

What have we done so far?

# December 2017 – District Workgroup

## **Assessment Workgroup**

- The group agreed to approach re-envisioning assessment in the district as follows:
- Form three workgroups:
  - English, Math, ESOL
- The workgroup will be comprised of:
  - 2 discipline faculty from each college
  - Discipline faculty from Continuing Education
  - Articulation Officer
  - Counselor
  - One faculty from another discipline
- A VPI will facilitate each group

# January 2018 – Math Workgroup

## ***Workgroup Charge:***

- The group discussed the role of the task force and decided on the following:
  - Make changes to how students are assessed in order to meet the requirements of AB705.
  - Decide on which students get an MMAP score and how do we place students without an MMAP score.
  - Focus on what placement means for our students
  - Take into consideration the different populations at the different colleges
- Develop a means of assessing high school students both in terms of placing in CCAP courses and on campus classes.

# January 2018 – Math Workgroup

## ***Data demonstration and discussion :***

- Bridget Herrin presented on district wide data on placement, course success and completion for math only. Data are attached.
  - These data clearly demonstrated the difference in population between the three credit colleges.
- They also demonstrated a huge disproportionate impact for placement, success and retention by gender, age and DSPTS.

# January 2018 – Math Workgroup

## ***Placement Assistant:***

- The questions and rubric used by Mesa college were discussed and presented
- Placement assistant allows students to self-place based on the last math class they have taken plus their GPA and the major they are considering.
- International students and CE students unless they have a GED and GPA cannot use this.
- Bridget indicated that using CCC apply data will allow students to self-place
- Currently students have to come to campus to use Placement Assistant

# January 2018 – Math Workgroup

## ***Placement Assistant:***

Placement is done in several different ways currently.

- How recently the student had taken a math course
- Placement test
- MMAP
- Challenge test
- Transcripts
- Miramar and Mesa allow students to challenge all levels of Math. City only allows challenges for courses without a means of placement.
- There was a great deal of discussion about finding the “perfect” placement method. The conclusion was that we would like to be able to predict where to place students using the tools we have in an effective manner.

**MINIMUM REQUIREMENTS**

Last Math Class  $\leq 5$  yrs + GPA  $\geq 2.4$

**THEN....**

**High**

Precalculus or higher



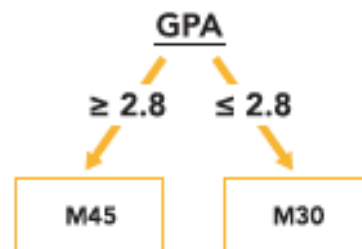
**Medium**

ALG II  
INT III  
TRIG



**Low**

ALG I  
GEO  
INT I  
INT II



**RECOMMENDATION BASED ON MAJOR**

**Stem**

M50 → MATH 104  
M45 → MATH 96  
M30 → MATH 46

**Business**

M50 → MATH 119/116 or BUSE 115  
M45 → MATH 119 or BUSE 115  
M30 → MATH 92

**Teaching**

M50 → MATH 210A  
M45 → MATH 119  
M30 → MATH 92

**Humanities**

M50 → MATH 119/118  
M45 → MATH 119/118  
M30 → MATH 92

**Social Sciences**

M50 → MATH 119 or PSYC 258  
M45 → MATH 119 or PSYC 258  
M30 → MATH 92

# Pathways

## Overview of College Math Pathways

- MATH 46 → 96 or 96X  
(STEM or all others)
- MATH 47A → MATH 115  
(Statway: Statistics track for liberal studies and some behavioral sciences; Non-Stem)
- MATH 48A → MATH 109  
Business, Non-STEM, Life Science
- MATH 92 → MATH 118, 119  
(Non-STEM)
- MATH 96X → 104, 107, 116, 119, 118, 210A  
(STEM and Business)



# February 2018 – Math Workgroup

- **Reviewed data from Mesa's Placement Assistant:**  
Mesa College implemented a pilot for using the PA and shared results.
- **Moving forward:** How are we going to use the information we have to change the way we assess students better for placement?

# March 2018 – Math Workgroup

We need to address how we will place students that don't fit with the Placement Assistant and identified several groups of students:

1. International Students
2. Students who have not taken math for more than 5 years
3. Students whose GPA is lower than 2.4
4. CE students
5. Home-schooled students
6. Students graduating high school with a modified curriculum (DSPS students)
7. Dual enrollment/high school students

Assessment offices at the colleges need to be brought in the loop and trained in order to "administer" the placement assistant.

