



Louis Stokes

ALLIANCES FOR MINORITY PARTICIPATION

A GAME CHANGER FOR

25 Years

LOUIS STOKES
ALLIANCES
FOR
MINORITY
PARTICIPATION
RESEARCH
SYMPOSIUM 2016
FEBRUARY 22-24, 2016



The LSAMP Program

- Began in 1991 as the Alliances for Minority Participation (AMP)
- Offered grants to 6 alliances (across 2- and 4-year institutions, laboratories, government agencies and laboratories, and industry) that have grown to number 45 in 2014
- Has helped about **500,000** complete their undergraduate degrees* and, for many of them, go onto graduate studies

*Based on 2011 data, preliminary statistics for 2012 and 2013, and projections for 2014

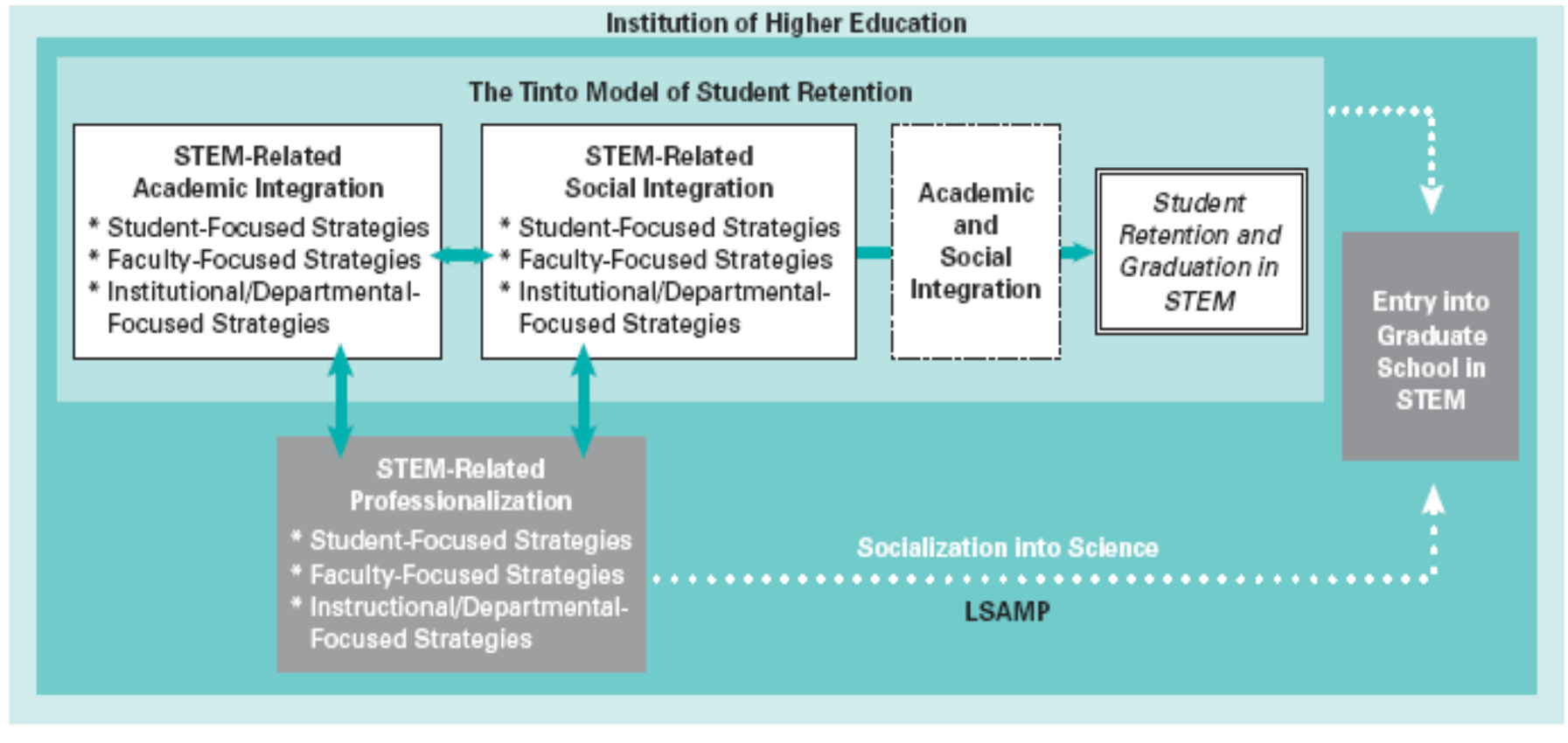
LSAMP



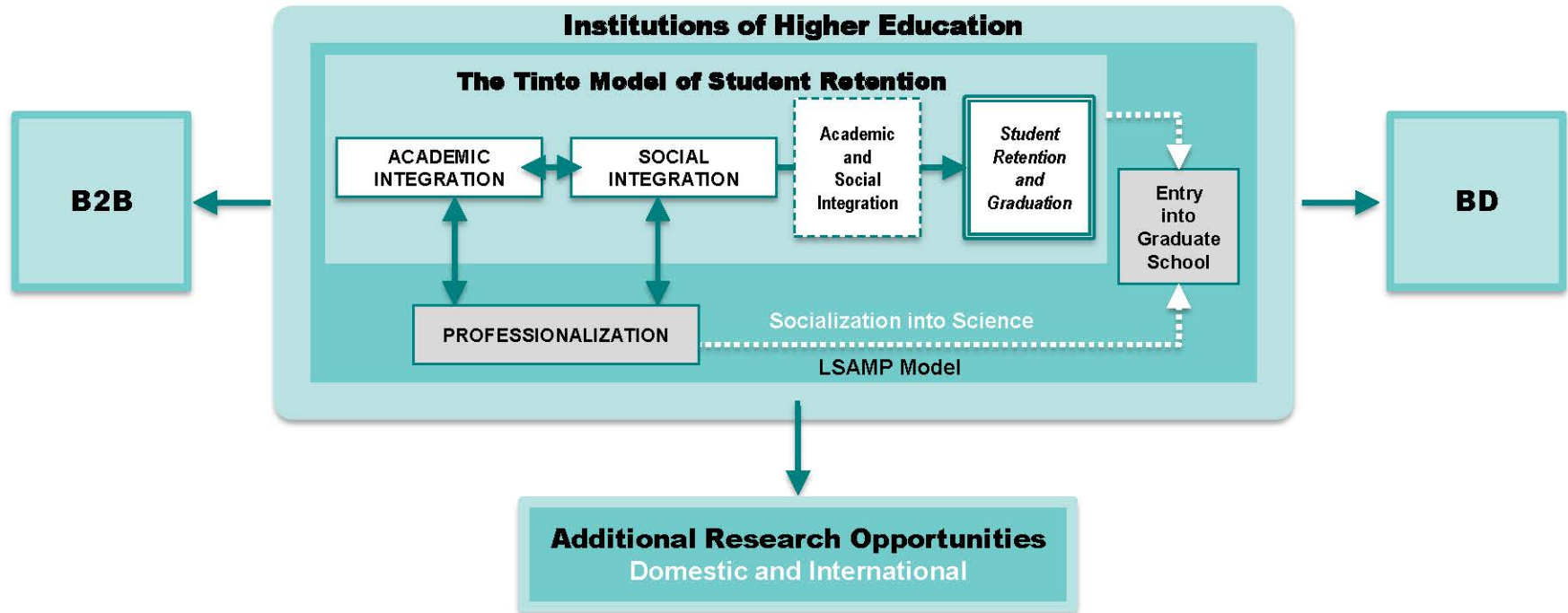
Division of Human Resource Development
