income students in engineering and computer science fields to baccalaureate-granting institutions.

Transfer

Performance Measure (3.1): The percentage change, over the five-year grant period, of the number of Hispanic and low-income, full-time STEM field degree-seeking undergraduate students enrolled.
Performance Measure (3.2): The percentage of Hispanic and low-income, first-time STEM field degree-seeking undergraduate students who were in their first year of postsecondary enrollment in the previous year and are enrolled in the current year who remain in a STEM field degree/credential program.

No performance measure data = activities underway now!

Objective 5: Develop research skills of Hispanic and low-income students in engineering and computer science.

Research skills

Outcome Measure (5.1): Gains on measures of self-perceptions, attitudes, and skills related to research from URSSA survey and interviews.

Plans for faculty research with students

Data to be collected that address on research skills/attitudes to research with CS&M faculty members (submitted for November 2017)

SEDCASO! INTERNS! IPS

Interact through the CS&M Facebook page

Objective 4: Improve career preparation of Hispanic and low-income students in engineering and computer science fields.

Career preparation

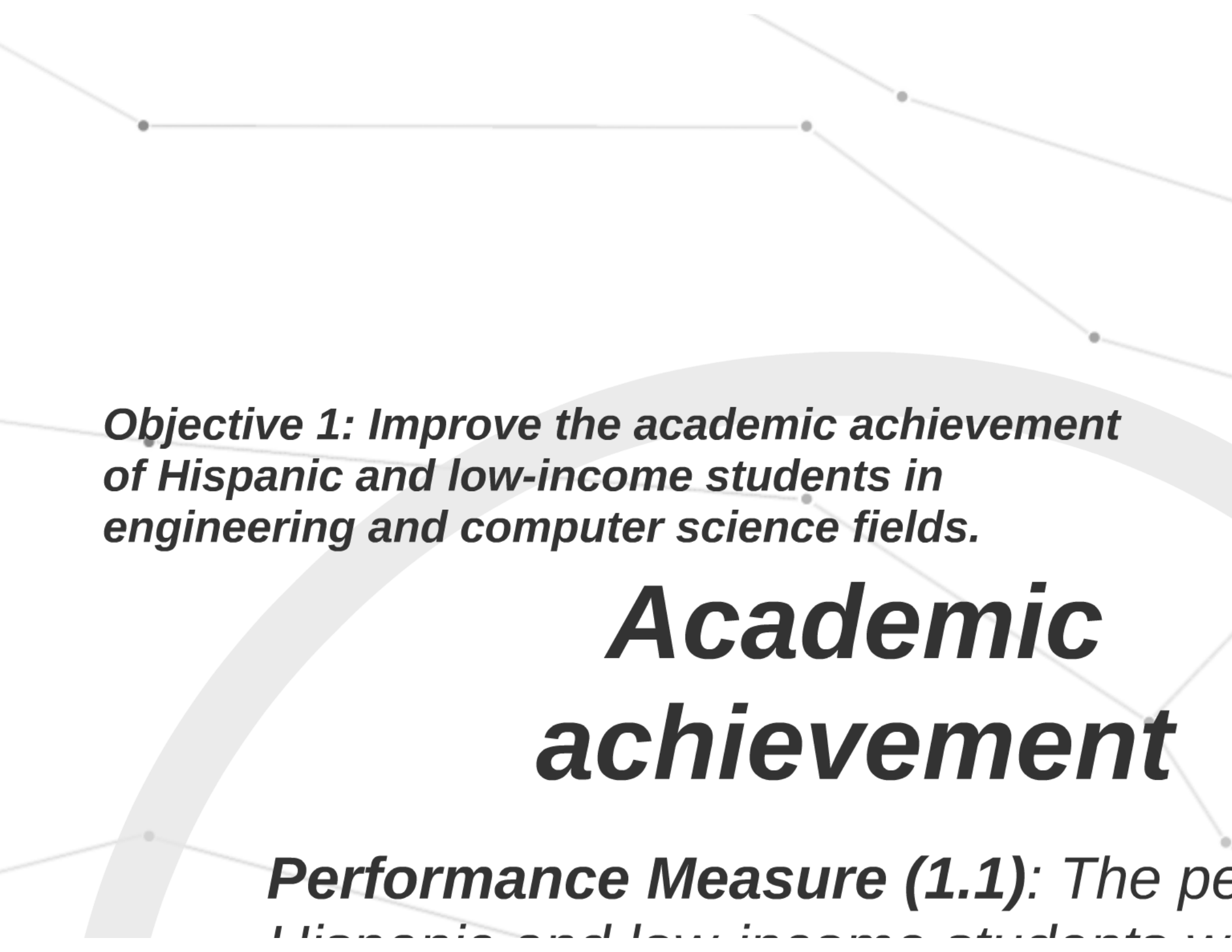
Outcome Measure (4.1): Gains on measures of self-perceptions, attitudes, and skills related to career.