# April 2018 – Math Workgroup

Outlined the proposed pathways from Continuing Education mathematics to College mathematics. We looked at the continuing education math courses and determined what placement students should get after completing a CE sequence:

**For example:**

**High School Equivalent Program:**

- ABED 414 + ABED 443 + ABED 444 =

Enrollment in one of the following:

MATH 46, MATH 47A , MATH 48A, MATH 92, MATH 96X (with reservation)

# Math Department Meetings at Miramar

- We looked at and discussed the Placement Assistant and decided we would like to implement it in Fall 2018 at Miramar
- We talked to Councilors and they like it
- We talked to Assessment office and they like it
- We are waiting on decisions from the district as to how this will be implemented

# Math Department Meetings at Miramar

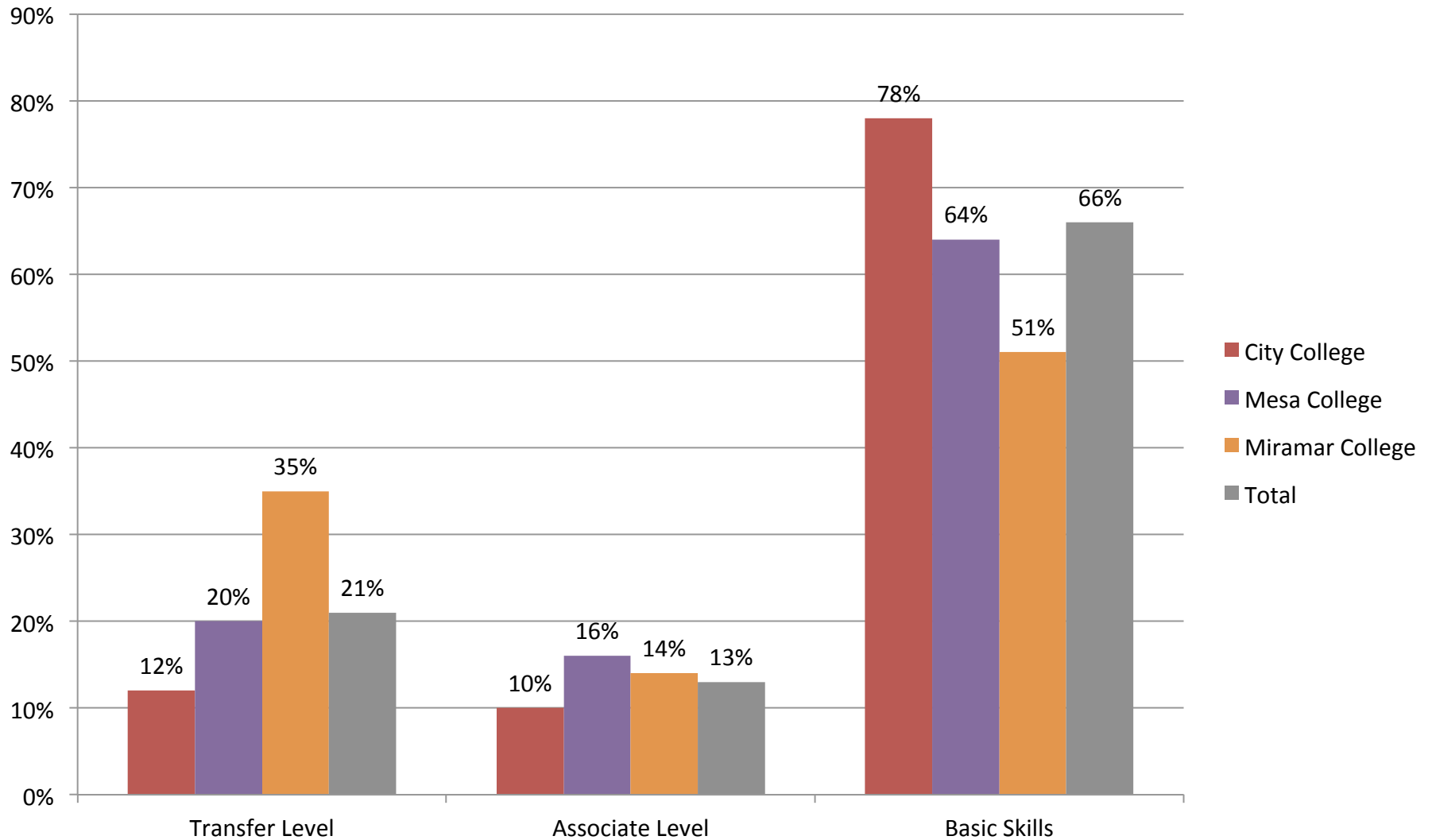
- We are offering a Statway course sequence now (started Fall 2017)
- We have written a math 96X course (Intermediate Algebra with Math 15B Support) and are offering two sections of 96X in Fall 2018
- We are starting to discuss designing and offering first-level transfer courses with support (Math104, Math 116, Math 119)

