

# EXAMINING THE FIRST-TERM EXPERIENCES OF NEW FRESHMEN

## AN IR APPROACH

UNIVERSITY OF MARYLAND  
MDAIR CONFERENCE  
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# ABOUT US

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## **Acknowledgements**

- Amanda Bowsher, IRPA Graduate Assistant
- CAWG Beginnings



# AGENDA

**Approach: How the project was developed**

**First Semester Experience: Why is this important?**

**About the data**

**First Semester Experiences: Key Findings**

- Entry
- Enrollment
- Performance
- Perceptions

**Challenges, Outcomes, Recommendations**

**Discussion / Q&A**

# APPROACH: HOW THE PROJECT WAS DEVELOPED

- **Brainstormed research projects for the summer during team retreat**
- **Inspired by Beloit College's "Mindset List" to provide additional data on incoming freshmen**
  - Reviews the "cultural touchstones" that shaped the lives of first-year students
  - Excerpts from the Class of 2015 Mindset List:
    - *Ferris Bueller and Sloane Peterson could be their parents*
    - *Refer to LBJ, and they might assume you're talking about LeBron James*
- **Decided to develop digestible data points on the first-semester experience that would be useful to the broader campus community based on strategic goals (e.g., STEM, General Education, Time-to-Degree)**

# APPROACH: HOW THE PROJECT WAS DEVELOPED

Created a list of data elements to include in the study, which served as a “to-do” list for the project

First-Semester Experiences		
Data Element	Description	Data Source
Major Facts	What major houses the majority of first-semester students? What percentage are in STEM? What percent of students declare a double major in their first term?	Warehouse: Um Student Facts, Um Student Org, Sec Major Table
Requested Major Enrollment	Distribution of students who enrolled in preferred major (LEP) and those "in limbo"	Warehouse: Um Ugrad Applicant Facts, Sis Ug Admissions, Um Ugrad
Class Size	Distribution of students' courses by class size; e.g. X% of students are in 2+ courses with 100+ students	Warehouse: Um Fac Course, Um Course Facts, Um Stu Sch Course
Faculty Exposure	Percentage of students in a certain number of courses taught by W	Warehouse: Um Fac Col
Credits Attempted	Average attempted credits for first-semester students	Warehouse: Um Student Facts, Um Student Org
Credits Earned	Average earned credits for first-semester students; what percentage of students finish with less than 10 credits?	Warehouse: Sis Term Stu Status, Sis End of Term Performance, Um Progressions2 Base Facts
GPA	Average GPA for first-semester students	Warehouse: Sis End of Term Performance, Um Progressions2 Base Facts

# FIRST SEMESTER EXPERIENCE: WHY IS THIS IMPORTANT?

- **Ensure students are on the path to success from day one**
- **Provide points of reference about what freshmen experience on campus in their first term**
- **Understand how data can provide a portrait of student experiences, supporting and contextualizing anecdotal evidence**
- **Highlight successes and opportunities within the first-semester experiences of new freshmen**

# ABOUT THE DATA: SOURCES

## IRPA DATABASE

- **Aggregated student enrollment data from the Fall 2009, 2010 and 2011 freshman cohorts**
- **Provides information on student demographics, registration, and course attributes**
- **Data include all new freshmen, including part-time and non-degree seeking students**

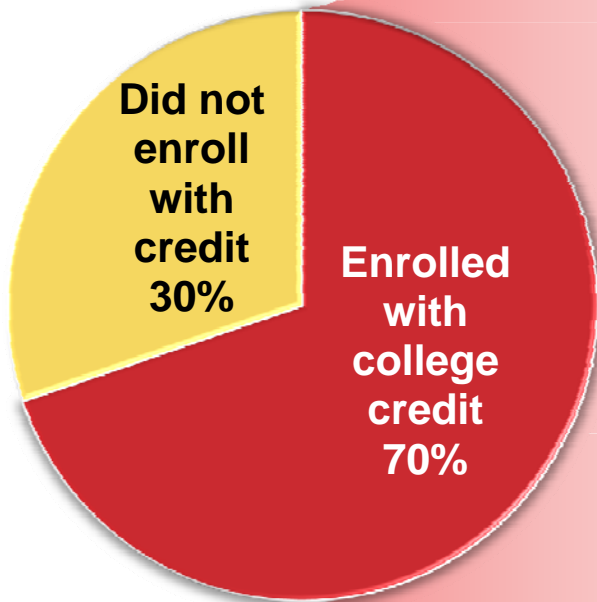
## BEGINNING STUDENT SURVEY, 2010 & 2011

- **Survey of freshmen taken 8-10 weeks into their first term**
- **2010 survey gauges student perceptions of the academic and social experiences on campus;  $n = 1869$**
- **2011 survey assesses students' degree completion expectations;  $n = 1498$**

# FIRST SEMESTER EXPERIENCES: ENTRY



# PRE-ENROLLMENT CREDITS



**70% of freshmen enroll with college credit**

- 65% enter with AP credit
- 10% enter with credit from another institution
- 3% enter with IB credit

