Tracking Lasers and Seekers in a Laser-like way

Spending time and effort
to track our students in a meaningful way

**Presentation at
RP Group Conference
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Presentation Outcomes

Understand:

- Why and how I created educational goal groups
- How we use them at our college
- Benefits of the research to our campus

Learn

- Research logistics of the project
- Tips for creating the groups on your own campus

Why did we create educational goal groups?

- Chabot's new strategic plan goal
- Peter Bahr's segmentation study
- ARCC and Scorecard reports
- Impatience of the researcher
- What my college needed

Chabot's Strategic Plan Goal

- Increase the number of students who achieve their educational goal in a reasonable time (outcomes)
    - How would Institutional Research measure that number?

- …by clarifying pathways and providing more information and support (methods)
    - College initiatives: methods to improve the number
    - How would they know who to target?

Bahr's segmentation study

- Grouped CCC students statewide
  - Based on what students *did*, not what they *said*

- Groups based on:
  - Course-taking and attendance patterns
  - Completion of transfer, degrees, and certificates

- Found 4 groups related to transfer/degrees/certs

- Surprise finding – Skills-builder group – 30%
  - Took 1 course at a time, occasionally
  - Obtained skills, not awards

Wanted to duplicate Bahr's study but…..

- Had to be done retroactively
- Could not group students during first term
- Could not monitor progress along the way
- Could not target interventions along the way

- Didn't want to wait until students left the college
- Wanted to group students when they started

ARCC →
Student Success Scorecard

- ARCC 2007-12
  - New student cohorts tracked for six years
  - Progress and completion rates
- Student Success Scorecard 2013 to present
  - Grouped by where they started in English/Math
  - Showed big differences in completion

Issues:
- Had to wait for 6 years to find out results
- Had to analyze progress of cohorts long gone

Needed at Chabot College

- Monitor progress of new student cohorts
  - Start monitoring immediately - in first semester

- Take into account differences in student types
  - Target initiatives / support services needed by each type
  - Increase time to completion for each student type

- Determine effect of initiatives as soon as possible

Student Types:
what we knew about students

- **Students had really different:**
  - Educational goals
  - Starting places
  - Speeds at which they were progressing

- **Wanted to group students in a simple way**
  - To take those factors into account

Creating educational goal groups for new students

Groups based on

Their educational goal

- Self-reported educational goal (why we used it)

How long they would take:

- How many units they took (full-time/part-time)
- Where they started (assessment in English)

Creating educational goal groups

Ed Goal	Units	English Assessment		Student Ed Goal Groups
Transfer or Degree (GE)	**Full-time**	College		**Laser** (FT) College
		Basic Skills		**Laser** (FT) Basic Skills
		Not Assessed		**Laser** (FT) Not Assessed
	Part-time	College		**Seeker** (PT) College
		Basic Skills		**Seeker** (PT) Basic Skills
		Not Assessed		**Seeker** (PT) Not Assessed
Undecided	6+ units			**Explorer**
Certificate or Job training	Full-time			**Career-builder FT**
	Part-time 6-11 units			**Career-builder PT**
Cert/Job/Und/ Pers Devel	Under 6 units			**Skills-builder**

10 student ed goal groups:
What percentage of each are your new students?

- Laser (FT) College
- Laser (FT) Basic Skills
- Laser (FT) Not Assessed
- Seeker (PT) College
- Seeker (PT) Basic Skills
- Seeker (PT) Not Assessed
- Explorer
- Career-builder FT
- Career-builder PT
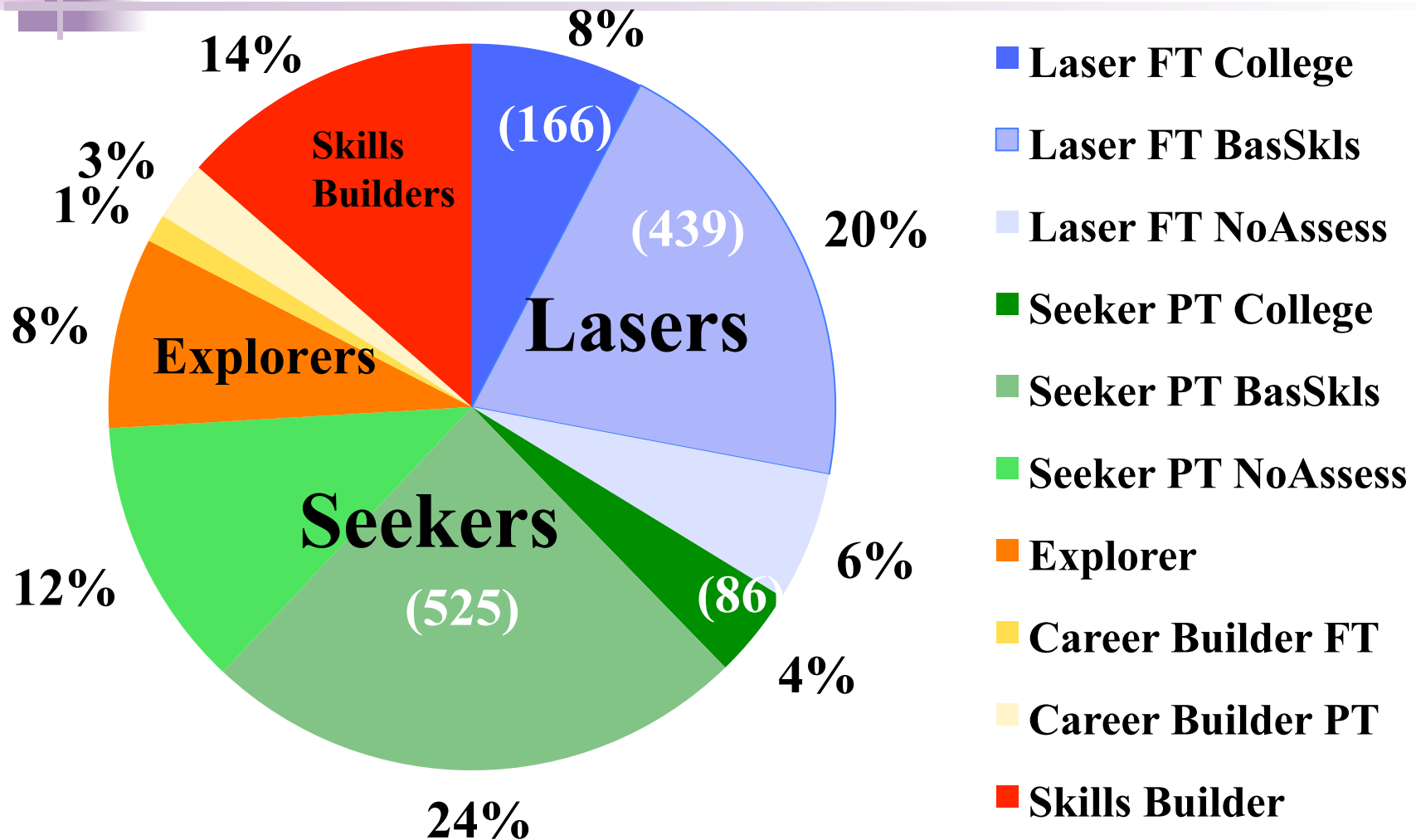- Skills-builder

10 student ed goal groups:
What percentage of each are your new students?

Consider which group might be:

- the largest group?
- the smallest group?
- the most changeable over time?

