



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Building a Community of Scholars: Results of the Annual Survey of The Ohio LSAMP Alliance

LSMCE Conference

October 24, 2015



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# The Ohio LSAMP Alliance

- Funded in September 2013
- 11 Ohio Institutions
  - 7 four-year institutions
    - 2 HBCUs
  - 4 community colleges
- Lead Institution: The Ohio State University
- Goal of Alliance: double number of URM students who complete bachelor's degrees in STEM



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# The Ohio LSAMP Alliance

- Central State University
- University of Cincinnati
- Cincinnati State  
Technical and  
Community College
- Cleveland State  
University
- Columbus State  
Community College
- Cuyahoga Community  
College
- Miami University
- The Ohio State  
University
- Sinclair Community  
College
- Wilberforce University
- Wright State University



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# The Ohio LSAMP Alliance

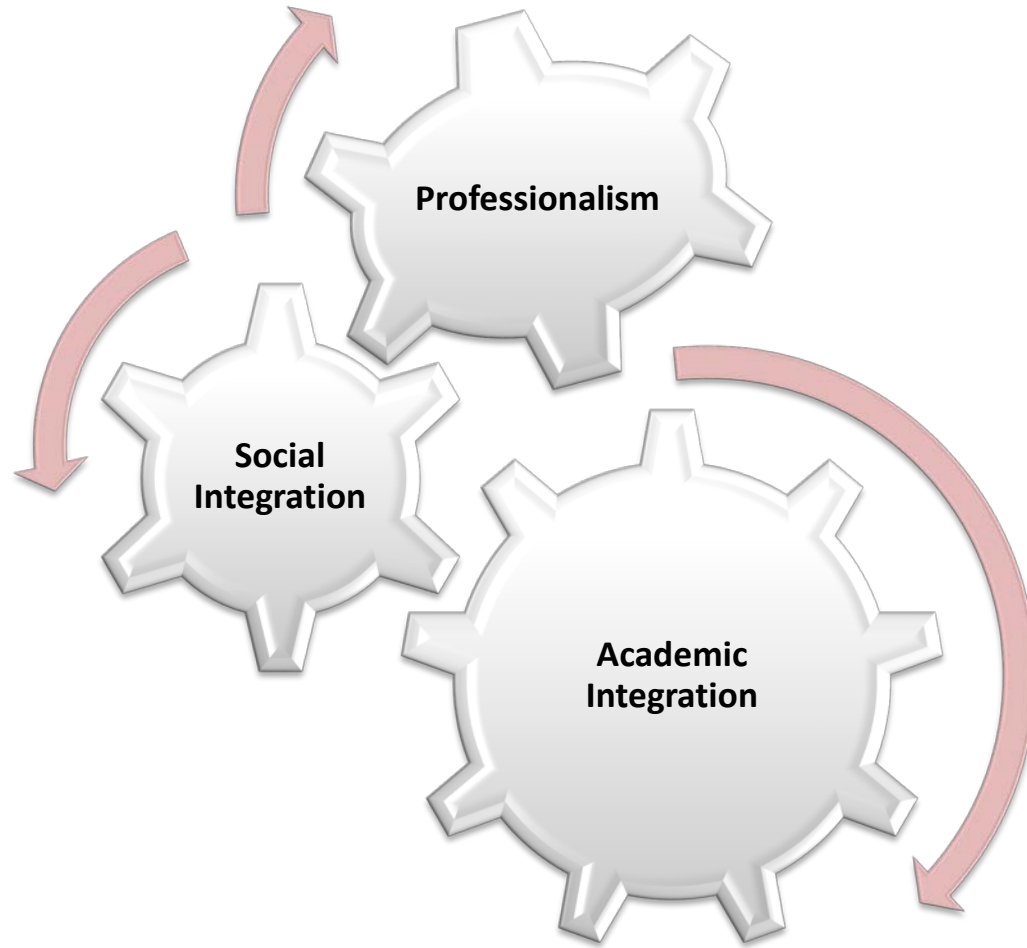
- **LSAMP Programming**
  - Advisement and counseling
  - Bridge or early arrival programs
  - Peer mentoring
  - Tutoring or supplemental instruction
  - Faculty mentoring
  - Undergraduate research
  - Professional development programming



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# LSAMP Program Goal

## Persistence and Attainment of STEM Degrees





THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# The Ohio LSAMP Alliance

- Alliance-wide efforts
  - Web site
  - Communications
    - Steering Committee Meetings
    - Site Visits
    - Conference Calls
    - Brochures
  - Policies and Procedures Manual
  - Mentoring and Diversity Handbook