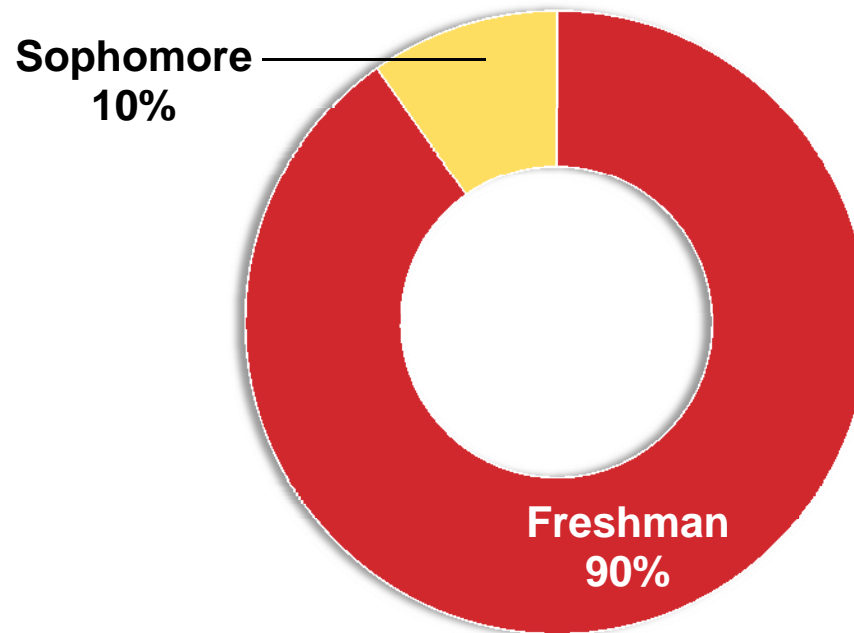
**Average number of accepted pre-college credits is 17**

*Source: IRPA database*

# PRE-ENROLLMENT CREDITS: CLASS STANDING

**The overwhelming majority of freshmen enter with freshman class standing; however, 10% enter with enough credits to reach sophomore class standing**