# District-wide Assessment Committee

Research Update

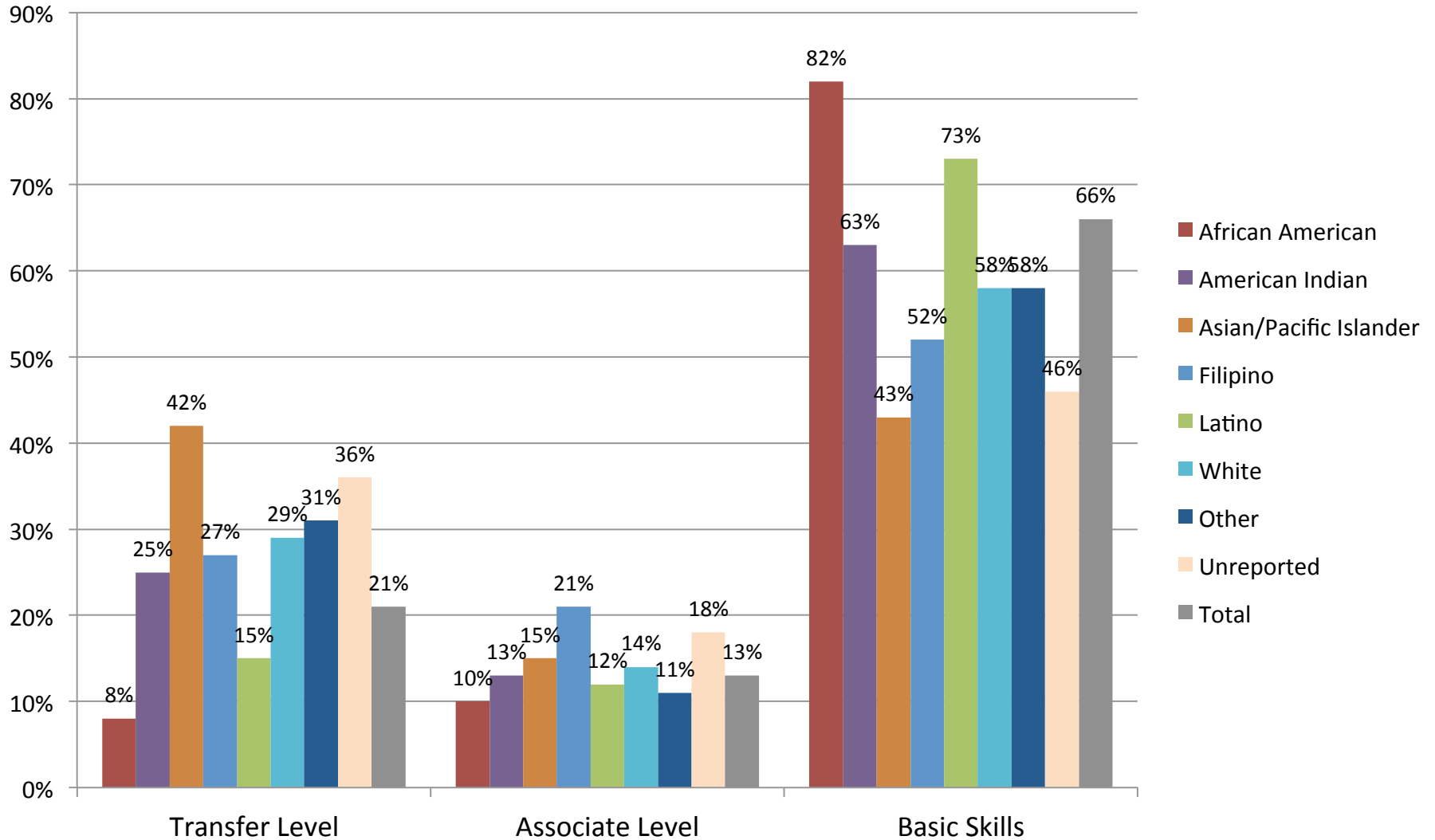