Patterns in career preparation

A lot of activities going on here!

No data yet!





Objective 1: Improve the academic achievement of Hispanic and low-income students in engineering and computer science fields.

Academic achievement

Performance Measure (1.1): The percentage of Hispanic and low-income students who

Objective 1: Improve the academic achievement of Hispanic and low-income students in engineering and computer science fields.

Academic achievement

Performance Measure (1.1): *The percent of Hispanic and low-income students who participated in grant-supported services or programs who successfully completed gateway courses.*

Performance Measure (1.2): *The percent of Hispanic and low-income students who participated in grant-supported services or programs in good academic standing.*

Outcome Measure (1.3): *Improvements in student success (non-cognitive) skills.*

Patterns

No performance measure data reported in the IPR, but lots of activities related to academic achievement have




Skills.

Patterns

No performance measure data reported in the IPR, but lots of activities related to academic achievement have been implemented!





Objective 2: Enhance faculty and peer environments for Hispanic and low-income students in engineering and computer science fields.

Faculty and peer environments

Performance Measure (2.1): The number of Hispanic and low-income students

Objective 2: Enhance faculty and peer environments for Hispanic and low-income students in engineering and computer science fields.

Faculty and peer environments

Performance Measure (2.1): The number of Hispanic and low-income students participating in grant-funded student support programs or services.

Outcome Measure (2.2): Improvements in self-reports of quality, quantity, and effects of student-faculty and peer-peer interaction.

Performance measure =
from U.S. Department of
Education
vs.
Outcome measure =
developed locally by
program
Function to measure
progress on objectives!

**Increase in
participation!**

Performance measure =
*from U.S. Department of
Education*

vs.

Outcome measure =
*developed locally by
program*

**Function to measure
progress on objectives!**

Increase in participants!

PARTICIPANTS

- Current student participant headcount by site:
 - COC = 23
 - GCC = 10
 - MC = 24
 - PC = 230
 - CSUN = No participants reported to date, recruitment/interviews of 11 students underway
- now

Objective 3: Improve the transfer of Hispanic and low-income students in engineering and computer science fields to baccalaureate-granting institutions.

Transfer

Performance Measure (3.1): The percentage change, over the five-year grant period, of the number of Hispanic and low-income, full-time STEM field degree-seeking undergraduate

Objective 3: Improve the transfer of Hispanic and low-income students in engineering and computer science fields to baccalaureate-granting institutions.

Transfer

Performance Measure (3.1): The percentage change, over the five-year grant period, of the number of Hispanic and low-income, full-time STEM field degree-seeking undergraduate students enrolled.

Performance Measure (3.2): The percentage of Hispanic and low-income, first-time STEM field degree-seeking undergraduate students who were in their first year of postsecondary enrollment in the previous year and are enrolled in the current year who remain in a STEM field degree/credential program.

**No performance measure data
= activities underway now!**

*Program completion data
to be reported in APR
after end of 2016-17!*



***Objective 4: Improve career preparation of
Hispanic and low-income students in
engineering and computer science fields.***

Career preparation

***Outcome Measure (4.1): Gains on
measures of self-perceptions,
attitudes and skills related to career***

Objective 4: Improve career preparation of Hispanic and low-income students in engineering and computer science fields.

Career preparation

Outcome Measure (4.1): Gains on measures of self-perceptions, attitudes, and skills related to career.

Patterns in career preparation

A lot of activities going on here!



**CAREER
PREPARATION**

No data yet!

Patterns in career preparation

A lot of activities going on here!



**CAREER
PREPARATION**

No data yet!

Objective 5: Develop research skills of Hispanic and low-income students in engineering and computer science.

Research skills

Outcome Measure (5.1): Gains on measures of self-perceptions, attitudes, and skills related to research from URSSA survey and interviews.

Objective 5: Develop research skills of Hispanic and low-income students in engineering and computer science.

Research skills

Outcome Measure (5.1): Gains on measures of self-perceptions, attitudes, and skills related to research from URSSA survey and interviews.

Plans for faculty research with students

Data to be collected this summer on students who participate in research with CSUN faculty mentors planned for Summer 2017!

RESEARCH INTERNSHIPS

Research Projects with CSUN Faculty Mentors

Plans for faculty research with students

*Data to be collected this summer on
students who participate in research with
CSUN faculty mentors planned for
Summer 2017!*

RESEARCH INTERNSHIPS

Research Projects with CSUN Faculty Mentors

Objective 6: Increase baccalaureate degree completion of Hispanic and low-income students in engineering and computer science fields.