Chabot Fall 2013 New Students
Percentage in each Educational Goal Group

- Laser FT College
- Laser FT BasSkls
- Laser FT NoAssess
- Seeker PT College
- Seeker PT BasSkls
- Seeker PT NoAssess
- Explorer
- Career Builder FT
- Career Builder PT
- Skills Builder

8% (166) Lasers
20% (439)
6%
4% (86)
24% (525) Seekers
12%
8% Explorers
1%
3%
14% Skills Builders

Ed goal group revelations

- Only 8 percent were Laser FT College
  - Traditional college students
- Only 4 percent were Seeker PT College
- Largest groups: Laser/Seeker Basic Skills
  - Almost equally full-time and part-time
  - Very different needs
- We had Skills-builders: 14%
  - Could take them out of degree/transfer efforts

Student ed goal groups

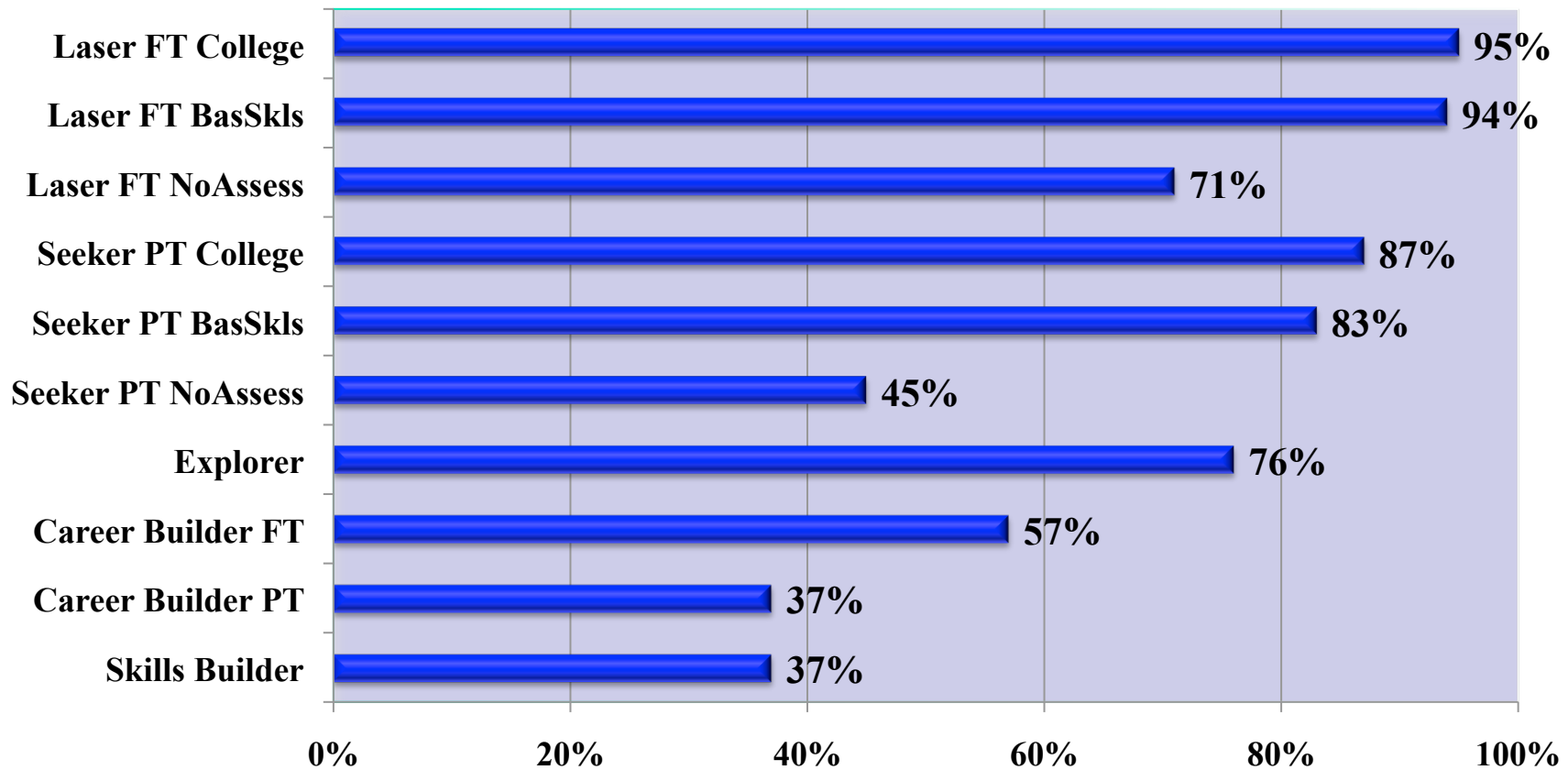- How did we know that these groups represented distinct groups of students?

Student ed goal groups look and behave differently by

- **Age (example on next page)**
- Gender
- Race-ethnicity
- Day vs. evening
- Early Decision
- Financial Aid
- Pct assessed in Math
- Math assessment levels
- Types of major

New Students 2012
Age by educational goal group

Percentage Age 19 or younger

Group	Percentage
Laser FT College	95%
Laser FT BasSkls	94%
Laser FT NoAssess	71%
Seeker PT College	87%
Seeker PT BasSkls	83%
Seeker PT NoAssess	45%
Explorer	76%
Career Builder FT	57%
Career Builder PT	37%
Skills Builder	37%

New Students 2012
Age by educational goal group

Percentage Age 30 or older

Goal Group	Percentage
Laser FT College	1%
Laser FT BasSkls	1%
Laser FT NoAssess	13%
Seeker PT College	1%
Seeker PT BasSkls	4%
Seeker PT NoAssess	25%
Explorer	6%
Career Builder FT	18%
Career Builder PT	36%
Skills Builder	25%