- Students entering as sophomores have an average of 40 pre-enrollment credits

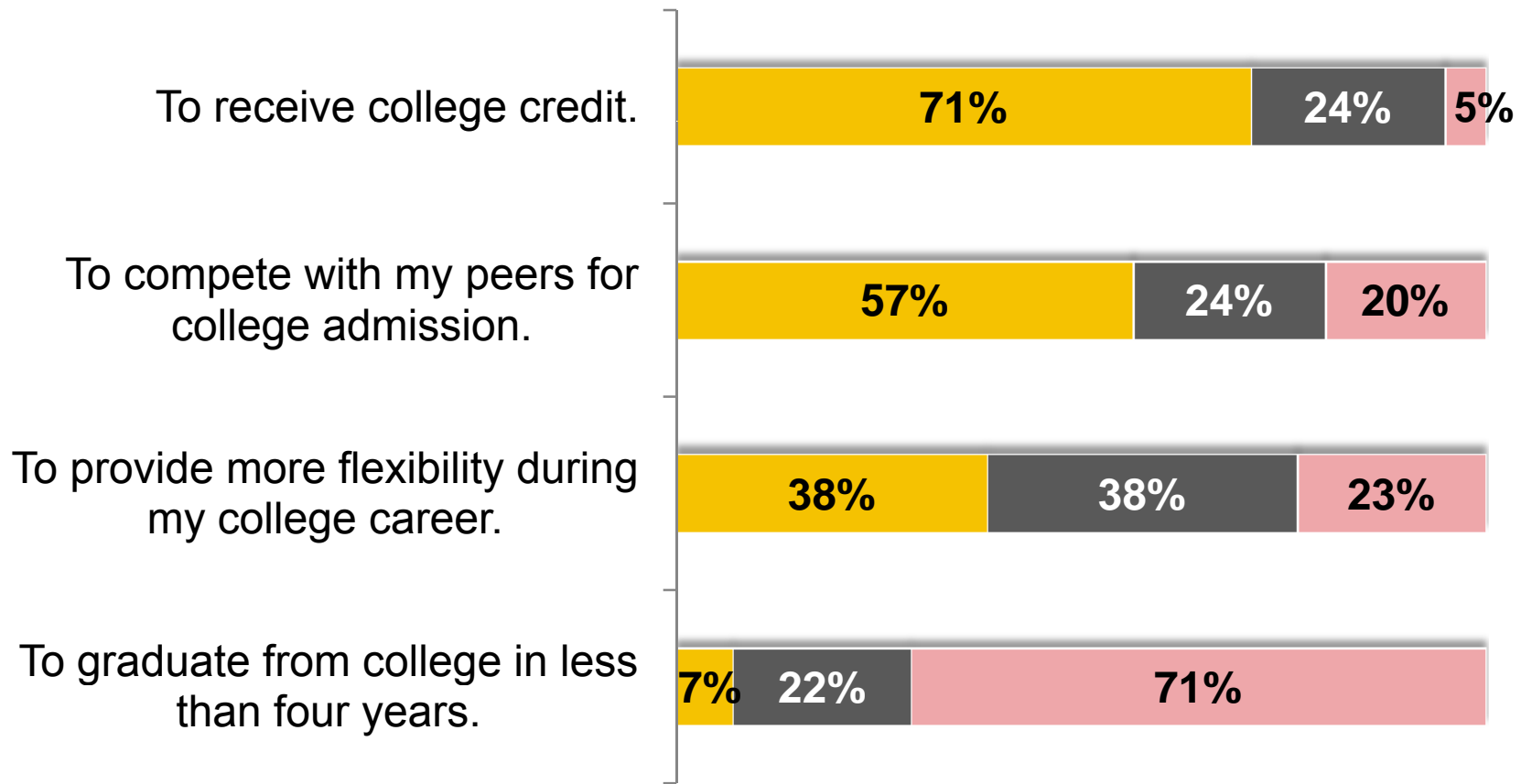


*Source: IRPA database*

# PRE-ENROLLMENT CREDITS

## Why freshmen took AP/IB/College-level courses

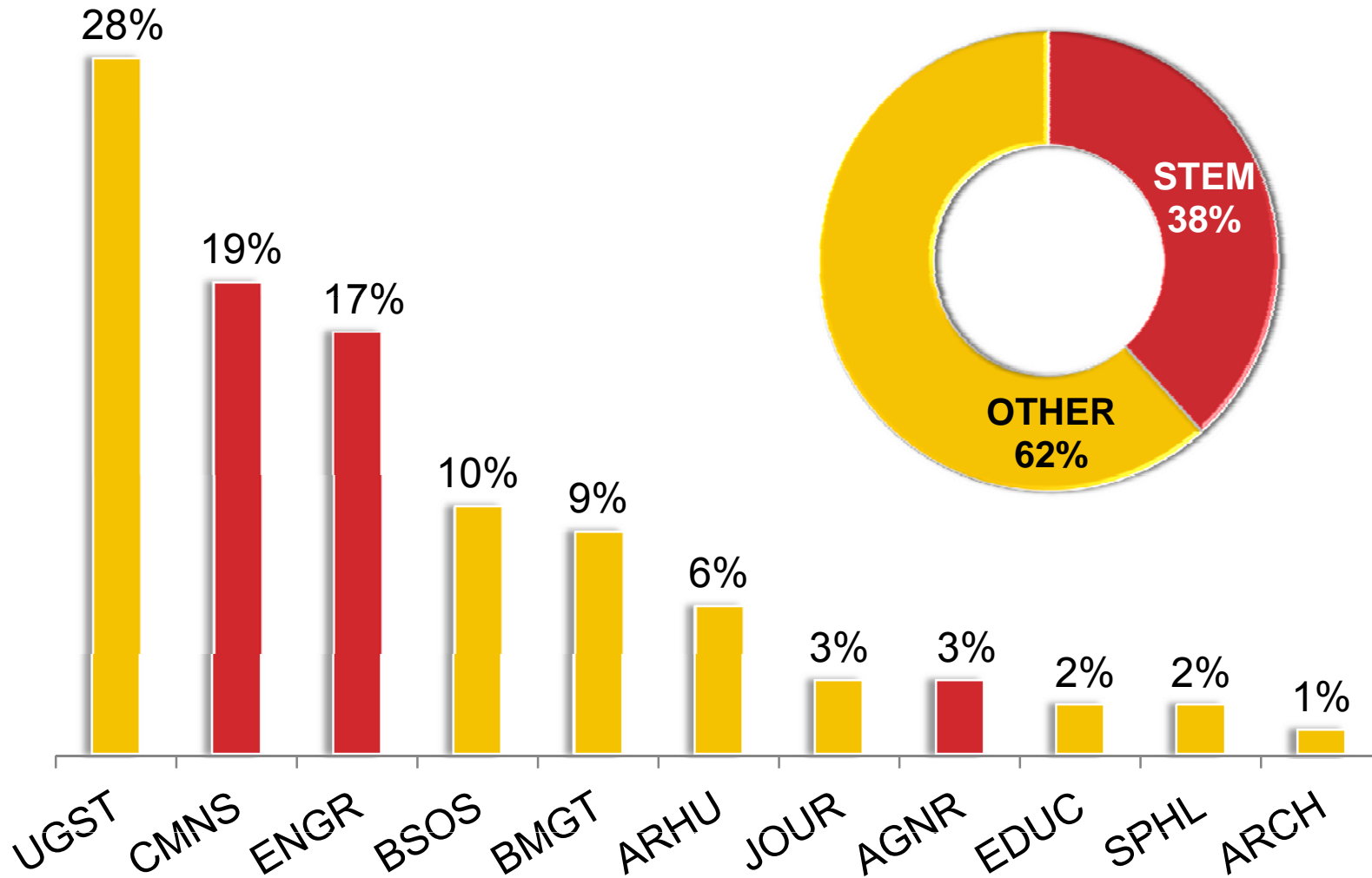
■ Very much a reason ■ Somewhat a reason ■ Not a reason



Source: BSS11; responses may not sum to 100 due to rounding.

# FIRST SEMESTER EXPERIENCE: ENROLLMENT

# MAJORS: BY COLLEGE AND STEM



Note: Percentages may not sum correctly due to rounding.

Source: IRPA database

# TEN MOST POPULAR MAJORS AMONG FRESHMEN

- |                                   |                                   |
|-----------------------------------|-----------------------------------|
| 1. <b>General Biology</b>         | 6. <b>Computer Science</b>        |
| 2. <b>Engineering-Undecided</b>   | 7. <b>Physiology/Neurobiology</b> |
| 3. <b>Business-Undecided</b>      | 8. <b>Journalism</b>              |
| 4. <b>Psychology</b>              | 9. <b>Mechanical Engineering</b>  |
| 5. <b>Government and Politics</b> | 10. <b>Bioengineering</b>         |