Baccalaureate degree completion

Performance Measure (6.1): The percentage of Hispanic and low-income students transferring successfully to a four-year institution from a two-year institution and retained in a STEM field major.

Objective 6: Increase baccalaureate degree completion of Hispanic and low-income students in engineering and computer science fields.

Baccalaureate degree completion

Performance Measure (6.1): *The percentage of Hispanic and low-income students transferring successfully to a four-year institution from a two-year institution and retained in a STEM field major.*

Performance Measure (6.2): *The percent of Hispanic and low-income STEM field major transfer students on track to complete a STEM field degree within three years from their transfer date.*

Performance Measure (6.3): *The percent of Hispanic and low-income students who participated in grant-supported services or programs and completed a degree or credential.*

*Program completion data
to be reported in APR
after end of 2016-17!*

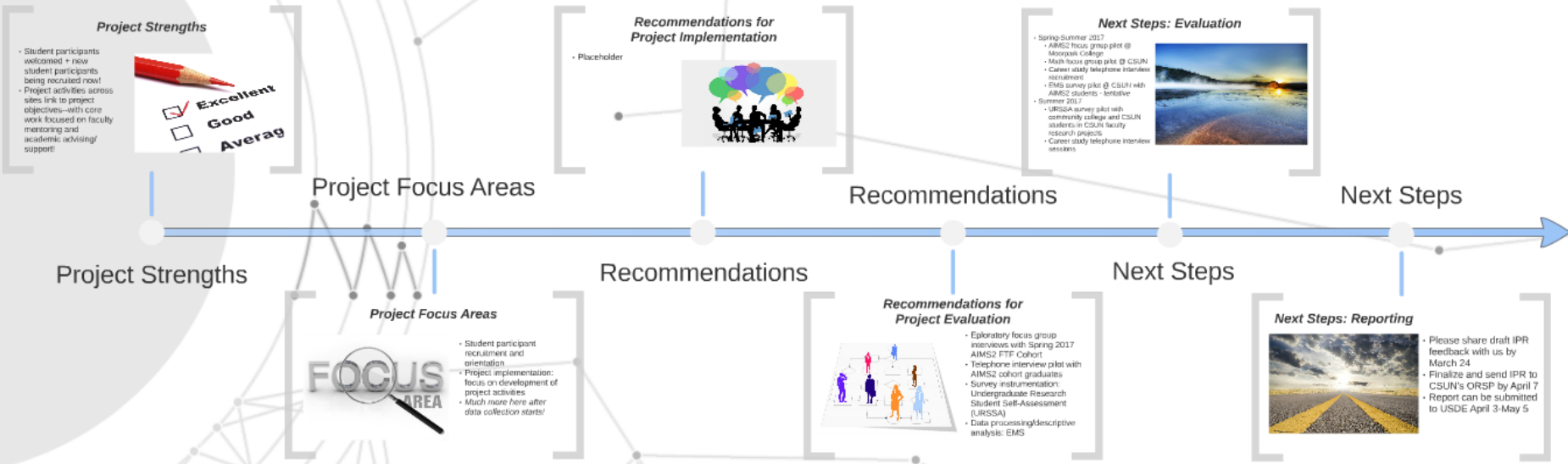


***Program completion data
to be reported in APR
after end of 2016-17!***



career preparation of

Recommendations and Next Steps



Engineering Majors Survey (EMS)

ORSP asks respondents about behaviors, interests, goals, and social identity. These items are used to identify students who need additional support and resources.

1. current status or change
2. school experience
3. beliefs, experiences, and interests
4. future career goals, and
5. background

ORSP students

ORSP

Project Strengths

- Student participants welcomed + new student participants being recruited now!
- Project activities across sites link to project objectives--with core work focused on faculty mentoring and academic advising/support!



Project Focus Areas



- Student participant recruitment and orientation
- Project implementation: focus on development of project activities
- *Much more here after data collection starts!*

Next Steps: Evaluation

- Spring-Summer 2017
 - AIMS2 focus group pilot @ Moorpark College
 - Math focus group pilot @ CSUN
 - Career study telephone interview recruitment
 - EMS survey pilot @ CSUN with AIMS2 students - *tentative*
- Summer 2017
 - URSSA survey pilot with community college and CSUN students in CSUN faculty research projects
 - Career study telephone interview sessions



Next Steps: Reporting



- Please share draft IPR feedback with us by March 24
- Finalize and send IPR to CSUN's ORSP by April 7
- Report can be submitted to USDE April 3-May 5

2016 AIMS2 Year 1 Interim Performance Report

Nathan Durdella / Angela Carpenter
March 2017