0%   20%   40%   60%   80%   100%
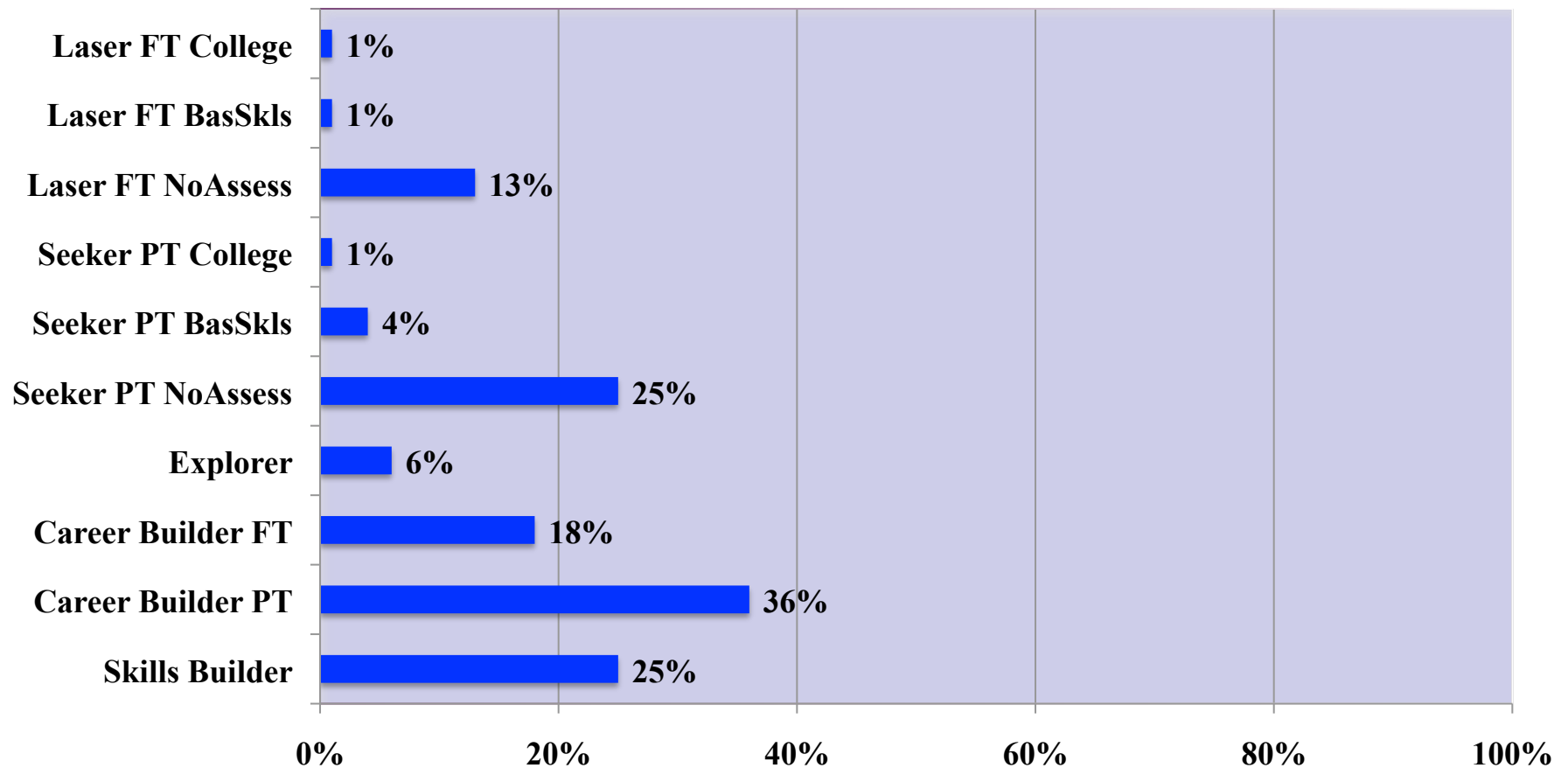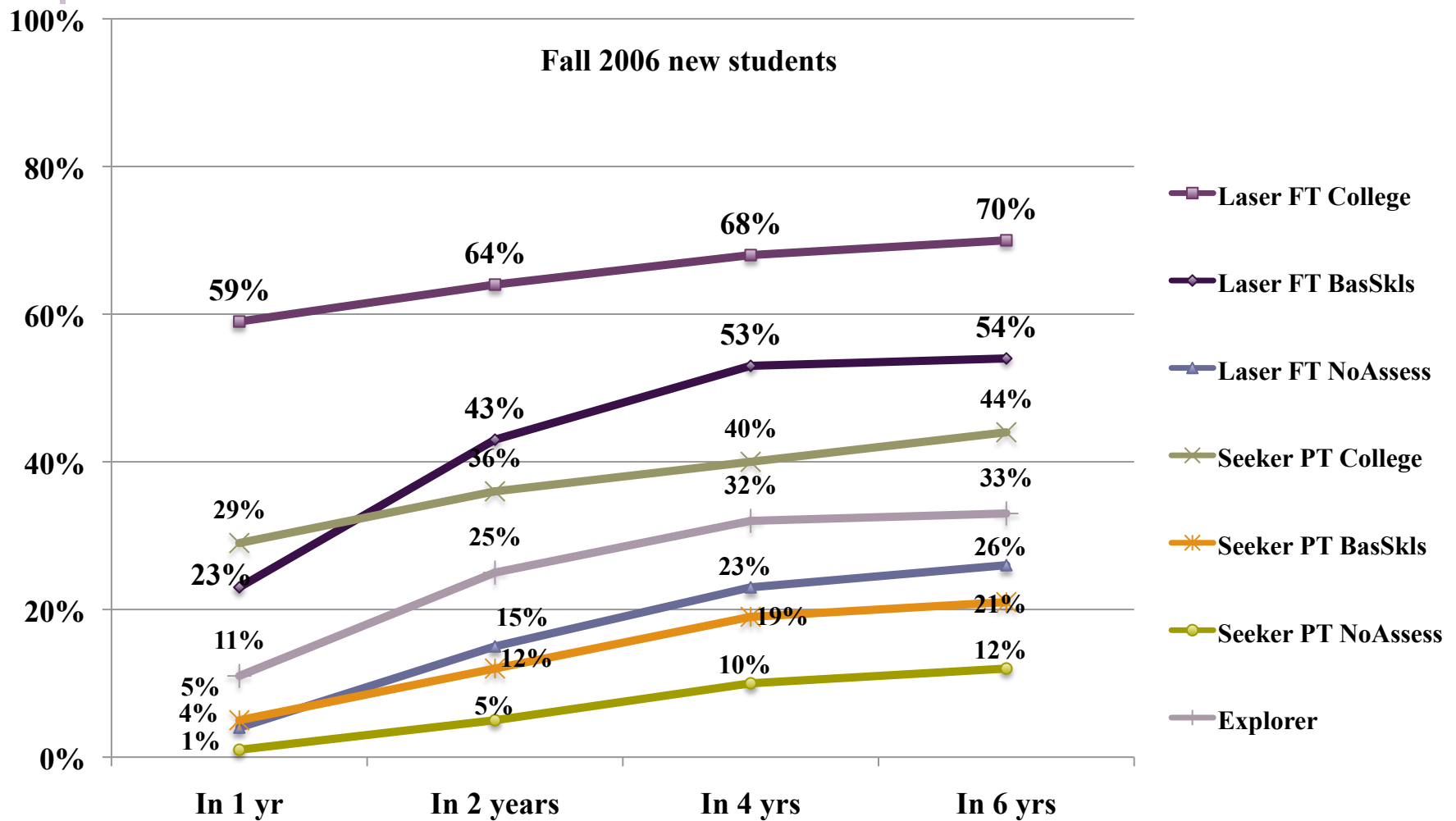
Student ed goal groups

- Ten different groups with different goals, different speeds, different starting places

- How will we know if they are making progress towards their educational goal?

- How do we know what is the 'reasonable time' it will take each group to achieve their educational goal?

Milestones towards ed goal for student groups

- **Early Engagement**
  - Enrolled in Basic Skills English or Math
- **Momentum**
  - Completed Basic Skills English or Math
  - Persistence
- **Progress**
  - **Completed College** Math or **English** **(next page)**
  - Earned Transferable units
  - Earned CTE units
- **Completion**
  - Earned certificates or degrees
  - Transfer ready / transferred

Milestone: Completion of College English by ed goal group by years

Fall 2006 new students

Legend:
- Laser FT College
- Laser FT BasSkls
- Laser FT NoAssess
- Seeker PT College
- Seeker PT BasSkls
- Seeker PT NoAssess
- Explorer

Data points:

	In 1 yr	In 2 years	In 4 yrs	In 6 yrs
Laser FT College	59%	64%	68%	70%
Laser FT BasSkls	23%	43%	53%	54%
Seeker PT College	29%	36%	40%	44%
Explorer	11%	25%	32%	33%
Laser FT NoAssess	5%	15%	23%	26%
Seeker PT BasSkls	4%	12%	19%	21%
Seeker PT NoAssess	1%	5%	10%	12%

We hoped: Student ed goal groups would allow us to:

- **Monitor progress of distinct student groups**
  - Determine if more were achieving milestones at each time point compared to previous cohorts of these groups