# **PLACEMENT RATES-FALL 2017**

# Math Placement by College

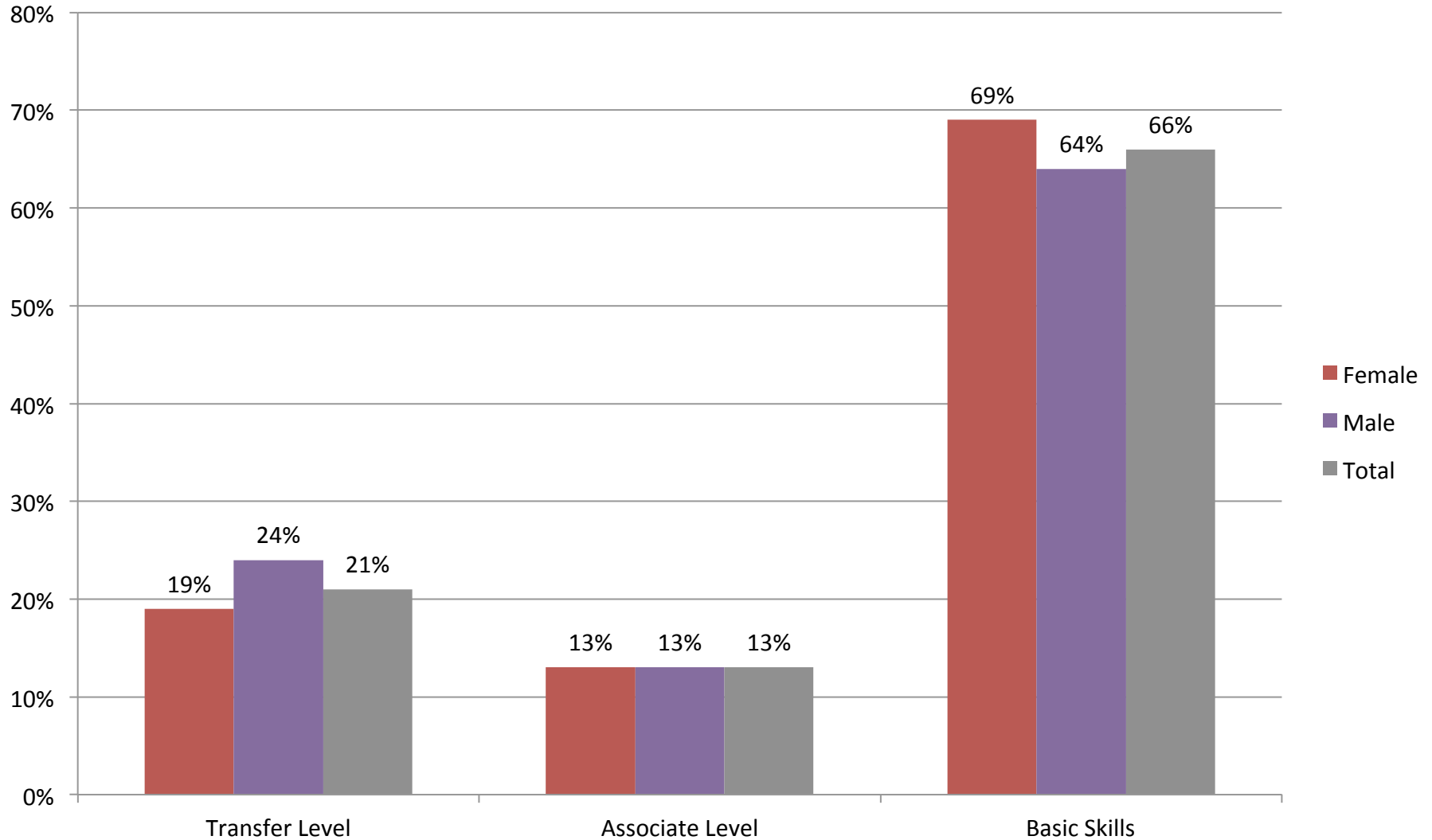