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# The Ohio LSAMP Alliance

- Alliance-wide Activities
  - Task Forces
    - Ancillary Studies
    - Articulation Agreement and Credit Transfer
    - Conference
    - Cyber-Sharing
    - Industry and Community Partner
    - Mathematics Curriculum Reform



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# The Survey

- Development of the Survey
  - Barbara Fink, Alliance Director
  - Jan Upton, Institutional Research Consultants, Ltd., External Evaluator
  - Input from LSAMP institutions
  - Literature reviews





THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# The Survey

- Survey Question Areas
  - Student Background
  - High School Preparation and Achievement
  - Initial Entry Experience
  - Current Experiences
  - Academic Integration
  - Disciplinary Socialization
  - Social Integration
  - The Louis Stokes Alliances for Minority Participation (LSAMP) Program
  - Three Open-Ended Questions



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# IRB Approval

- IRB Approval
  - Institutions ceded review to OSU
  - OSU's IRB reviews
    - Amendments to IRB
    - Surveys and other study instruments



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# The Pilot

- April-May 2014
- The Ohio State University
- Minor revision made based on comments



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Invitation to Take the Survey

- Mid-March through mid-May 2015
- >5,600 students
  - 285 “Level 1” Scholars
    - received stipends
  - 5668 “Level 2” Scholars
    - eligible to be LSAMP Scholar but did not receive stipends
- Drawing for \$25 gift card (one winner for every 100 participants)



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Response to Invitation to Take the Survey

- 125/285 (44%) Level 1 Scholars responded
- 502/5668 (<10%) Level 2 Scholars responded
- Statistical differences between Level 1 and Level 2 Scholars on survey questions
  - Control for institution type (2-year vs. 4-year)
  - Control for freshman status
  - Control for transfer status

\*significantly correlated with being a Level 1 LSAMP Scholar

	TOTAL LSAMP Scholars (Level 1 and Level 2)			Level 1 LSAMP Scholars		
Partner Institutions	Invited	Response	Response Rate	Invited	Response	Response Rate
<b>Four-year</b>						
<b>Central State University</b>	276	12	4.3	22	3	13.6
<b>Cleveland State University</b>	395	46	11.6	16	14	87.5
<b>Miami University</b>	314	44	14.0	28	12	42.9
<b>Ohio State University</b>	1887	151	8.0	59	37	62.7
<b>University of Cincinnati</b>	430	63	14.7	39	28	71.8
<b>Wilberforce University</b>	67	12	17.9	19	4	21.1
<b>Wright State University</b>	299	29	9.7	30	6	20.0
<b>Two-year</b>						
<b>Cincinnati State Technical and CC</b>	525	9	1.7	7	1	14.3
<b>Columbus State CC</b>	148	32	21.6	6	4	66.7
<b>Cuyahoga CC</b>	1237	94	7.6	52	14	26.9
<b>Sinclair CC</b>	90	10	11.1	7	2	28.6
<b>TOTAL</b>	5668	502	8.9	285	125	43.9



# Results from Close-ended Questions

- Student Background
  - Student Demographics and Other Background Characteristics
  - Highest Degree They Expect to Achieve
  - Parents' Education
  - Transfer Status, Background, and Experience



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Student Demographics

- 55% female; 45% male
- 65% African American; 26% Hispanic
  - 70% of Level 1 Scholars were African American
- 32% freshmen; 30% sophomores; 20% juniors
- 78% not first in family to attend college





THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Highest Degree They Expect to Achieve

- More Level 1 Scholars expected to complete a doctorate (31% vs. 13%)
- More Level 2 Scholars expected to earn a professional degree (23% vs. 17%)

What is the highest degree you expect to achieve?	LSAMP Scholars Responding To Year 2 Survey					
	Level 1 <i>N=125</i>		Level 2 <i>N=377</i>		TOTAL <i>N=502</i>	
	N	%	N	%	N	%
Some college – No degree completed	0	0.0	8	2.2	8	1.6
Two-year college degree – Associate's	2	1.6	10	2.7	12	2.4
Four-year college degree – Bachelor's	23	18.4	89	24.1	112	22.6
Master's degree	42	33.6	114	30.8	156	31.5
Doctorate	28	22.4*	47	12.7	75	15.2
Professional degree – Medicine or Law	21	16.8*	83	22.4	104	21.0
Not sure at this time	9	7.2	19	5.1	28	5.7