- **Target services needed by each group**

- **Monitor effect of initiatives on each group**

What we did

- Strategic Plan Goal developed in 2012
- Started new initiatives in Fall 2013
- Followed Fall cohorts 2013-2016
  - First Fall Census, end of First Fall, end of each year
- Developed Baseline milestone outcomes
  - Average of Fall Cohort outcomes 2010-2012
  - Compared to each subsequent cohort
- Focused on Lasers & Seekers
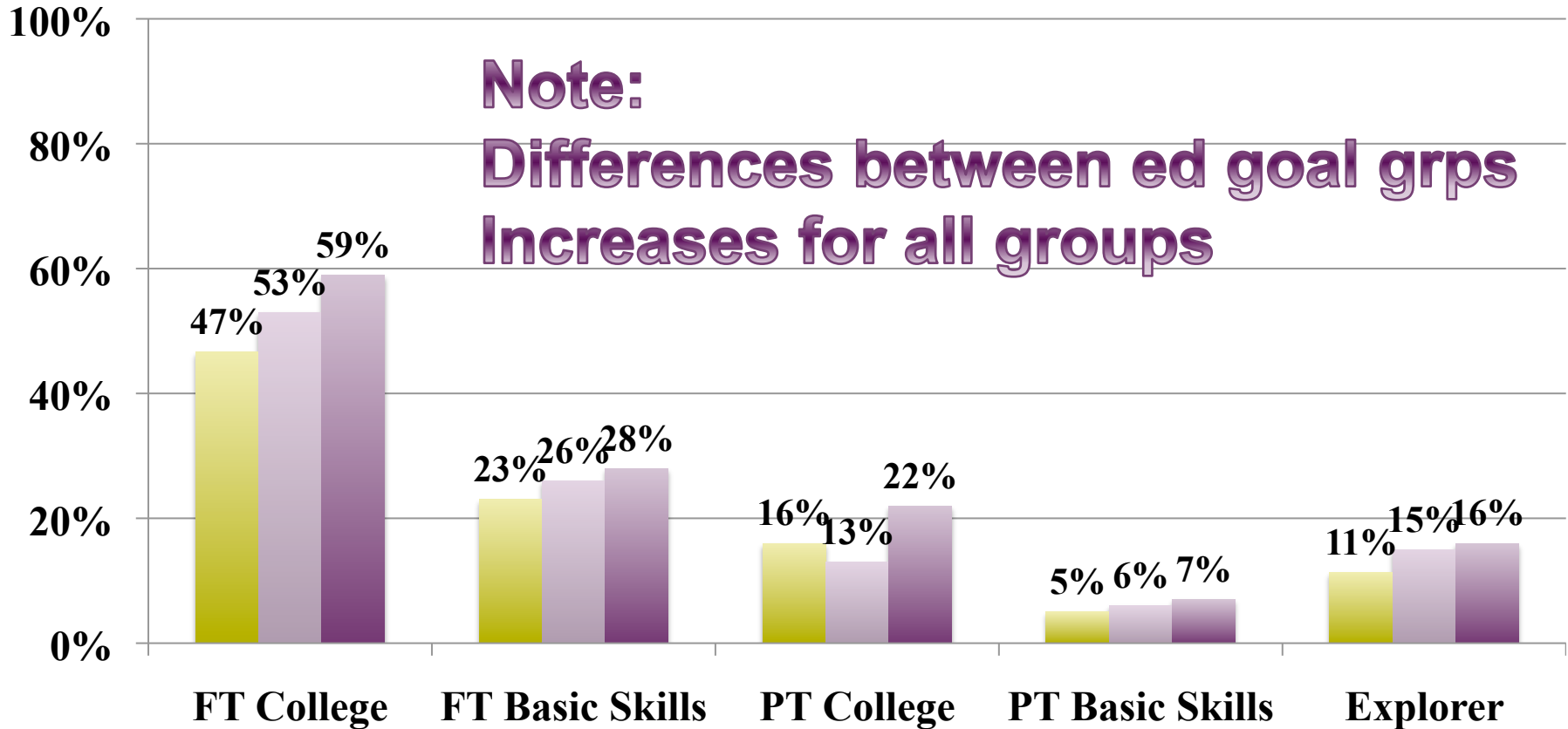 - Initiatives focused on increasing degree/transfer.

What we found

- The ed goal group differences persisted
  - **Example: College Math by second year**

Milestone by Second Year
Completed College Math

Legend: ■ Average F10-F12 ■ Fall 13 ■ Fall 14

Note:
Differences between ed goal grps
Increases for all groups

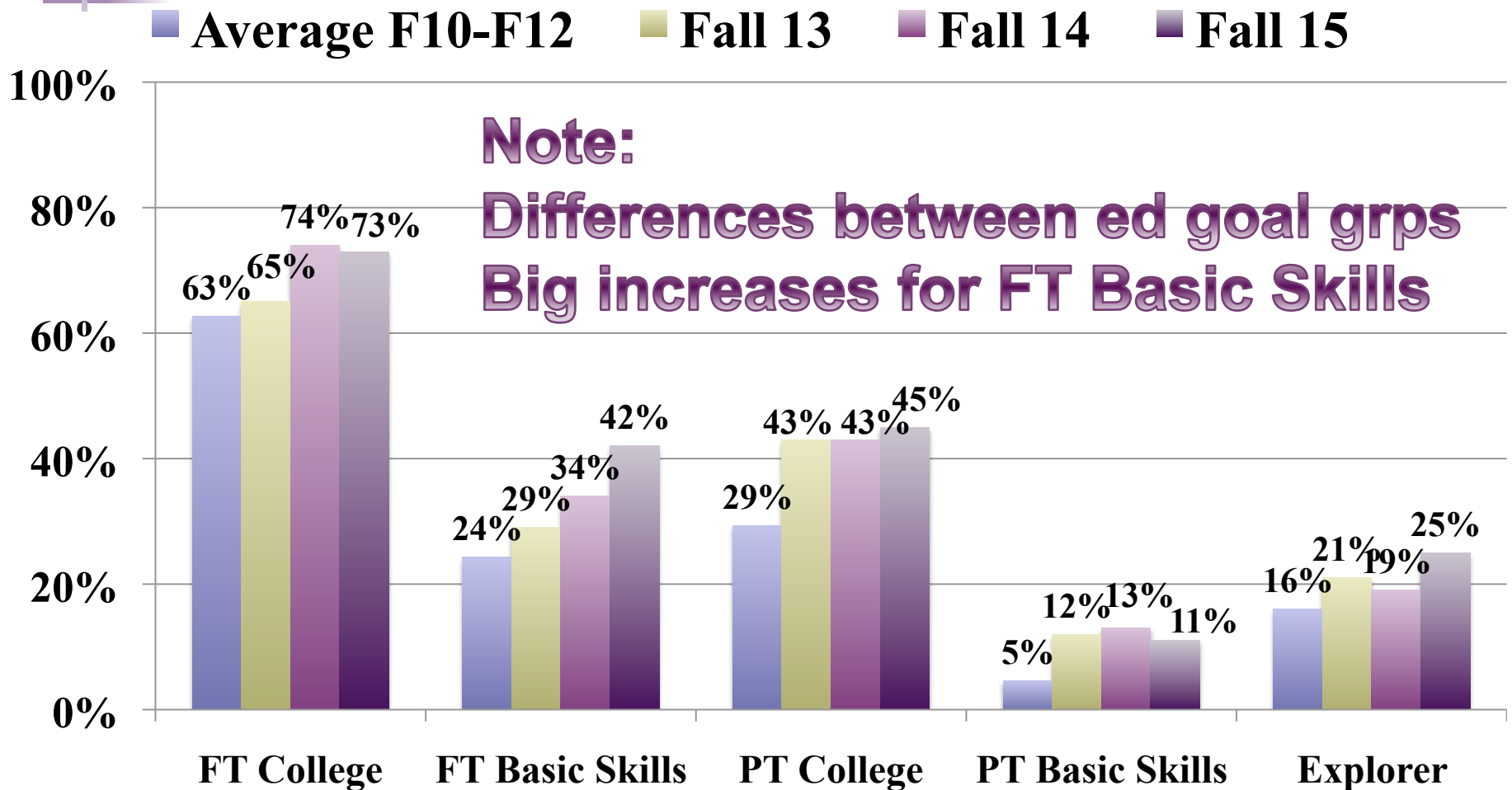| Category	Average F10-F12	Fall 13	Fall 14
FT College	47%	53%	59%
FT Basic Skills	23%	26%	28%
PT College	16%	13%	22%
PT Basic Skills	5%	6%	7%
Explorer	11%	15%	16%

What we found

- The ed goal group differences persisted
    - Example: College Math by second year
- Some improvements within ed goal groups
    - **Example: College English by first year**