Louis Stokes Alliances for Minority Participation
(LSAMP)
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The LSAMP Model

FIGURE 2. LSAMP Model



Component 4: LSAMP Supports Graduate Studies



Most successful programs show:

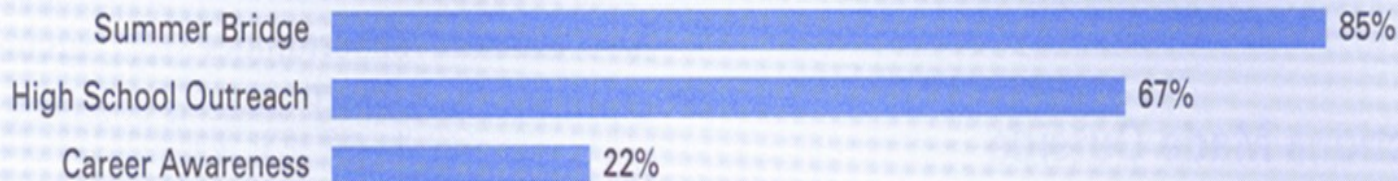
- *Active mentoring & encouragement w/visible role models*
- *Partnerships & alliances (making efficient use of all resources)*
- *Hands-on domestic or international research experiences*

Successful programs cont'd...

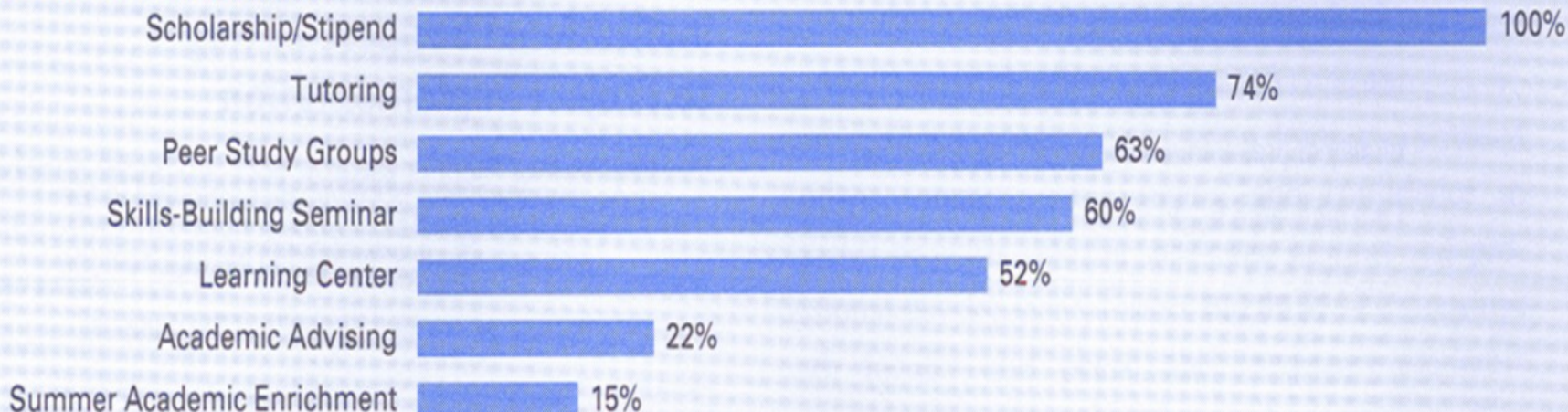
- *Program evaluation/tracking to measure long-time student success in the pipeline*
- *Communication of the relevance of science (ecology & environmental) to society's health & well-being*
- *Funding for programs & student stipends*