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Parents' Education

- 32% had at least one parent who had completed a 4-year degree or advanced degree

What is the highest education level completed by your parents/guardians?	LSAMP Scholars Responding To Year 2 Survey					
	Level 1 N=125		Level 2 N=377		TOTAL N=502	
	N	%	N	%	N	%
<b>Father</b>						
Less than 4-year Degree	60	48.0	193	51.2	253	50.4
4-year Degree	25	20.0	56	14.9	81	16.1
Advanced Degree	27	21.6	79	21.0	106	21.1
Degree not specified	13	10.4	49	13.0	62	12.4
<b>Mother</b>						
Less than 4-year Degree	66	52.8	204	54.1	270	53.8
4-year Degree	30	24.0	74	19.6	104	20.7
Advanced Degree	25	20.0	72	19.1	97	19.3
Degree not specified	4	3.2	27	7.2	31	6.2
<b>At Least One Parent Completed a 4-year Degree or Advanced Degree</b>						
4-year Degree or above	74	59.2	192	50.9	266	53.0
Advanced Degree	40	32.0	122	32.4	162	32.3



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Transfer Status, Background, and Experience

- 19% were transfer students
  - 23% of Level 2 Scholars
  - 8% of Level 1 Scholars
- The Ohio LSAMP Alliance focuses on the first two years of college.
- 36% of transfers had more than 60 credit hours



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Transfer Status, Background, and Experience

- 33% had earned a degree prior to transferring
  - 16% AS
  - 8% AA
  - 6% AAS
  - 4% bachelor's



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Transfer Status, Background, and Experience

- Satisfaction with Experience at Current Institution
  - satisfied or highly satisfied
    - 79% with academic resources
    - 79% with interactions with instructors
    - 77% with communications about institutional requirement
    - 43% with campus activities outside of class time



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Initial Entry Experiences

- Reasons for Decision to Major in STEM
  - 97% interest in the discipline
  - Desire to help others (7% Level 1 vs 62% Level 2)
  - Shortage of minorities in field (68% Level 1 vs 60% Level 2)



Reason was <u>Somewhat Important</u> or <u>Very Important</u> in decision to major in a STEM field	LSAMP Scholars Responding To Year 2 Survey					
	Level 1 N=125		Level 2 N=377		TOTAL N=502	
	N	%	N	%	N	%
Interest in the discipline or field	122	97.6*	342	96.3	464	96.7
Desire for a high salary	103	82.4	277	78.9	380	79.8
Encouragement from mentors	92	73.6	256	72.7	348	73.0
Desire to help others through STEM activities	93	75.0**	219	62.0	312	65.4
Opportunities for more scholarships/fellowships than in other majors	86	68.8**	212	59.9	298	62.2
Shortage of minorities in the field	85	68.0**	191	54.3	276	57.9
Desire to do research	74	59.2	199	56.2	273	57.0
Desire to go to professional school (medicine, dentistry, optometry, etc.)	59	47.2	204	57.6	263	54.9
Desire to please parents/teachers	68	54.4	174	49.7	242	50.9
Desire to teach in STEM areas	44	35.2	118	33.6	162	34.0



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Current Experiences

- A greater percentage of Level 1 LSAMP Scholars than Level 2 Scholars
  - Were majoring in engineering (54% vs. 31%)
  - Wanted to be an engineer (57% vs. 37%)
  - Wanted to be a business owner (22% vs 16%)
  - Were involved in volunteer work (77% vs. 60%)
  - Lived in campus residence halls (51% vs. 22%)
  - Were recipients of scholarships based on financial need (56% vs. 37%)
  - Were recipients of scholarships not based on financial need (76% vs. 47%)



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Residence

Where do you reside while enrolled in your degree program?	LSAMP Scholars Responding To Year 2 Survey					
	Level 1 N=125		Level 2 N=377		TOTAL N=502	
	N	%	N	%	N	%
a. On-campus residence hall	64	51.2**	77	22.3	141	29.9
a. On-campus apartment/house	2	1.6	11	3.2	13	2.8
a. On-campus fraternity/sorority	0	0.0	3	0.9	3	0.6
a. Off-campus apartment/house (not with parent or guardian)	30	24.0**	148	42.8	178	37.8
a. Permanent home address (with parent or guardian)	29	23.2	107	30.9	136	28.9



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Academic Integration

- A greater percentage of Level 1 LSAMP Scholars than Level 2 Scholars
  - Were comfortable talking with teaching assistants (75% vs 67%)
  - Were comfortable talking with faculty (70% vs. 69%)
  - Participated in at least one study group (61% vs. 35%)
  - Had a faculty mentor in a STEM field (62% vs. 27%)
  - Were satisfied with the academic advisement received (79% vs 68%)