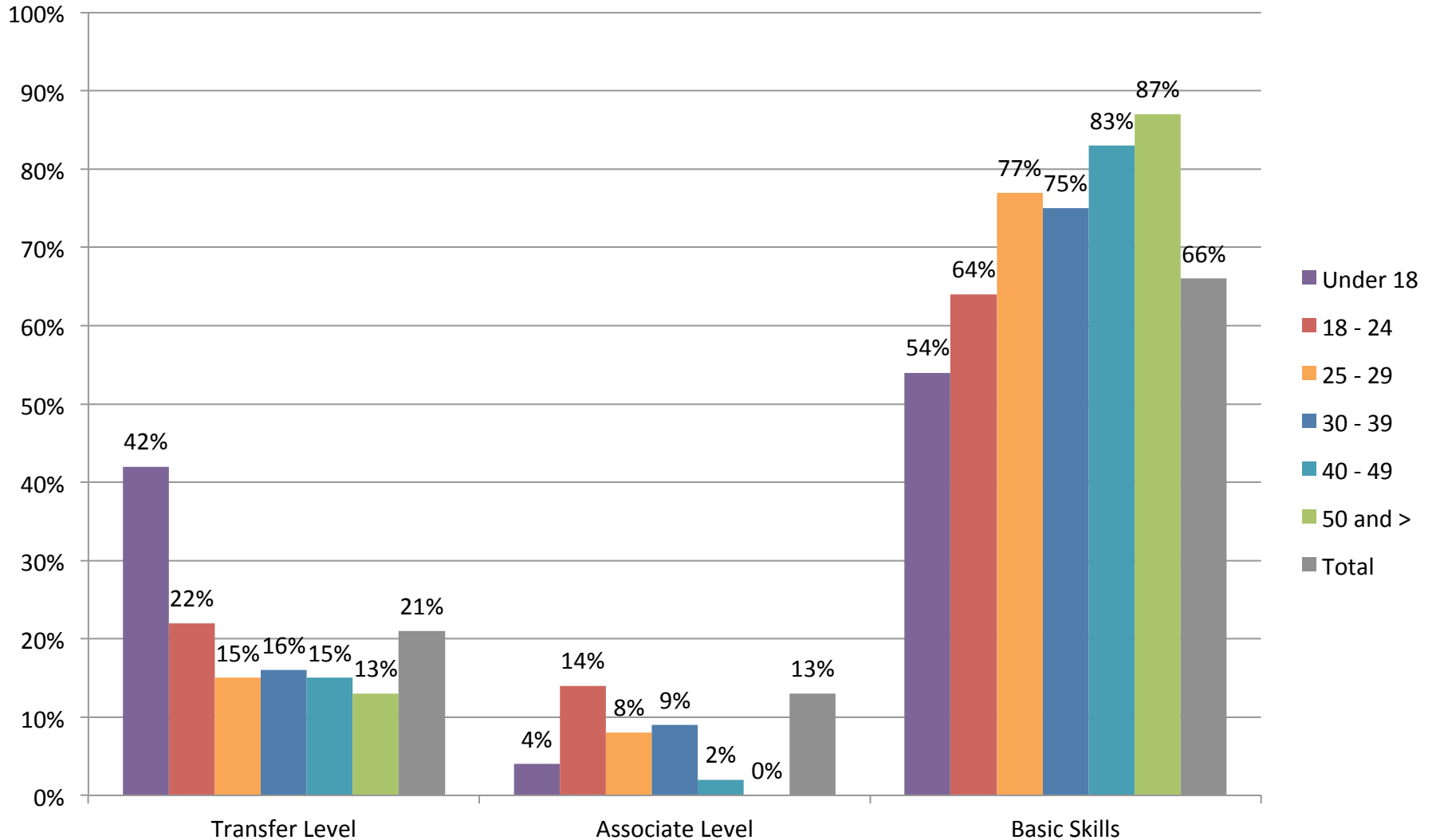
# Math Placement by Ethnicity



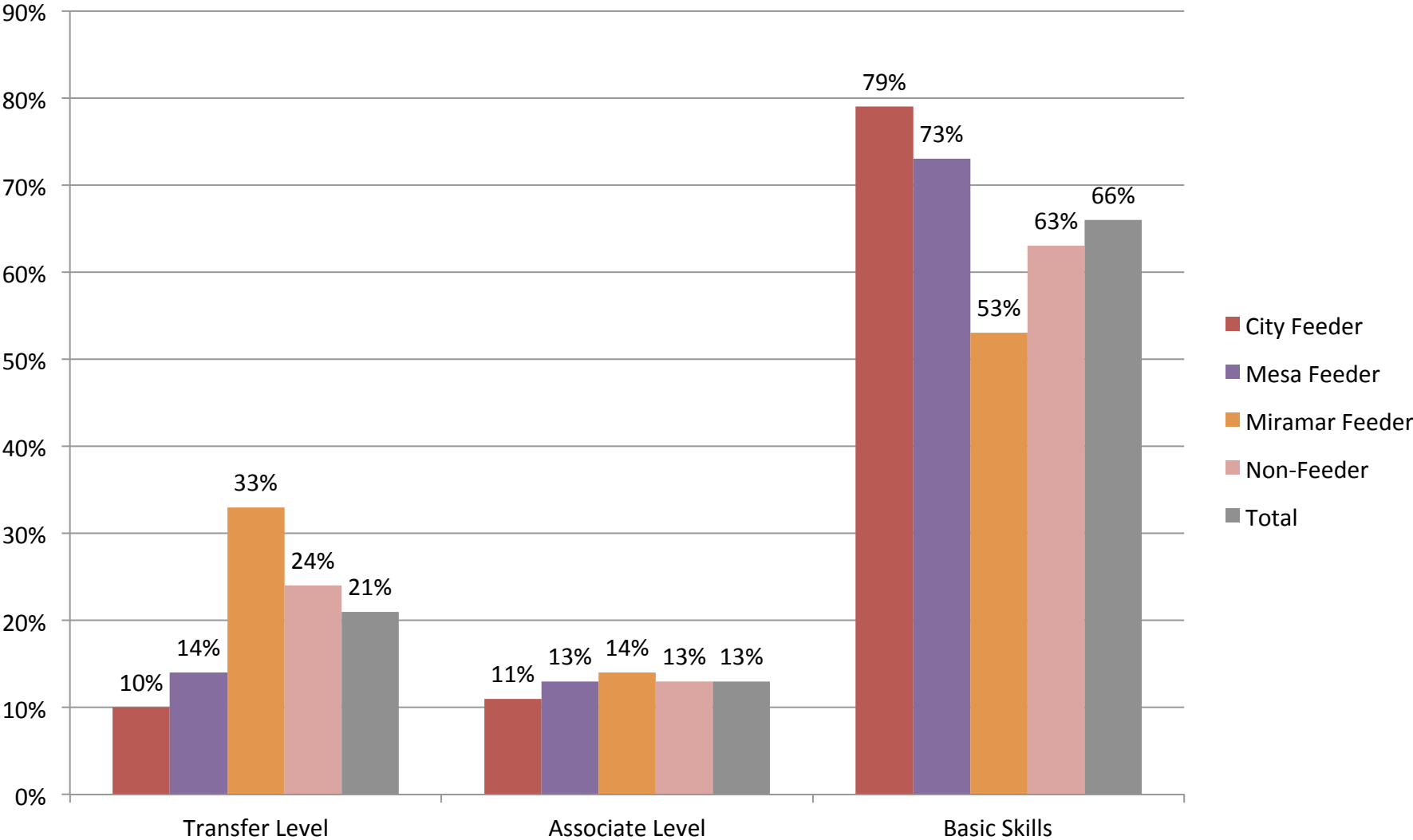