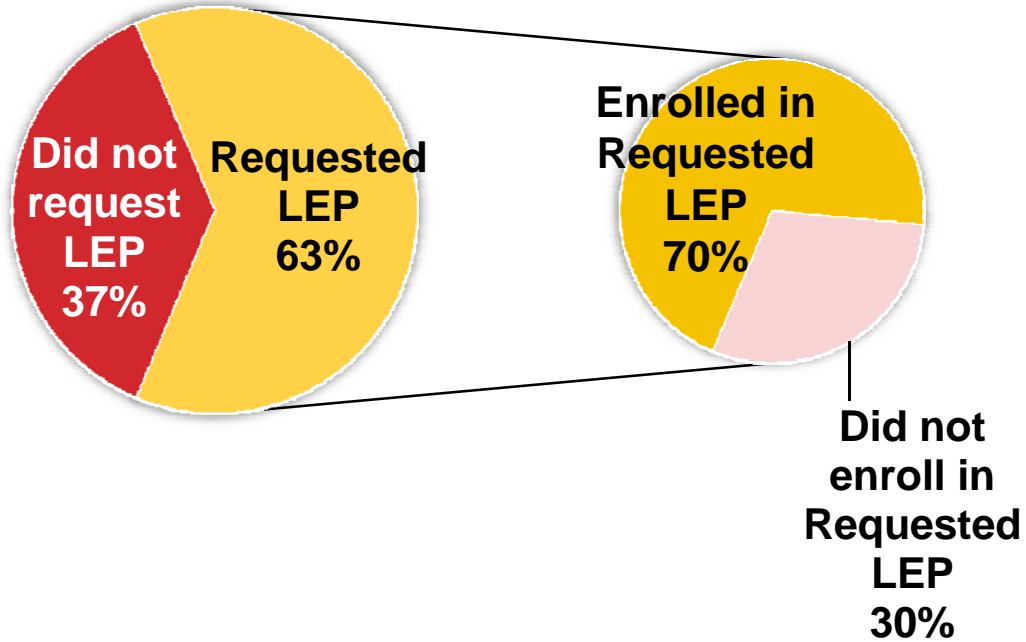
**But...25% of freshmen are undecided**

*Note: STEM majors are shown in red.*

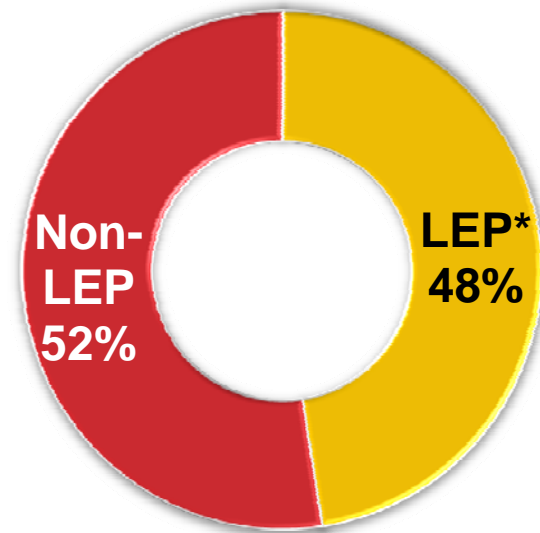
*Source: IRPA database*

# REQUESTED MAJOR / LEP ENROLLMENT

## Requested LEP Admission



## First-Semester Major Enrollment



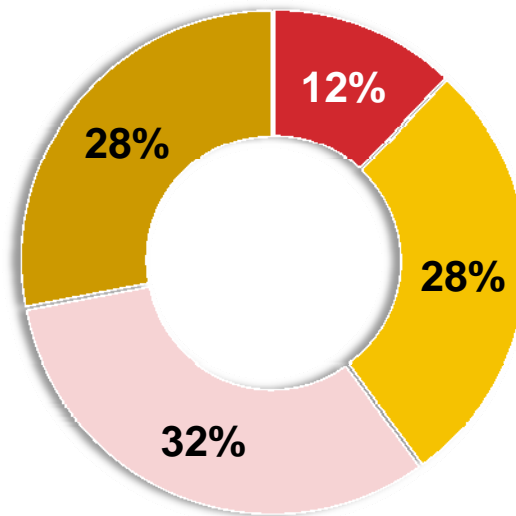
\*Includes students who were admitted to their requested LEP as well as those who switched to another LEP at orientation.