Percentage of LSAMP Projects Offering Various Components

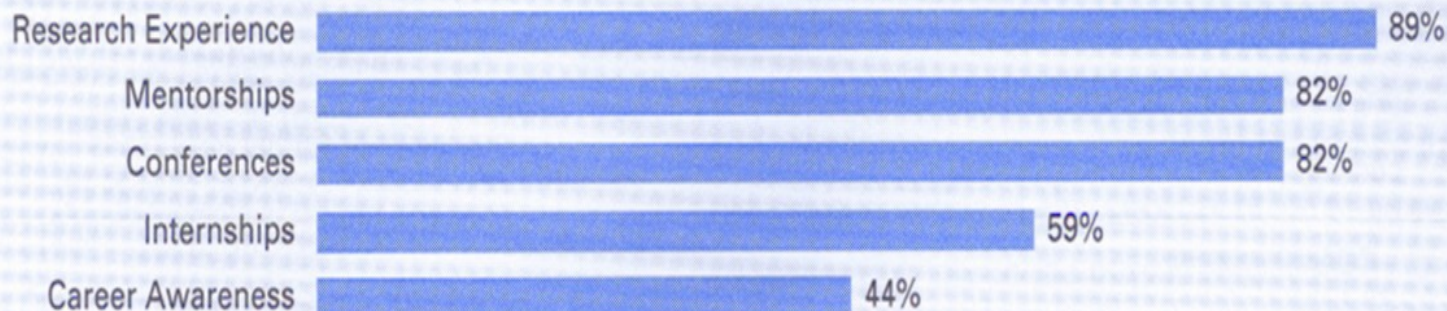
Pre-College to College Programs



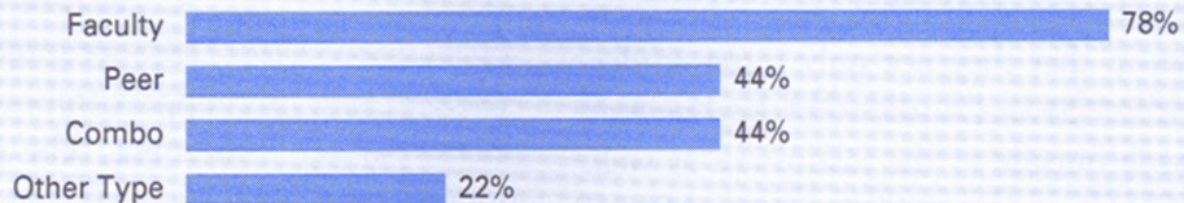
Student Academic Development



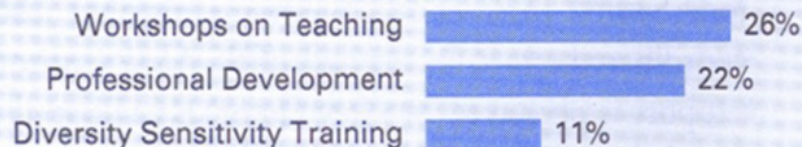
Student Professional Development



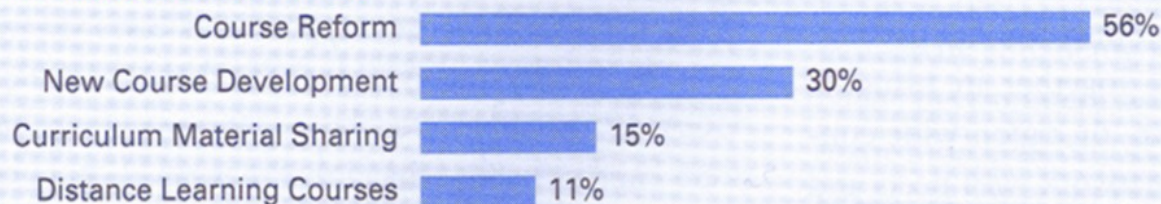
Types of Mentoring Programs



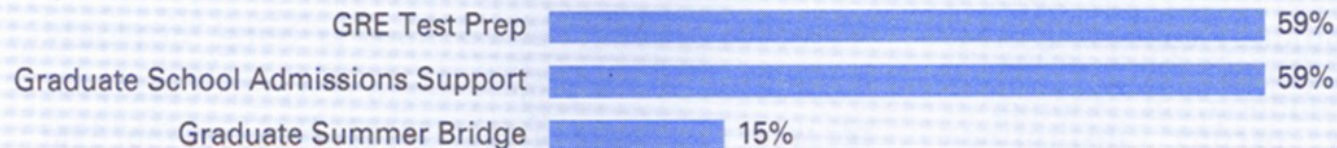
Faculty Development



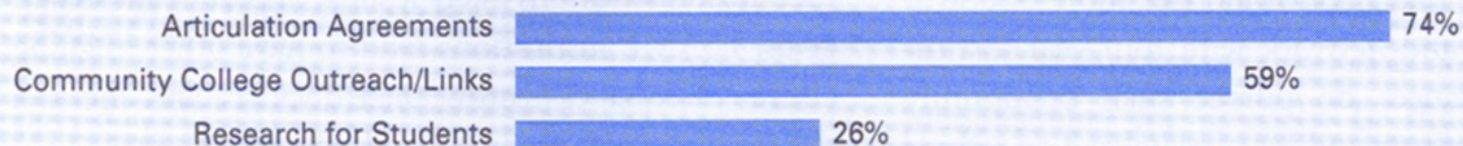
Curriculum Development Activities



Graduate Studies Development



Community College Components



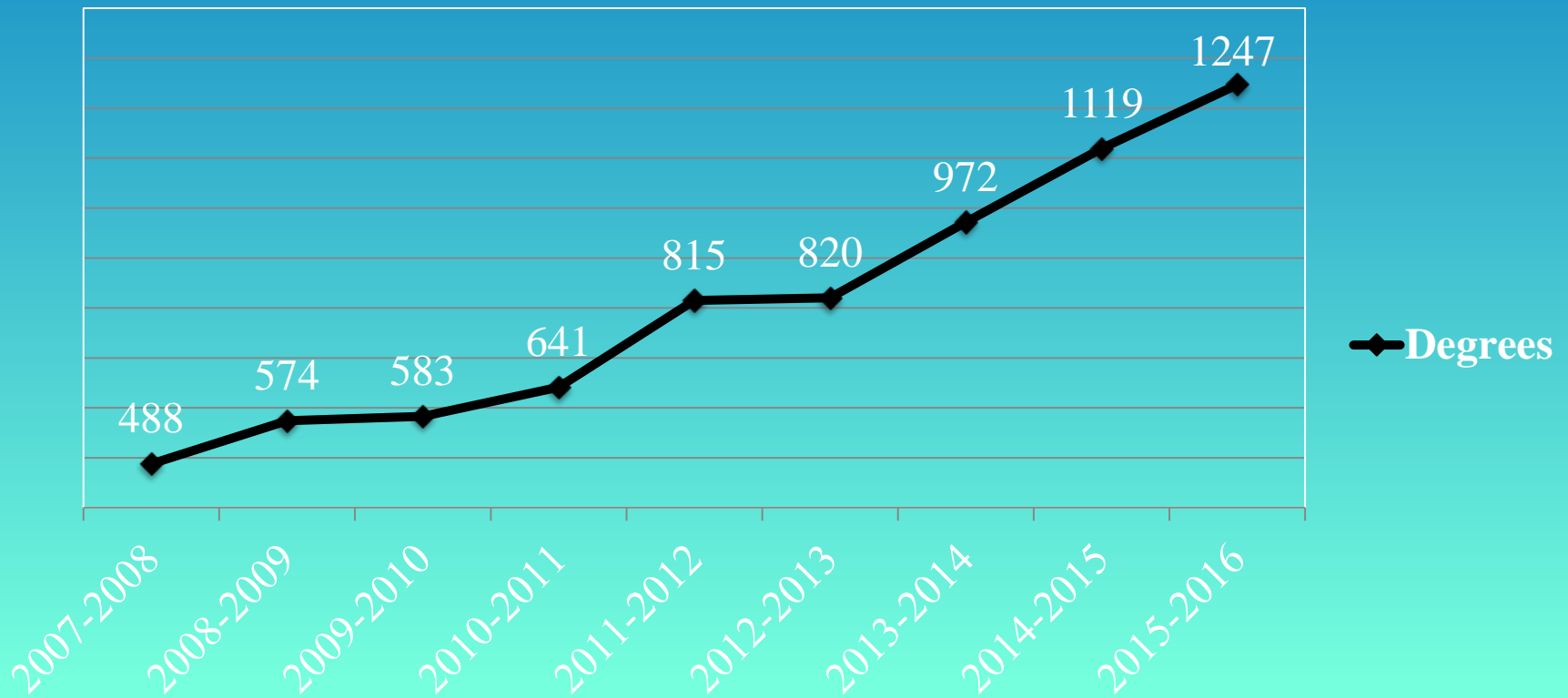
Source: Urban Institute telephone interviews with project staff, 2002

CSU-LSAMP: SUCCESS WRITTEN IN THE NUMBERS

- Since 1994, CSU-LSAMP has served **23,360** participants, including **19,765** URM students
- The annual number of participants has increased more than fourfold, from **641** in 1994 to **3,520** in 2014
- From 1994 to 2013, CSU URM-STEM undergraduate **enrollment increased 208%**. STEM **enrollment for non-URM students increased by only 23%** over the same time period
- **From 1994 to 2013, CSU URM-STEM baccalaureate degree production increased 277%**
- CSU-LSAMP participants are 1.2-1.8 times more likely than non-participants to remain enrolled in STEM disciplines
- CSU-LSAMP participants are two times more likely than non-participants to graduate with STEM Degrees
- **In 2014-15, almost 900 CSU-LSAMP** students engaged in research on their own campuses, at national laboratories, and internationally
- In 2014-15, CSU-LSAMP students disseminated their research through journal articles (13), presentations at international conferences (4), presentations at national conferences (130), and presentations at regional conferences (119)

VA-NC Alliance . . . Making a Difference!

156% increase in UREP STEM degrees.