Milestone by First Year
Completed College English

Legend: Average F10-F12, Fall 13, Fall 14, Fall 15

Note:
Differences between ed goal grps
Big increases for FT Basic Skills

FT College: 63%, 65%, 74%, 73%
FT Basic Skills: 24%, 29%, 34%, 42%
PT College: 29%, 43%, 43%, 45%
PT Basic Skills: 5%, 12%, 13%, 11%
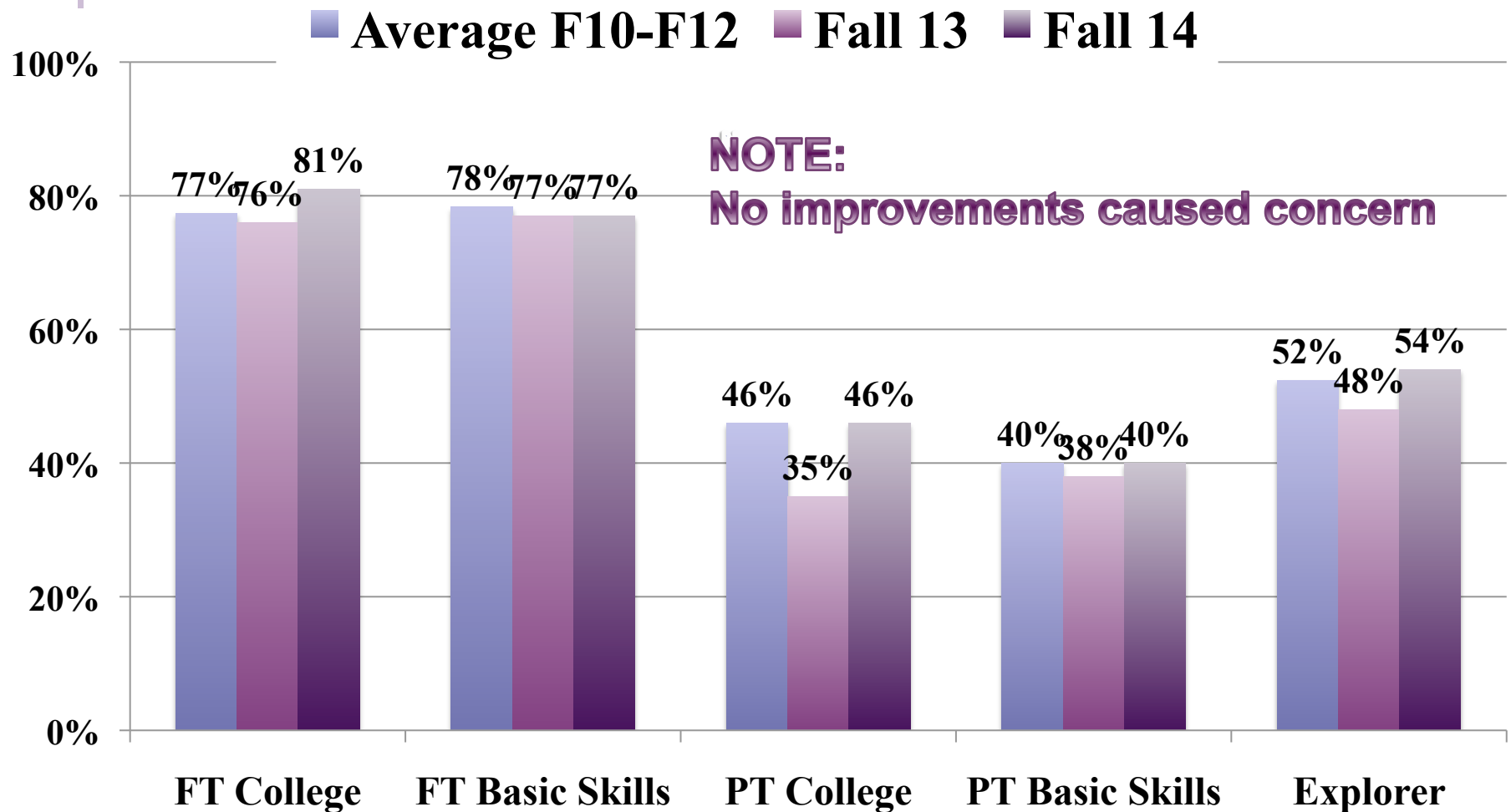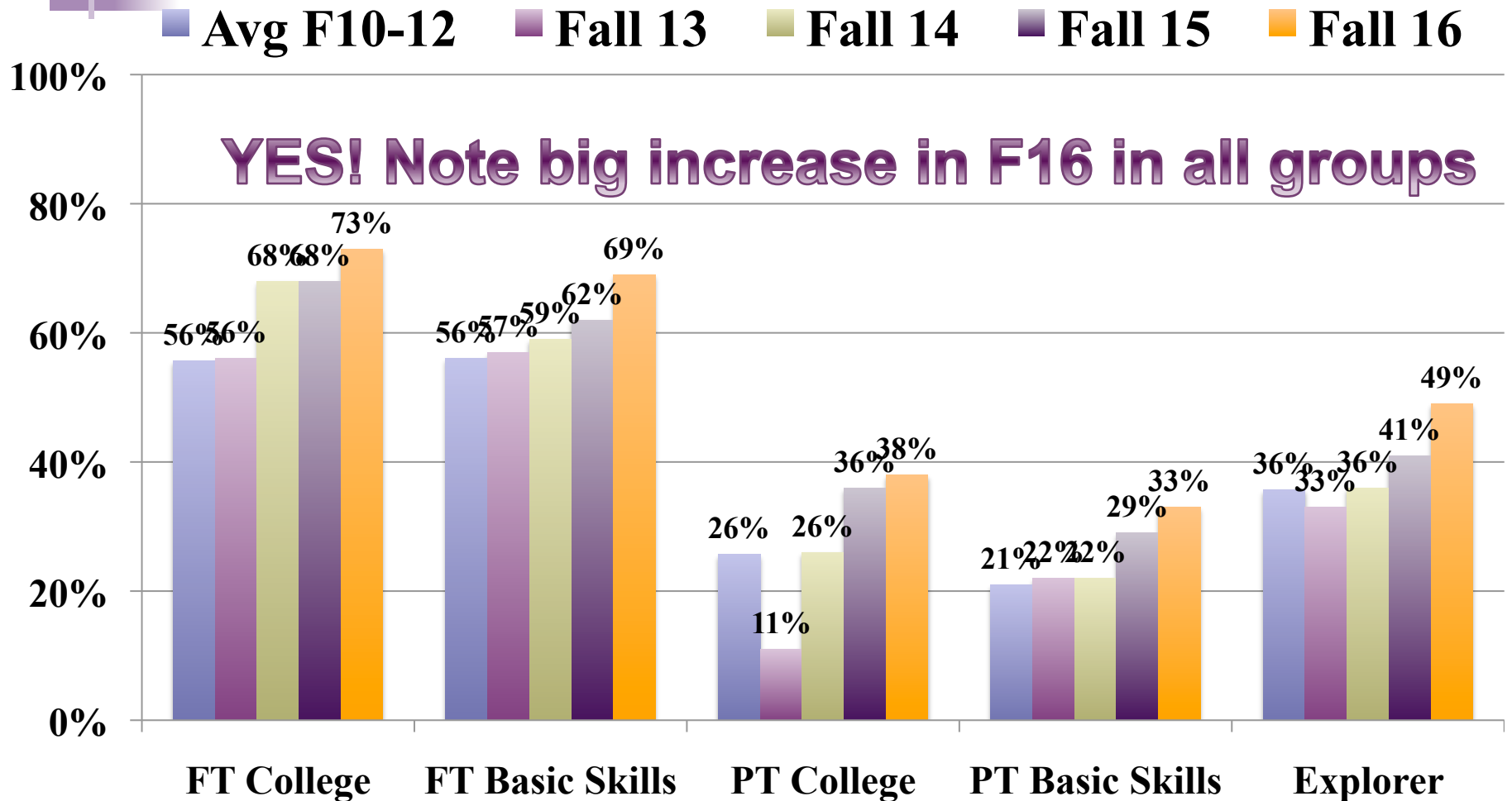Explorer: 16%, 21%, 19%, 25%

What we found

- The ed goal group differences persisted
  - Example: College Math by second year
- Some improvements within groups
  - Example: College English by first year
- Some non-improvements within groups
  - **Example: Enrolled in any math by 1st year**

Milestone by First Year
Enrolled* in Any Math Course
*Enrollment percentages reflect availability of classes as well as access

Legend: ■ Average F10-F12 ■ Fall 13 ■ Fall 14

NOTE:
No improvements caused concern

Chart data:

Category	Average F10-F12	Fall 13	Fall 14
FT College	77%	76%	81%
FT Basic Skills	78%	77%	77%
PT College	46%	35%	46%
PT Basic Skills	40%	38%	40%
Explorer	52%	48%	54%

What we found

- **The ed goal group differences persisted**
  - Example: College Math by second year
- **Some improvements within groups**
  - Example: College English by first year
- **Some non-improvements within groups**
  - Example: Enrolled in any math by 1st year – concern!
- **Some college initiatives made a difference**
  - **Example: Enrolled in any math in first fall**

Milestone by First Fall
More enrolled in Any Math Course?