Source: IRPA database

# COURSES: INSTRUCTION

**Most freshmen have at least 2 courses taught by a tenured/tenure-track faculty member**

**Freshmen Taught by T/TTK Faculty**



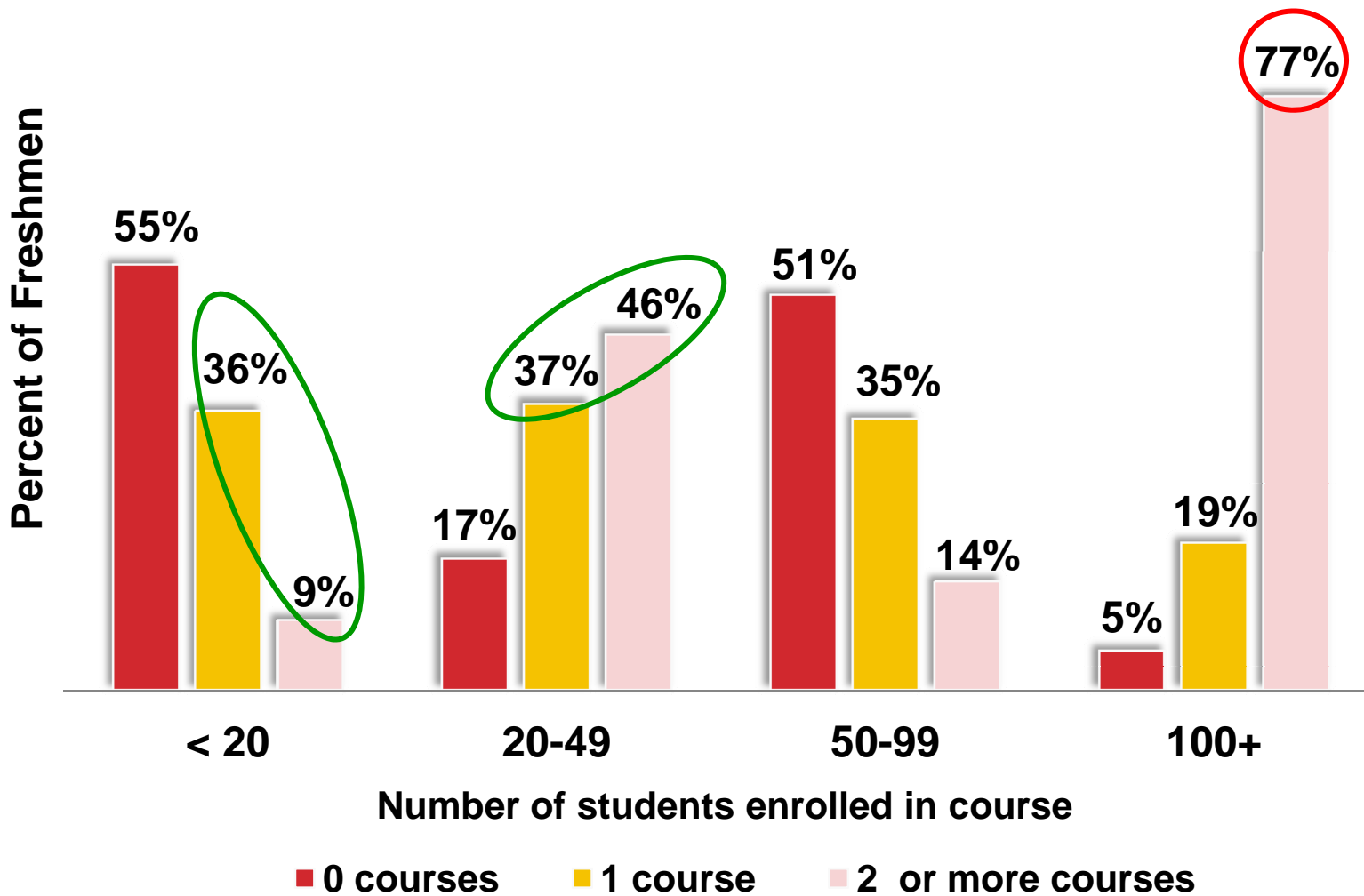
■ 0 courses ■ 1 course ■ 2 courses ■ 3+ courses

*Note: Only data for lead lecture courses are shown.*

*Source: IRPA database*



# COURSES: CLASS SIZE

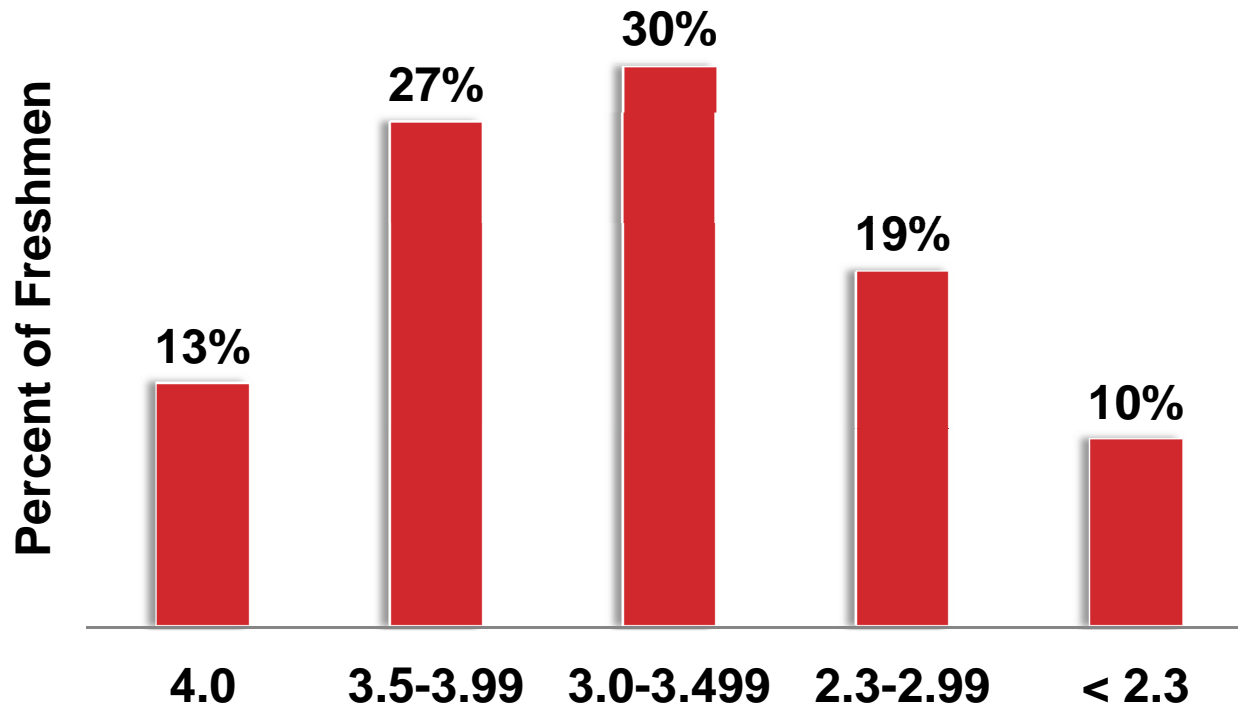


*Note: Only data for lead lecture courses are shown.  
Percentages may not sum to 100 due to rounding.*