Year



Keys to Success

- Alliance Structure
- Summer Bridge (skills, gatekeeping)
- Mentoring (Faculty and Students)
- Research Experience (academic excellence)
- Drop in Center (community)
- Caring Staff





An Evaluative Study of the LSAMP Program

By the Urban Institute

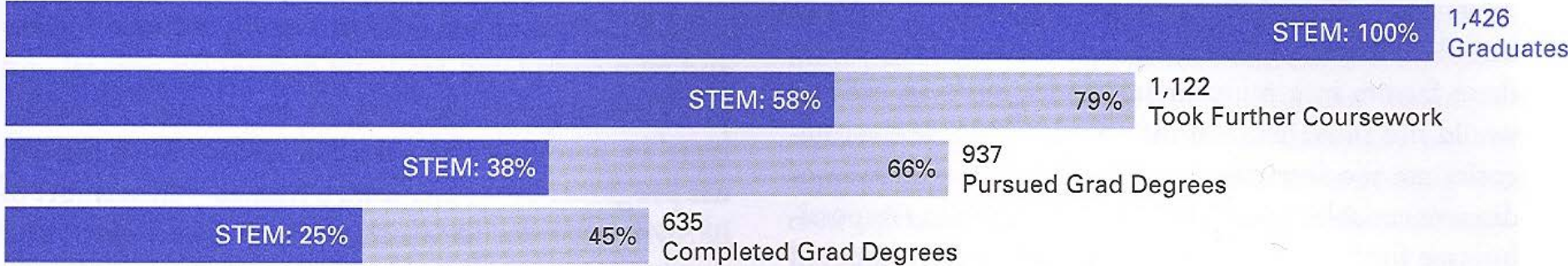
Revitalizing the Nation's Talent Pool in STEM SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS

Bonnie Choi Clowell
Charmelle Cosentino de Colon
Lina Tsai
Nicola Deterding

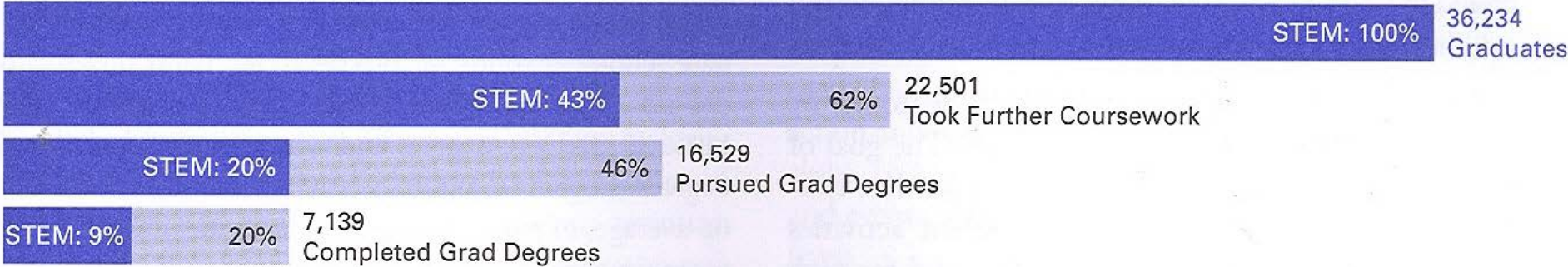


FIGURE 6. Graduate Coursework, Degrees Pursued, and Degrees Complete

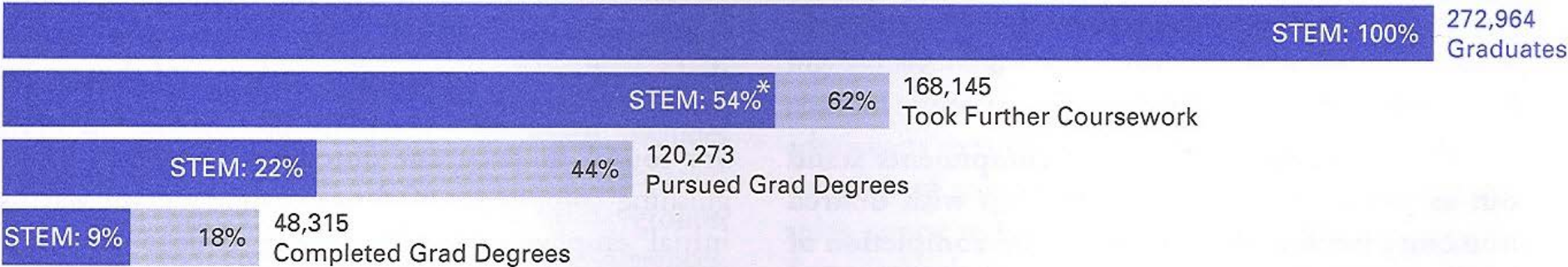
LSAMP Participants



National Underrepresented Minority

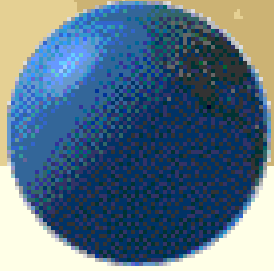


National White and Asian



Sources: UI LSAMP Graduate Survey and NSF NSRCG Longitudinal File.
*National comparison group statistic is not significantly different from LSAMP.