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Academic Integration

- A greater percentage of Level 1 LSAMP Scholars than Level 2 Scholars
  - Were satisfied with the supportiveness of faculty in their major (70% vs. 68%)
  - Studied 3 or more hours/day (34% vs. 28%)
  - Received referrals to campus resources (67% vs. 55%)
  - Were advised about opportunities to do undergraduate research (61% vs. 48%)



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Academic Integration

- A greater percentage of Level 1 LSAMP Scholars than Level 2 Scholars participated in the following activities:
  - Tutoring/supplemental instruction in math (46% vs. 29%)
  - Tutoring/supplemental instruction in sciences (48% vs. 23%)
  - Tutoring/supplemental instruction in major courses (34% vs. 17%)



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Academic Integration

- A greater percentage of Level 1 LSAMP Scholars than Level 2 Scholars participated in the following activities:
  - Tutoring/supplemental instruction in non-STEM courses (19% vs. 9%)
  - Study skills workshops (54% vs. 26%)
  - Early arrival program (41% vs. 18%)
  - Bridge program (38% vs. 12%)



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Academic Integration

Extent that respondent was <u>Satisfied or Highly Satisfied</u> with each of the following	LSAMP Scholars Responding To Year 2 Survey					
	Level 1 N=125		Level 2 N=377		TOTAL N=502	
	N	%	N	%	N	%
My intellectual development	98	79.0	276	81.4	374	80.8
The quality of instruction by faculty in my major	88	70.4	243	71.5	331	71.2
Academic advisement I have received	99	79.2*	230	67.6	329	70.8
The supportiveness of faculty in my major	87	70.2*	226	66.7	313	67.6
My academic performance	76	60.8	199	58.9	275	59.4



<b>Academic advisor assisted respondent's academic progress "Some" or "A Lot" on each of the following</b>	<b>LSAMP Scholars Responding To Year 2 Survey</b>					
	<b>Only Respondents with an Academic Advisor</b>					
	<b>Level 1 N=119</b>		<b>Level 2 N=286</b>		<b>TOTAL N=405</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
Advising me about course selection and course prerequisites	97	85.1	237	86.5	337	86.2
Assisting me with adding or dropping classes and scheduling questions	89	80.2	203	77.8	295	78.7
Assessing my academic performance with me	86	74.8	195	71.7	284	72.8
Taking an interest in me as a person	83	72.8	182	67.2	268	69.1
Referring me to campus support services and resources	74	67.3	141	55.1	218	59.1
Helping me interpret university policies and procedures	68	66.0	134	54.3	205	58.1
Advising me about opportunities to do undergraduate research	69	60.5	123	48.0	194	52.2
Advising me about internships	60	54.1	117	45.7	180	48.6
Advising me about graduate or professional school	50	45.9	120	47.8	173	47.7



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Academic Integration

- For all LSAMP Scholars:
  - 63% overall were confident they had strong study skills
  - 55% indicated their high school education adequately prepared them for STEM majors
  - 54% felt overwhelmed by the pace and load of curriculum demands in their majors
  - 20% felt non-STEM courses were more interesting than the ones for their major
  - 86% reported their academic advisors provided assistance with course selection
  - 66% met with academic advisors only when needed



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Disciplinary Socialization

- The Role of the Faculty Mentor
  - Level 1 Scholars more likely to have a faculty mentor from a STEM field (62% vs. 27%)
  - Level 2 Scholars more likely to not have a faculty mentor (59% vs. 34%)
  - 88% of all Scholars said their mentors encouraged their continuation in a STEM field and they would recommend their mentor



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Disciplinary Socialization

- Over 80% of all Scholars said their faculty mentors:
  - Listen carefully to their concerns
  - Convey high ethical standards
  - Have been appropriately accessible
  - Have met their expectations
  - Provide helpful advice on academic progress and growth
  - Provide timely feedback
  - Facilitate interactions with others in STEM



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Disciplinary Socialization

- Undergraduate Research
  - Level 1 Scholars were more likely to be involved in undergraduate research (25% vs. 15%)
  - 75% doing research in their major
  - Time spent/week on research
    - 35% worked <5 hours
    - 37% worked 5-10 hours
    - 10% worked 11-15 hours
    - 11% worked 16-20 hours