*Source: IRPA database*

# FIRST SEMESTER EXPERIENCE: PERFORMANCE

# ACADEMIC PERFORMANCE



**5% of freshmen are placed on academic probation at the end of their first term**

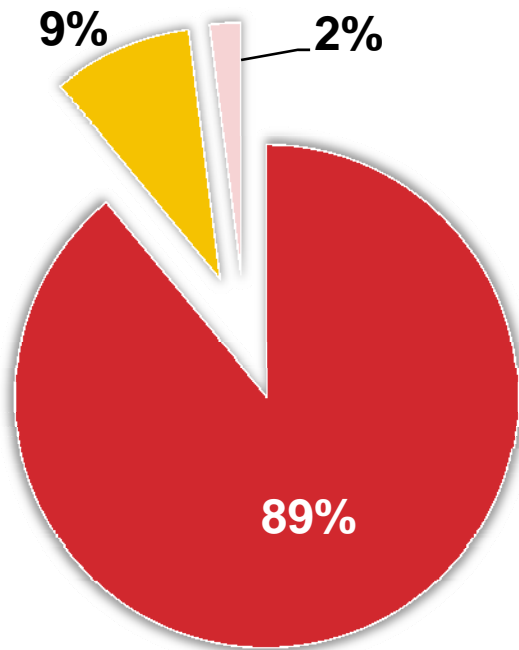
*Note: Percentages may not sum to 100 due to rounding.*

*Source: IRPA database*

# FIRST SEMESTER EXPERIENCE: PERCEPTIONS

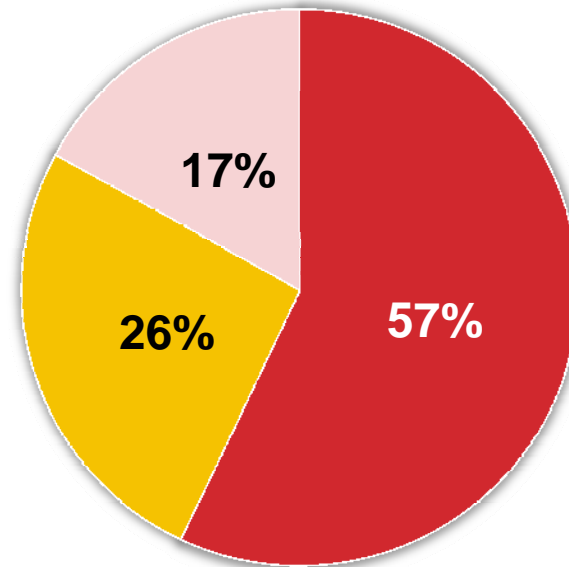
# UNIVERSITY OF MARYLAND

At present, my general attitude towards the University of Maryland is:



- Positive or Very Positive
- Neutral
- Negative or Very Negative

When I entered this institution, it was my:

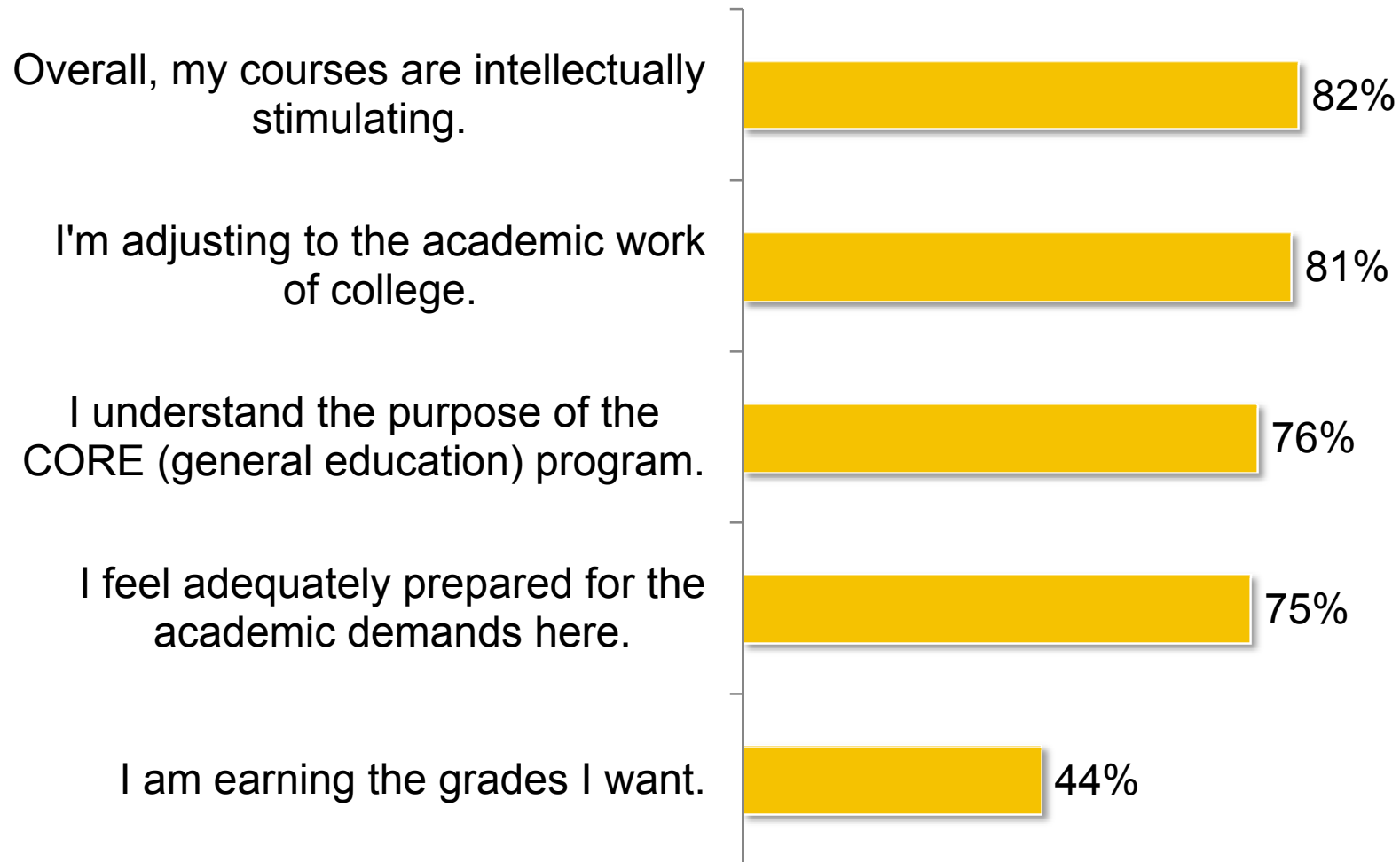


- 1st choice
- 2nd choice
- 3rd choice or lower

Source: BSS10

# ACADEMIC LIFE

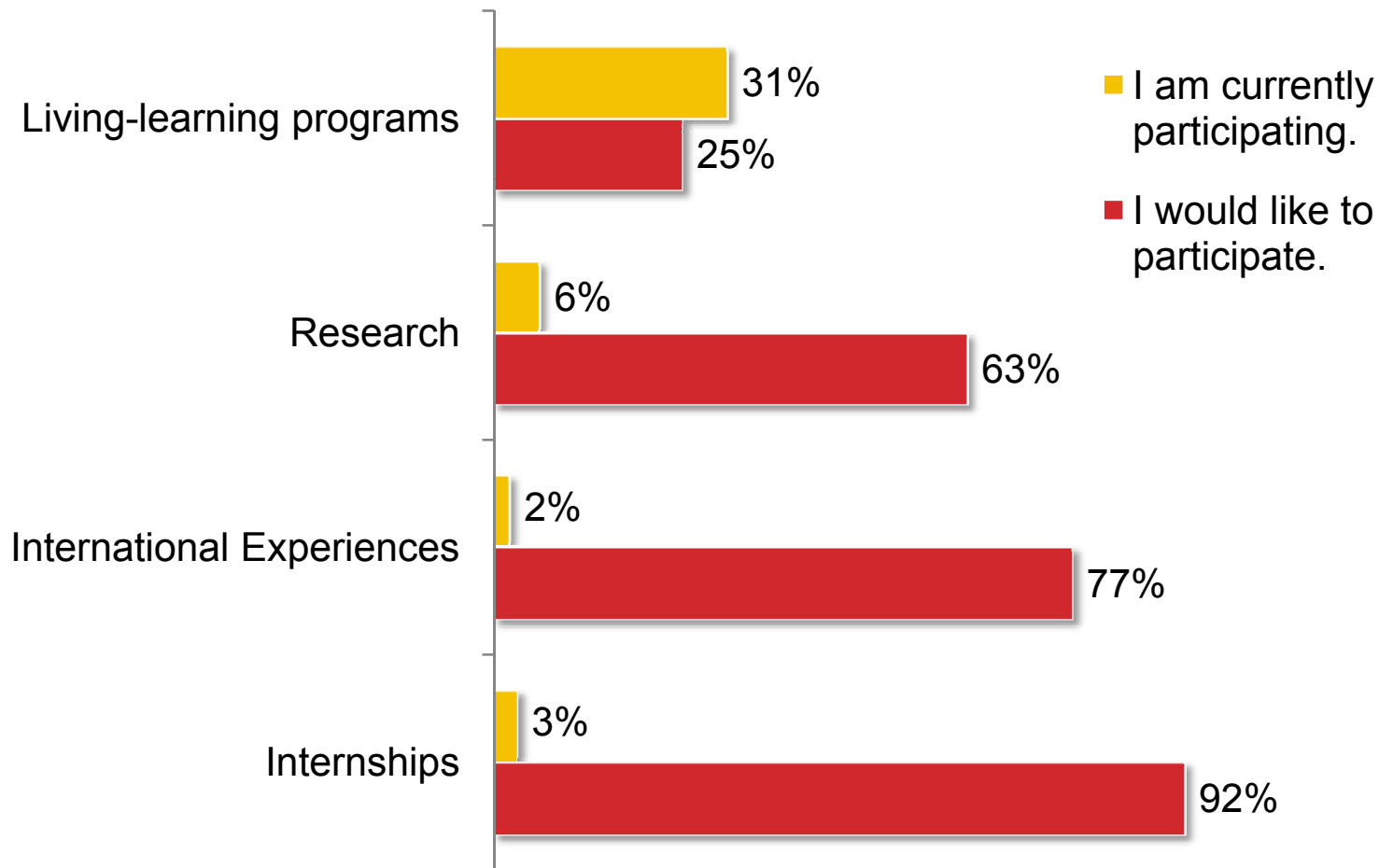
Percentage of freshmen who “Agreed” or “Strongly Agreed” ...