Education Pipeline: Post-BA Coursework, Graduate Degrees Pursued and Completed



LSAMP Graduates

- 80% took further coursework after bachelor's degree
- 65% pursued graduate degrees
- 45% completed graduate degrees
- 38% enrolled in STEM
- 25% completed STEM graduate degrees

Non-LSAMP Graduates

- 60% took further coursework after bachelor's degree
- 45% pursued graduate degrees
- 20% completed graduate degrees
- 20% enrolled in STEM
- 9% completed STEM graduate degrees

The LSAMP Bridge to the



Doctorate (BD) Program



Thank You

ECONOMIC IMPACT

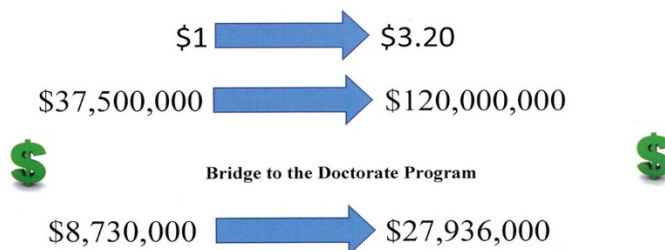


2015 ALABAMA LOUIS STOKES ALLIANCE FOR MINORITY PARTICIPATION (ALSAMP)

Impact Statement

The Alabama Alliance for Minority Program (AMP) originated in 1991 with nine institutions that had a combined underrepresented minority science, technology, engineering and mathematics (STEM) enrollment of 4,549 and underrepresented minority annual STEM bachelor's degree production of 473. Today, the ALSAMP membership includes 12 institutions with a combined underrepresented minority STEM enrollment of 7,808 and underrepresented minority annual bachelor's degree production of 1,337. In a state where opportunities for minorities were limited 25 years ago, the alliance has been the key that has opened the doors of opportunity for countless minority STEM students. The alliance is the only state-wide organization with the single goal of increasing the quality and quantity of underrepresented minorities at undergraduate and graduate levels.

UAB economist and experts estimate that every dollar coming into ALSAMP generates three dollars and twenty cents for the state, or 3.2 dollars. Consequently, by this estimate, over the life of the ALSAMP program, the approximately \$37,500,000 coming to the state from NSF has generated \$120,000,000. These funds have created jobs in Alabama and raised the educational level of its citizens.



The NSF Louis Stokes Alliance for Minority Participation program has had a tremendous economic effect on Alabama and in particular, the universities involved in the project.

STEM Bachelor Degrees Report

Disciplines by Race/Ethnicity

Discipline	Black or African American	Hispanic or Latino	Native American *	Native Hawaiian or Pacific Islander	More Than One Race Reported – Minority **	Total
Agricultural Science	398	608	48	58	133	1,245
Architecture	208	675	21	24	61	989
Biological Sciences	5,205	7,288	374	621	860	14,348
Business and Management	1,300	3,389	74	85	159	5,007
Computer and Information Sciences	1,860	2,236	85	117	272	4,570
Engineering	3,000	6,560	246	291	771	10,868
Engineering Technologies	475	628	25	13	62	1,203
Interdisciplinary Studies	1,323	719	41	27	80	2,190
Mathematics	696	1,218	45	65	130	2,154
Natural Resources and Conservation	185	830	88	64	100	1,267
Physical Sciences	1,056	1,646	104	181	268	3,255
Total	15,706	25,797	1,151	1,546	2,896	47,096

Period: Academic Year 2014-2015/ Reporting Year 2015

STEM Bachelor Degrees Report

Gender by Race/Ethnicity

Gender	Black or African American	Hispanic or Latino	Native American*	Native Hawaiian or Pacific Islander	More Than One Race Reported Minority**	Total
Male	7,695	14,885	623	803	1,697	25,703
Female	8,008	10,894	524	743	1,198	21,367
Not Reported/Unknown	3	18	4	0	1	26
Total	15,706	25,797	1,151	1,546	2,896	47,096

*The Native American category includes American Indians and Alaska Natives.

**The More Than One Race Reported – Minority category comprises non-Hispanic/Latino.

Notes:

In 2015, the discipline categories changed.

Chemistry, Geosciences and Physics/Astronomy were combined into Physical Sciences.

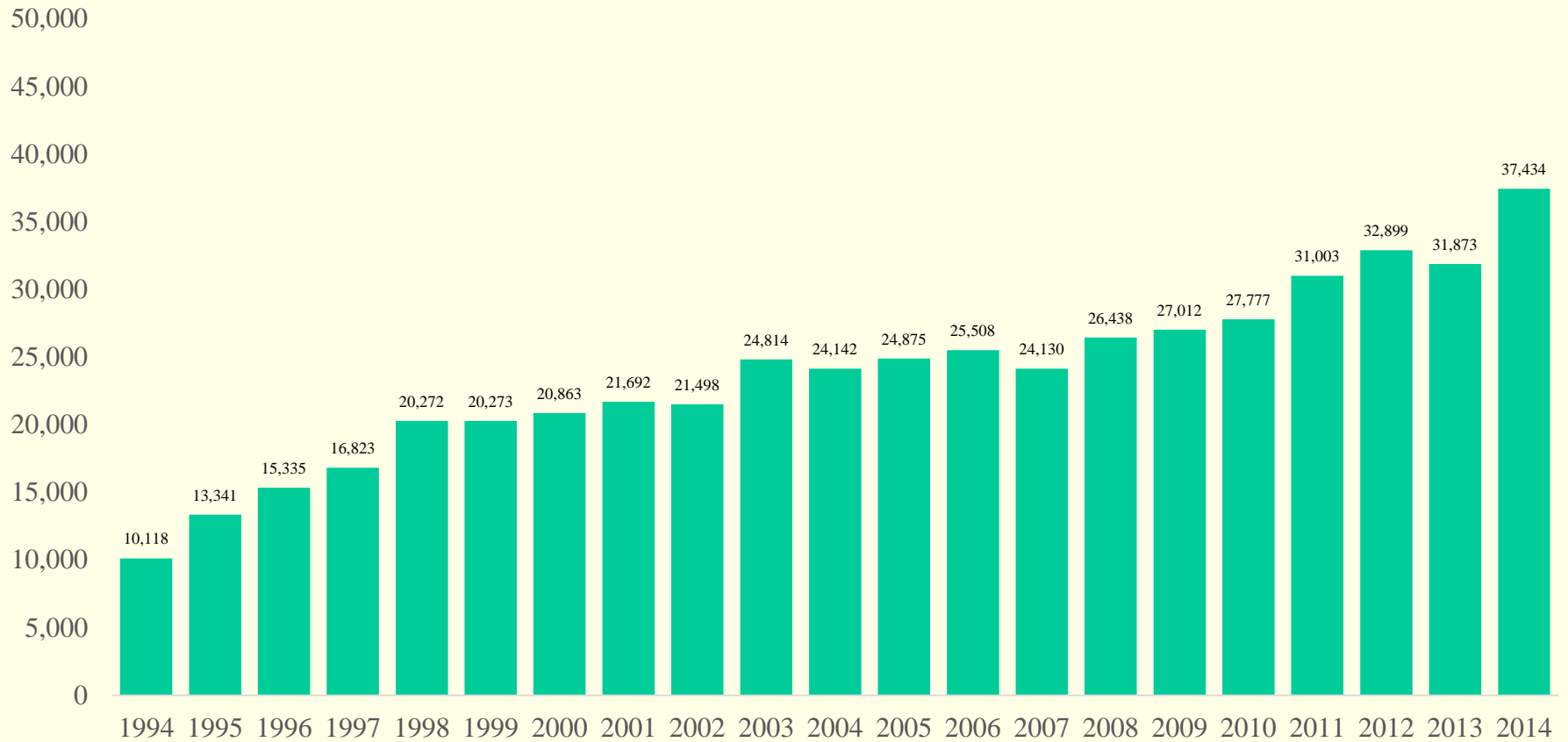
Environmental Science was renamed Natural Resources and Conservation.