# Math Placement by Gender



# Math Placement by Age

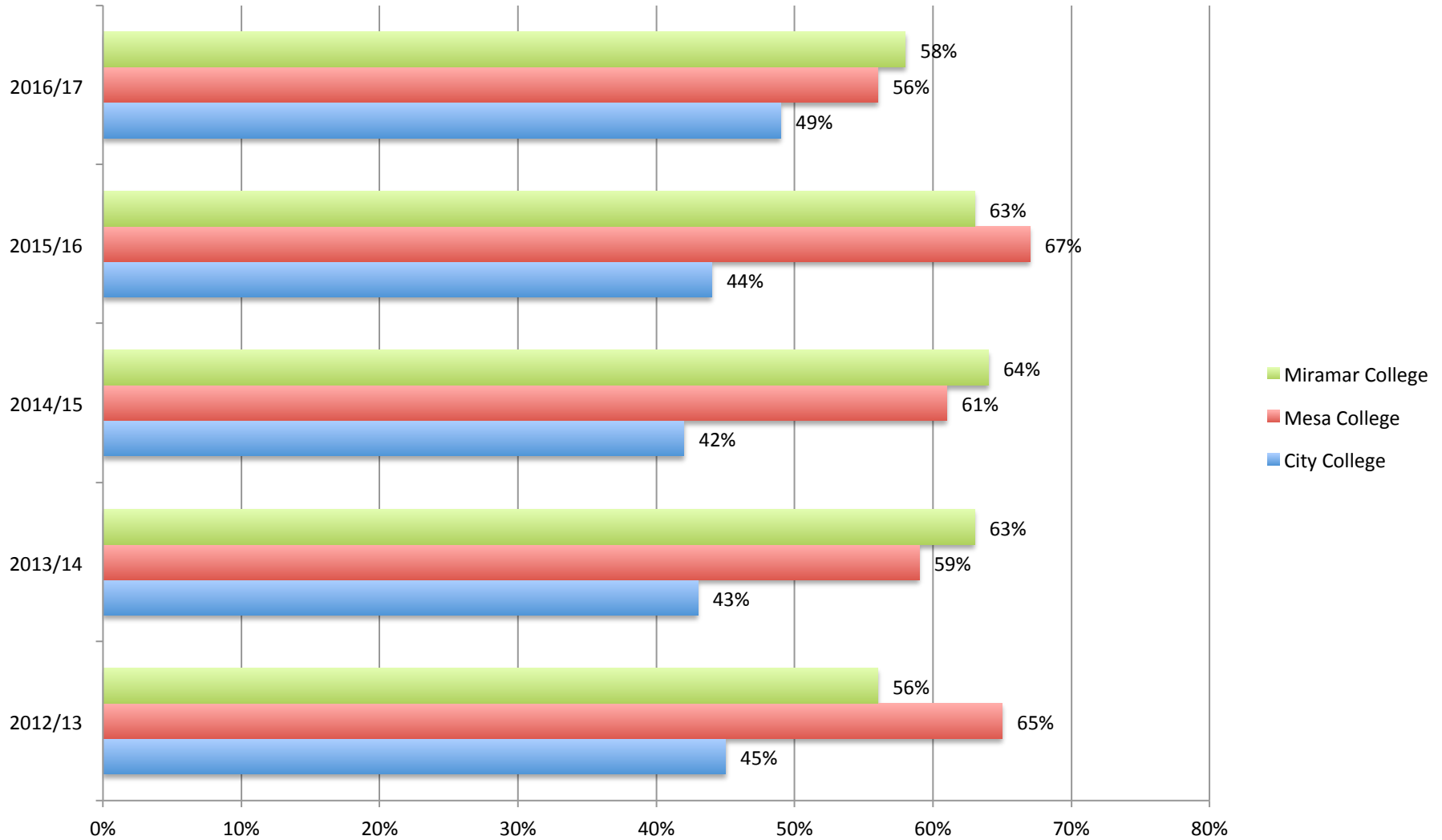