Source: BSS10

# FUTURE INVOLVEMENT

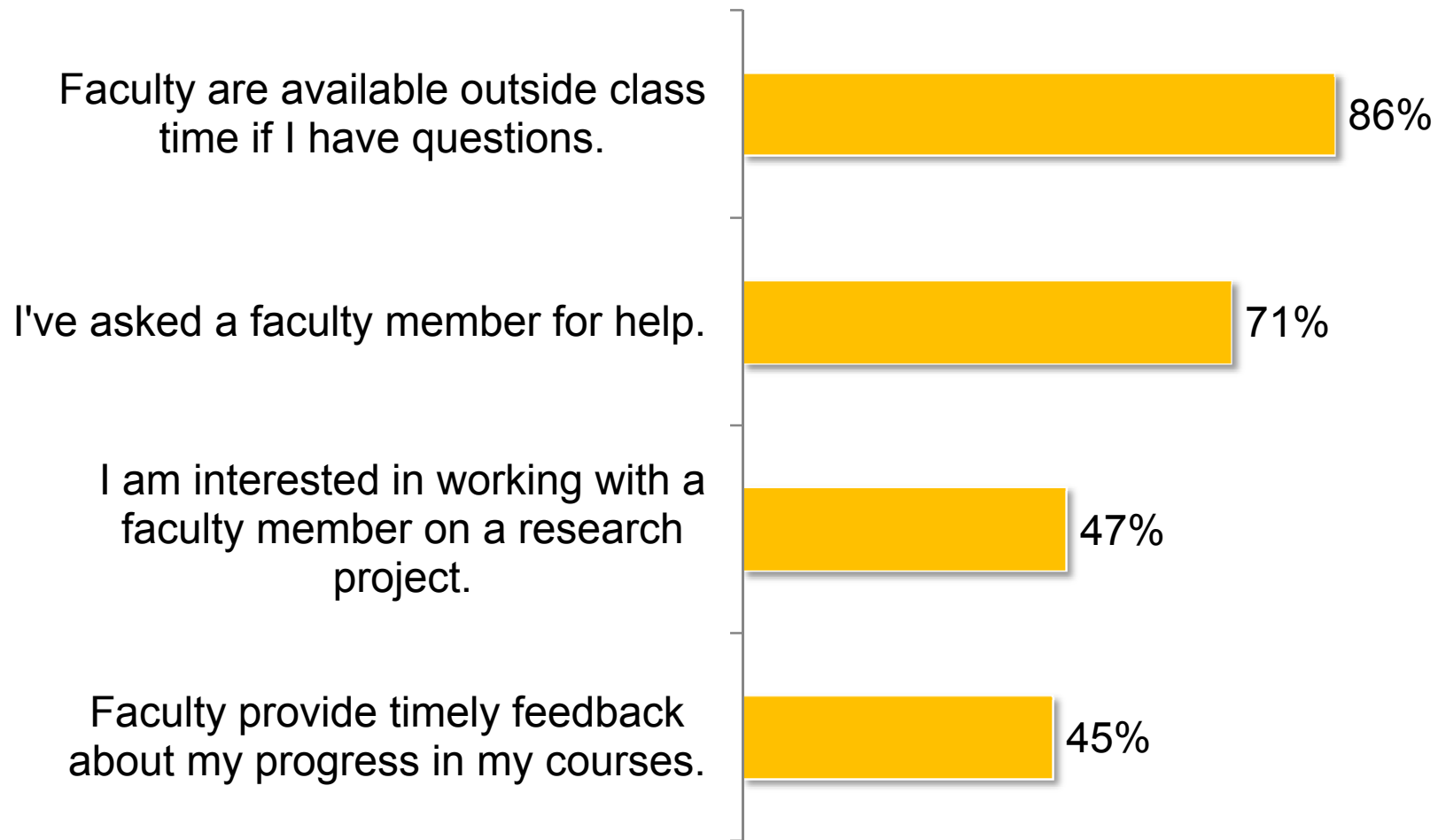
Percentage of freshmen who reported they are currently participating in or would like to participate in the following experiences:



Source: BSS11

# FACULTY

Percentage of freshmen who “Agreed” or “Strongly Agreed” ...



Source: BSS10



# CHALLENGES, OUTCOMES & RECOMMENDATIONS

MDAIR 2012

# CHALLENGES AND OUTCOMES

## DATA CHALLENGES

### **Managing nuances in the data**

- Identifying limited enrollment program applicants
- Linking students' courses to class size and faculty data

### **Working within the bounds of available data**

- Annual changes to BSS
- Unable to query CourseEval data

### **Interpreting and translating technical data for audiences with varied technical fluency**

## BROADER OUTCOMES

### **Improvements to the IRPA data warehouse**

- Discovered that there are duplicate courses in database that will have to be corrected
- Added a field to the warehouse to flag LEP applicants

### **Targeted dissemination of accessible and relevant information to key campus constituents**

# RECOMMENDATIONS

- **Evaluate your data and determine which questions you can answer**
- **Utilize existing campus surveys to complement IR data**
- **Leverage campus surveys to inform the institution's strategic goals**
- **Share your findings in a format that is easy to comprehend for non-data/technical audiences**
- **Anticipate the needs of your campus and conduct proactive analyses**

*A lot of times, people don't know what they want until you show it to them. – Steve Jobs*

# QUESTIONS?

## Contact Us

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