Life/Biological Sciences were renamed Biological Sciences.

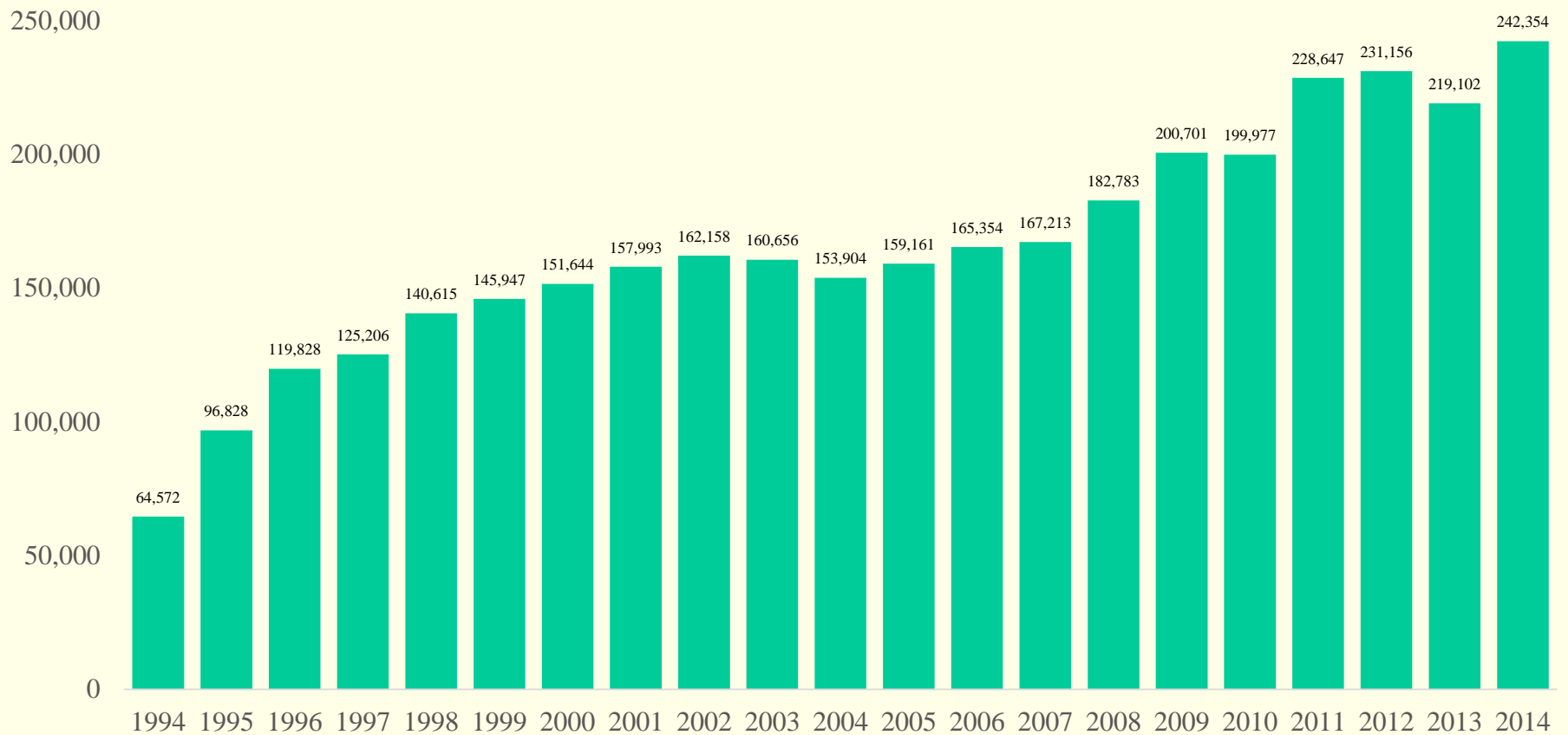
Four new disciplines were added: Architecture, Business and Management, Engineering