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Disciplinary Socialization

- Professional Meetings and Publications
  - Level 1 Scholars reported attending professional meetings more than Level 2 Scholars (61% vs. 44%)
  - Level 1 Scholars more likely to have their research published in a journal (61% vs. 35%)



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Social Integration

- Significant differences were shown between Level 1 and Level 2 Scholars on every item measuring social integration.
- Participation in the following activities was higher for Level 1 Scholars:
  - LSAMP social activities (68% vs. 3%)
  - Summer bridge (38% vs. 12%)
  - Early arrival program (41% vs. 18%)
  - LSAMP workshops (63% vs. 3%)
  - Counseling and advisement (54% vs. 3%)
  - Peer mentor (39% vs. 18%)



THE OHIO LSAMP  
**ALLIANCE**  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Social Integration

Extent that respondent <u>Strongly Agreed or Agreed</u> with each statement	LSAMP Scholars Responding To Year 2 Survey					
	Level 1 <i>N=125</i>		Level 2 <i>N=377</i>		TOTAL <i>N=502</i>	
	N	%	N	%	N	%
I am comfortable making friends with people from different backgrounds and/or values.	115	92.0*	287	87.2	402	88.5
At least one faculty member has provided me with guidance in developing my career goals.	102	82.9*	227	69.2	329	72.9
I relate well to other students in my classes.	93	74.4*	213	64.9	306	67.5
I am very involved in campus activities at my college.	84	67.7*	136	41.3	220	48.6





THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Impacts on Academic Performance

- Tutoring/supplemental instruction in math (41%)
- Tutoring/supplemental instruction in sciences (41%)
- Participation in LSAMP workshops (33%)
- LSAMP counseling and advisement (30%)
- Tutoring/supplemental instruction for courses in major (30%)
- Faculty mentor (30%)
- Workshops on study skills, professional development (30%)
- Peer mentor (26%)
- Early arrival program (25%)
- LSAMP social activities (24%)



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Impacts on Persistence in STEM

- LSAMP workshops (35%)
- Faculty mentor (27%)
- Workshops on study skills, professional development (27%)
- Tutoring/supplemental instruction in math (26%)
- Peer mentor (26%)
- LSAMP counseling and advisement (25%)
- Tutoring/supplemental instruction in sciences (24%)
- Summer bridge (23%)
- Tutoring/supplemental instruction for courses in major (23%)
- LSAMP social activities (22%)



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Open-Ended Questions

- What support or activities have most positively impacted your ability to succeed in college?
- Have you faced any challenges during the academic year? If so, how were you able to address them?
- What has your institution done to help or hinder your sense of belonging at your college or university?



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Supports or Activities

- STEM-related clubs
- Study groups
- Living/learning communities
- Bridge programs
- Workshops
- Attentive advisors



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Supports or Activities

- Faculty mentors
- National professional organizations
- Leadership roles in organizations
- Family members
- Like-minded, purposeful peers



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Challenges

- Catastrophic challenges included:
  - Death of a loved one
  - Homelessness
  - Debilitating physical or mental illness
- Less catastrophic challenges included:
  - Trouble finding a babysitter
  - Feeling overwhelmed by rigors of studies



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Addressing Challenges

- Sought out campus resources
- Confiding in instructors and advisors
- Working out accommodations
- Improving study skills
- Using tutoring/supplemental instruction



# Issues that Hinder Sense of Belonging

- Campus size
- Classroom cliques
- Feeling isolated and anonymous
- Difficulty balancing academic performance with social activities, work, and life challenges
- Nontraditional students less likely to participate in campus support services





THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Conclusions

- More Level 1 LSAMP Scholars:
  - Lived in campus residence halls
  - Related well with classmates
  - Were involved in campus activities
  - Were comfortable talking with teaching assistants and faculty
  - Were comfortable making friends with people from different backgrounds



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Conclusions

- More Level 1 LSAMP Scholars:
  - Were satisfied with the academic advising they received
  - Had faculty mentors in their major fields
  - Had greater, regular encouragement from mentors and faculty
  - Participated in study groups and early arrival/summer bridge programs
  - Participated in undergraduate research
  - Had their research published



THE OHIO LSAMP  
ALLIANCE  
LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION

# Conclusions

- Supports students said contributed to their academic and social integration
  - Attentive academic advisor
  - Caring faculty mentor
  - Tutoring/supplemental instruction in math and science
  - Participation in study skills and career workshops



# THE OHIO LSAMP ALLIANCE

LOUIS STOKES ALLIANCES FOR MINORITY PARTICIPATION