# Math Placement by Feeder HS

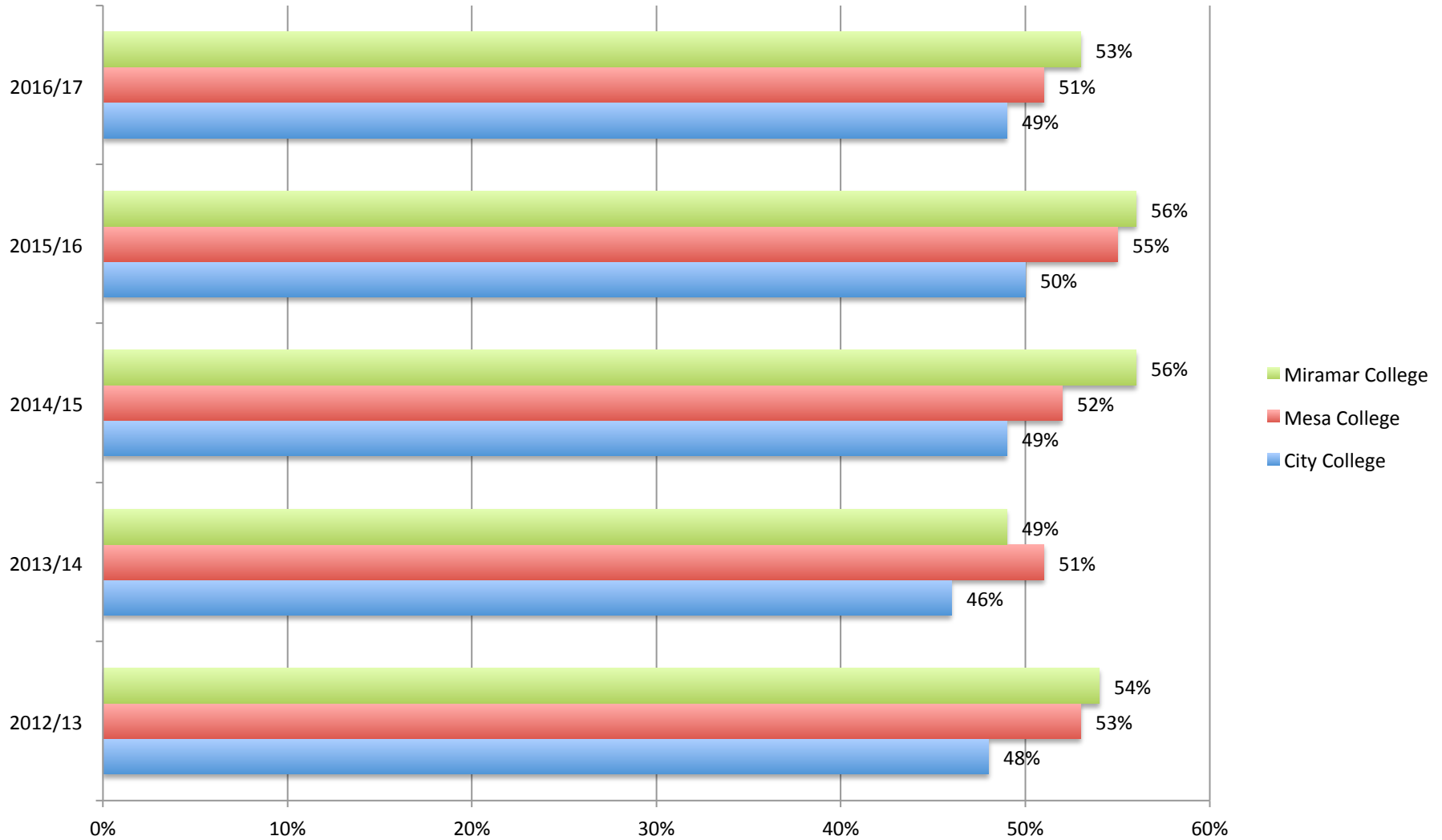


# **COURSE SUCCESS