Legend: Avg F10-12 ■ Fall 13 ■ Fall 14 ■ Fall 15 ■ Fall 16

YES! Note big increase in F16 in all groups

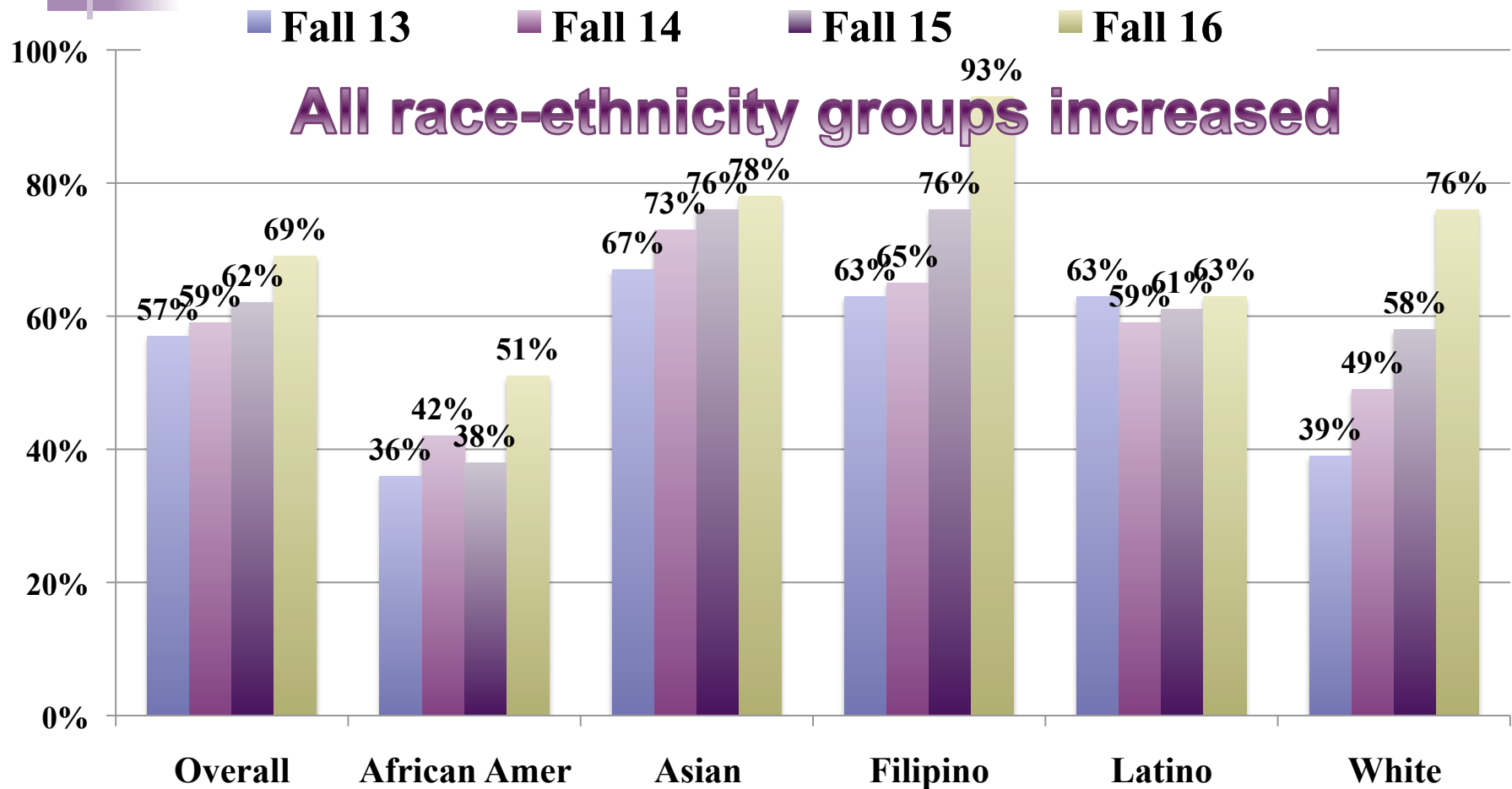| Group	Avg F10-12	Fall 13	Fall 14	Fall 15	Fall 16
FT College	56%	56%	68%	68%	73%
FT Basic Skills	56%	57%	59%	62%	69%
PT College	26%	11%	26%	36%	38%
PT Basic Skills	21%	22%	22%	29%	33%
Explorer	36%	33%	36%	41%	49%

Equity findings

- Some improvements were shared

  by all race-ethnicity groups
- Some differences by race-ethnicity persisted
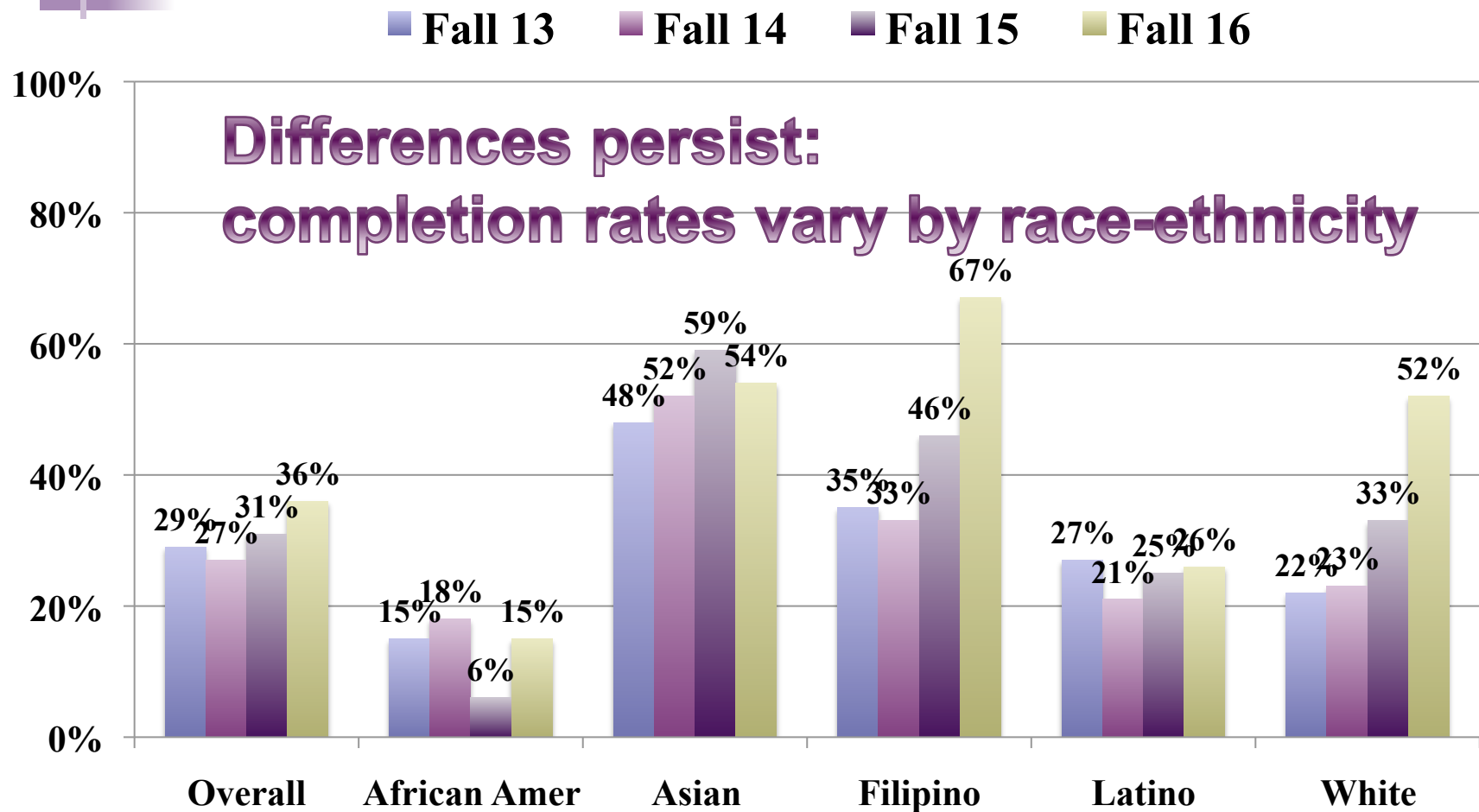- Some ed goal groups were more equitable