Printed: Mar 29, 2017

Degrees



Enrollment



Succeeding When You're Supposed To Fail

- The critical importance of the Limelight Effect- our ability to redirect focus of our lives to the result of our own efforts, as opposed to external forces
- The value of a satellite in our lives- the remarkable way in which a consistent ally who accepts us unconditionally while still challenging us to be our best can make a huge difference
- The power of temperament- people who are able to tunnel through life's obstacles have a surprisingly mild disposition; they don't allow the bumps in the road to unsettle them

Benefits of Undergraduate Research

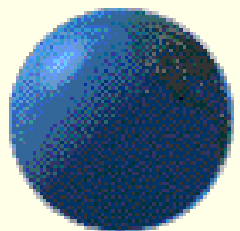
- Greater gains in academic performance & the acquisition of professional skills
(cognitive adaption, communication, interdisciplinary training)
- Greater participation in other intellectual opportunities on campus
- Increased opportunity to overcome traditional boundaries for women, minorities, & first-generation students



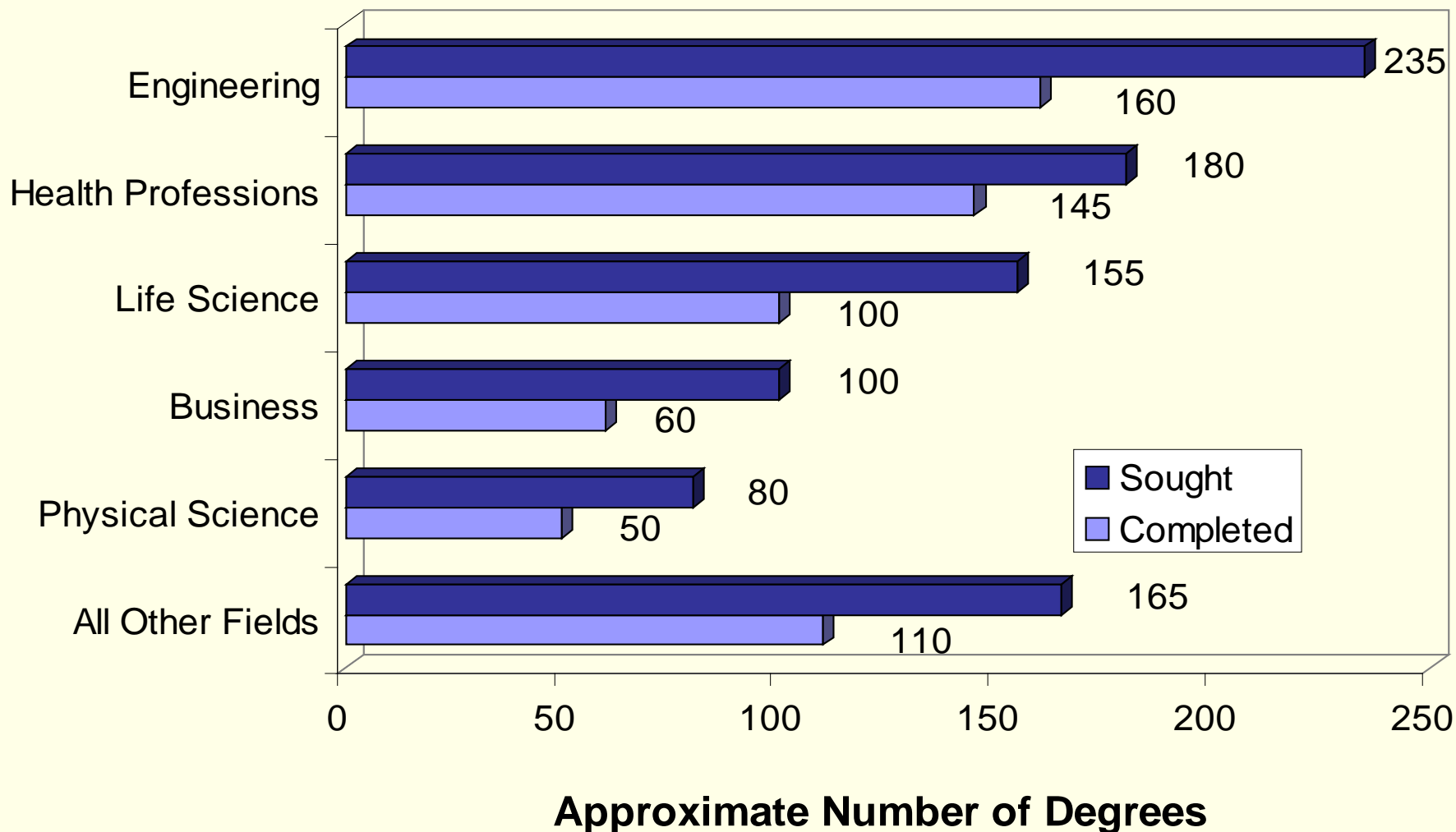
Benefits of Undergraduate Research

- Increase connection to & retention within field
- Stronger propensity for enrollment in graduate education
- Increased employment in major –related career

Source: National Academy of Engineering and National Research Council *of the National Academies*
Partnerships for Emerging Research Institutions, Report of a Workshop...(2009)



Fields of Graduate Study: LSAMP Participants



*SOURCE: Urban Institute LSAMP Graduate Survey, 2002