Milestone by First Fall
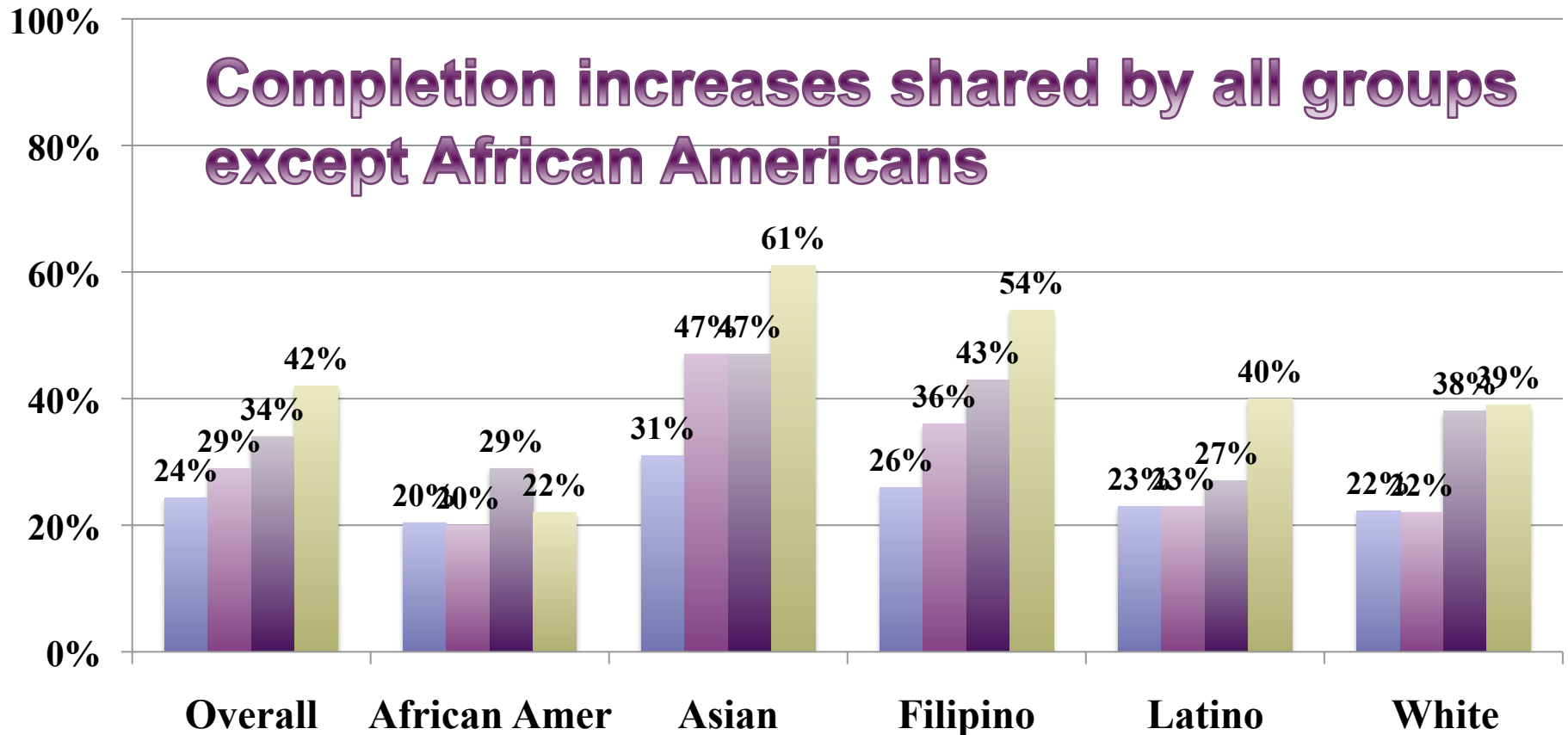## Enrolled in Any Math Course, by Ethnicity
Laser Full-time Basic Skills

All race-ethnicity groups increased

Legend: Fall 13, Fall 14, Fall 15, Fall 16

Overall: 57%, 59%, 62%, 69%

African Amer: 36%, 42%, 38%, 51%

Asian: 67%, 73%, 76%, 78%

Filipino: 63%, 65%, 76%, 93%

Latino: 63%, 59%, 61%, 63%

White: 39%, 49%, 58%, 76%

Milestone by First Fall
Completed Any Math Course, by Ethnicity
Laser Full-time Basic Skills

Legend: ■ Fall 13 ■ Fall 14 ■ Fall 15 ■ Fall 16

Differences persist:
completion rates vary by race-ethnicity

Overall: 29%, 27%, 31%, 36%
African Amer: 15%, 18%, 6%, 15%
Asian: 48%, 52%, 59%, 54%
Filipino: 35%, 33%, 46%, 67%
Latino: 27%, 21%, 25%, 26%
White: 22%, 23%, 33%, 52%

Milestone by First Year
Completed College English, by Ethnicity
Laser Full-time Basic Skills

■ Average F10-F12   ■ Fall 13   ■ Fall 14   ■ Fall 15

Completion increases shared by all groups except African Americans

Ethnicity	Average F10-F12	Fall 13	Fall 14	Fall 15
Overall	24%	29%	34%	42%
African Amer	20%	20%	29%	22%
Asian	31%	47%	47%	61%
Filipino	26%	36%	43%	54%
Latino	23%	23%	27%	40%
White	22%	22%	38%	39%

Milestone by First Year
Completed College English, by Ethnicity
Laser Full-time College

■ Average F10-F12　■ Fall 13　■ Fall 14　■ Fall 15

For Laser FT College, outcomes more equal

	Overall	African Amer	Asian	Filipino	Latino	White
Average F10-F12	63%	41%	74%	83%	56%	62%
Fall 13	65%	53%	70%	62%	64%	61%
Fall 14	74%	67%	78%	90%	55%	67%
Fall 15	73%	60%	81%	72%	68%	81%
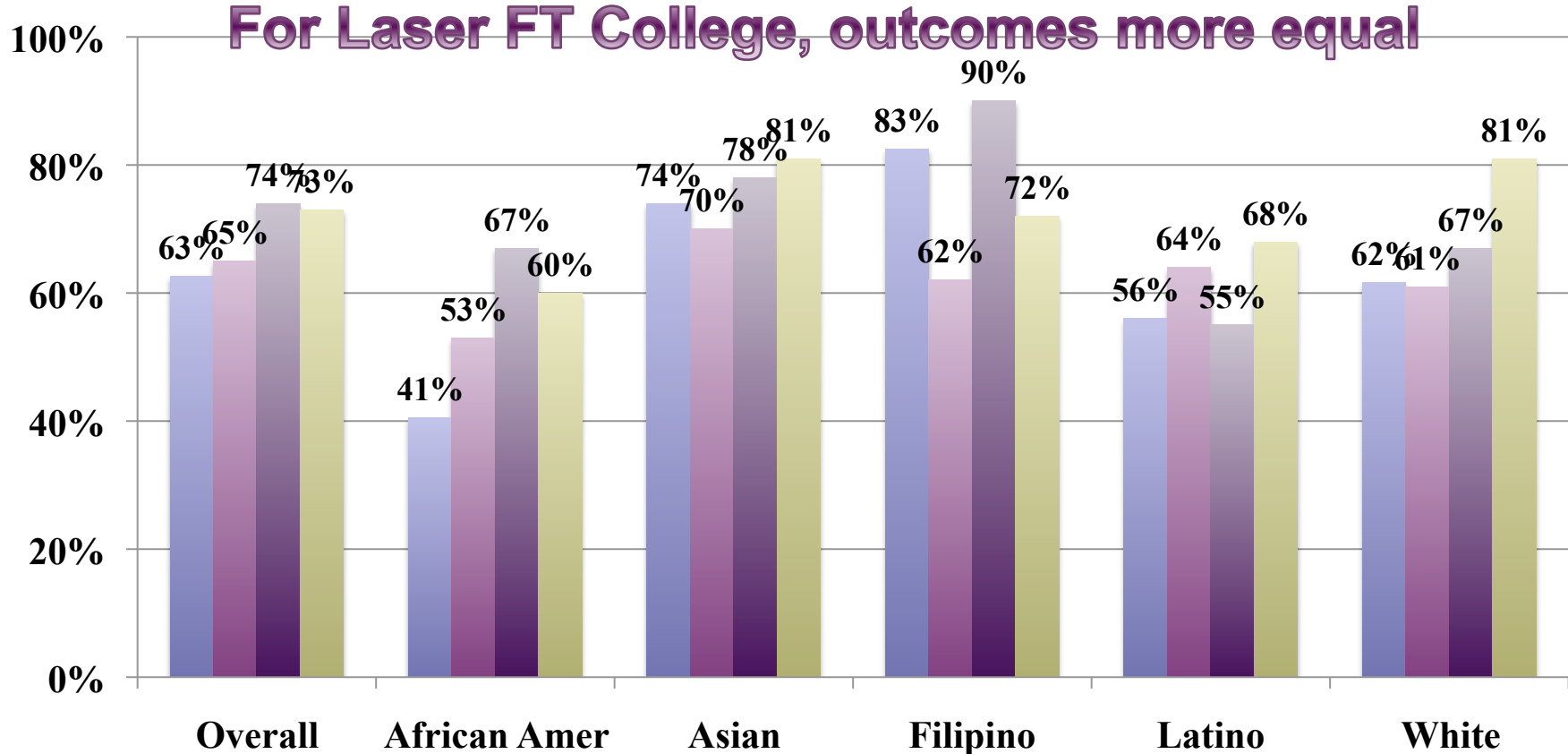
How we use the results at Chabot College

- Regular reports to planning committee (2/year)
    - See IR web page handout
    - Measuring Progress on the Strategic Plan
        - College focus on English and Math Bottlenecks
        - College focus on Equity in Basic Skills and College levels

- Tailored reports to Enrollment Management, Faculty prioritization, Basic Skills Committee, Math department.
    - More FTEF, focus on English and Math at all levels

How we use the results at Chabot College

- Regular synthesis reports to campus
  - One page summaries
  - See IR web page and handout
  - Get language of ed goal groups out to campus
- Use ed goal groups when describing programs
  - First Year Experience (FYE) student characteristics
  - Special Programs student characteristics
- Use groups to focus grant and other initiatives
 - FYE and HSI grants targeted Laser FT Basic Skills

What we learned

- Not only College vs Basic Skills or FT vs PT
  - BOTH are important – the intersection →4 diff groups
- Biggest change may be changing their group
  - Rise of FT Laser College (due to lowering cut scores)
- Can improve enrollment easier than success
  - Note enrollment to success drop: BS Eng / College Math
- Some progress milestones could be improved
  - Basic Skills to College English completion
  - Enrollments in math in First Fall

Chabot Fall 2016 New Students
More students are Laser FT College!
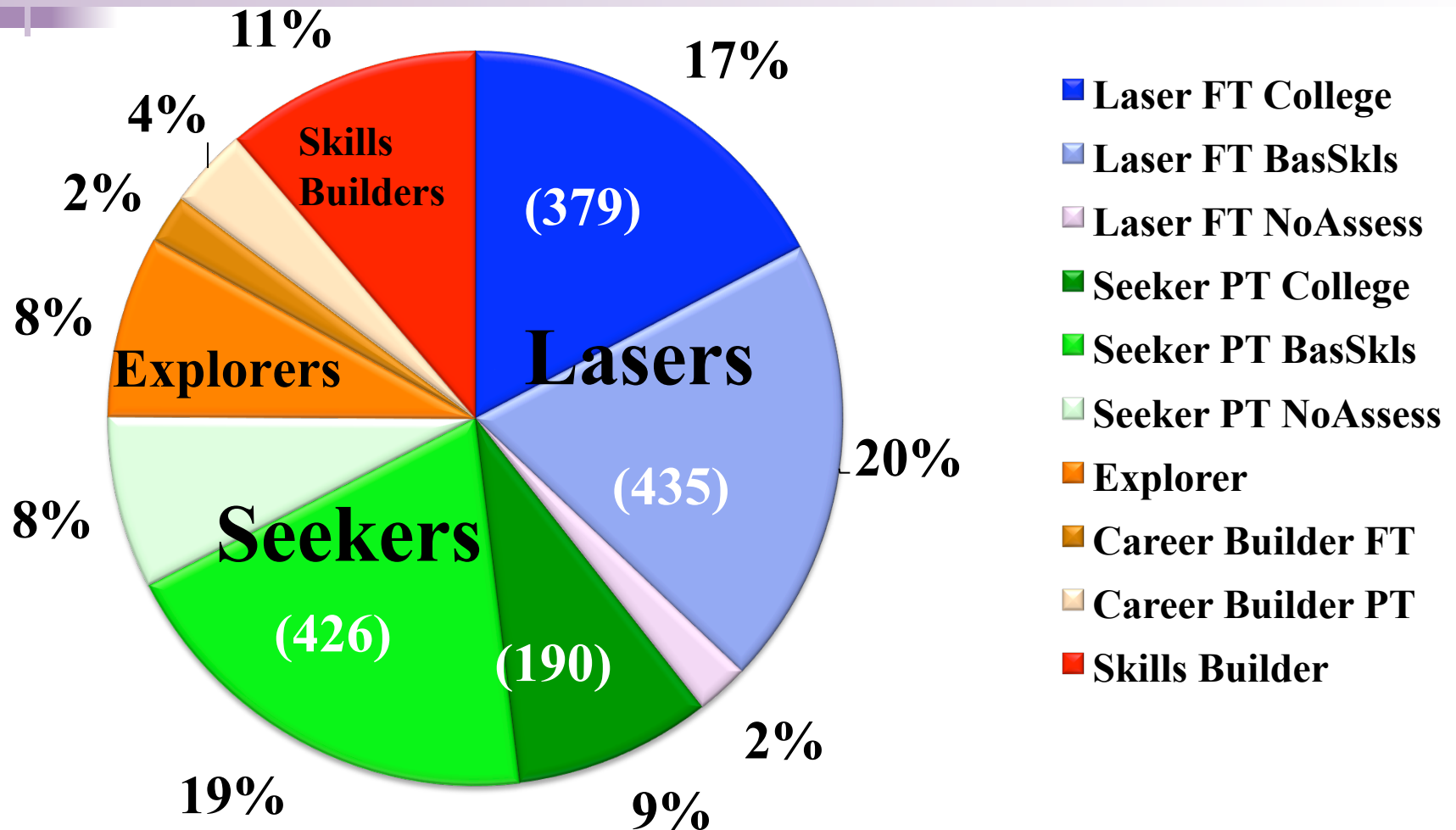
How Chabot has benefited

- Have common language to talk about student groups
- Know which students our programs reach
- Can plan programs with certain groups in mind
- Understand different types of support needed
- Have pinpointed where progress is and is not
- Initiatives can be targeted to address bottlenecks

Research nitty gritty

- Decided on ed goal group definitions
- Checked data for each variable
- Research Analysts programmed it
  - carefully and consistently
- Entered cohort data into Excel files carefully
  - Student characteristics and progress indicators
  - Lots of Laser College Student Assistants!
- Were willing to redo cohort data if errors found
  - Changing defs of new students, assessment coding
- Created trend charts consistently

How to develop and use ed goal groups

- Decide on group definitions
- Check your own data for each variable
- Develop consistent programs
- Create Excel or Tableau cohort databases
  - Automated or student labor?
  - Plan for cohorts at milestones
- Be willing to redo cohort data if errors found
- Create trend charts consistently
- Use the groups in all presentations

Questions? Thoughts?

Implications for your campus

Discussion questions:

- Do you know what ed goal groups your students are in?
- What would your college do if they knew these groups?
- Do you do cohort tracking now, and how do you use it?
- If not, would your college benefit from cohort tracking?
- How would they use the information?
- How do you or would you communicate findings with your college and get them involved?