RATES**

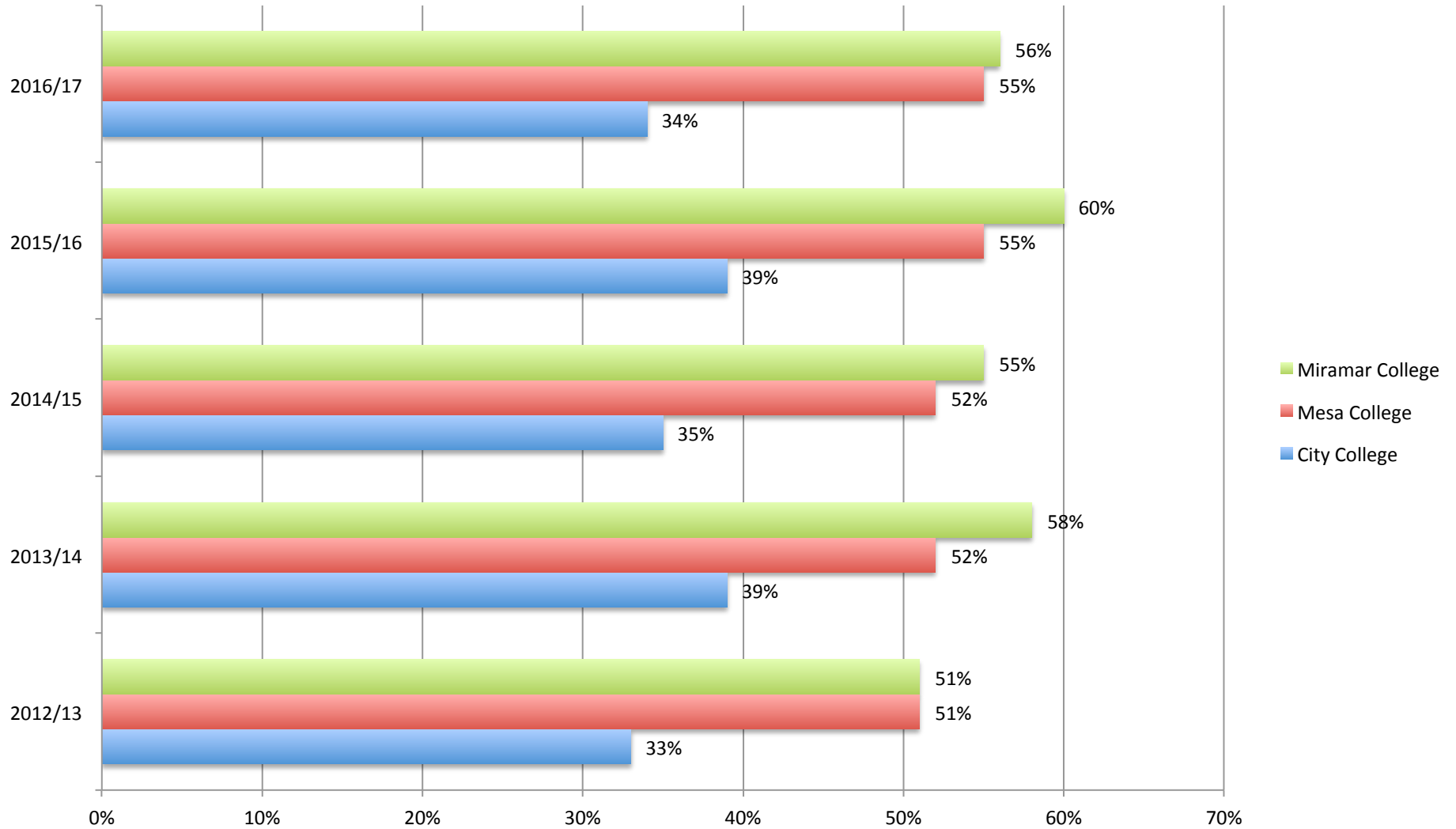
# Math 38 Course Success



# Math 46 Course Success

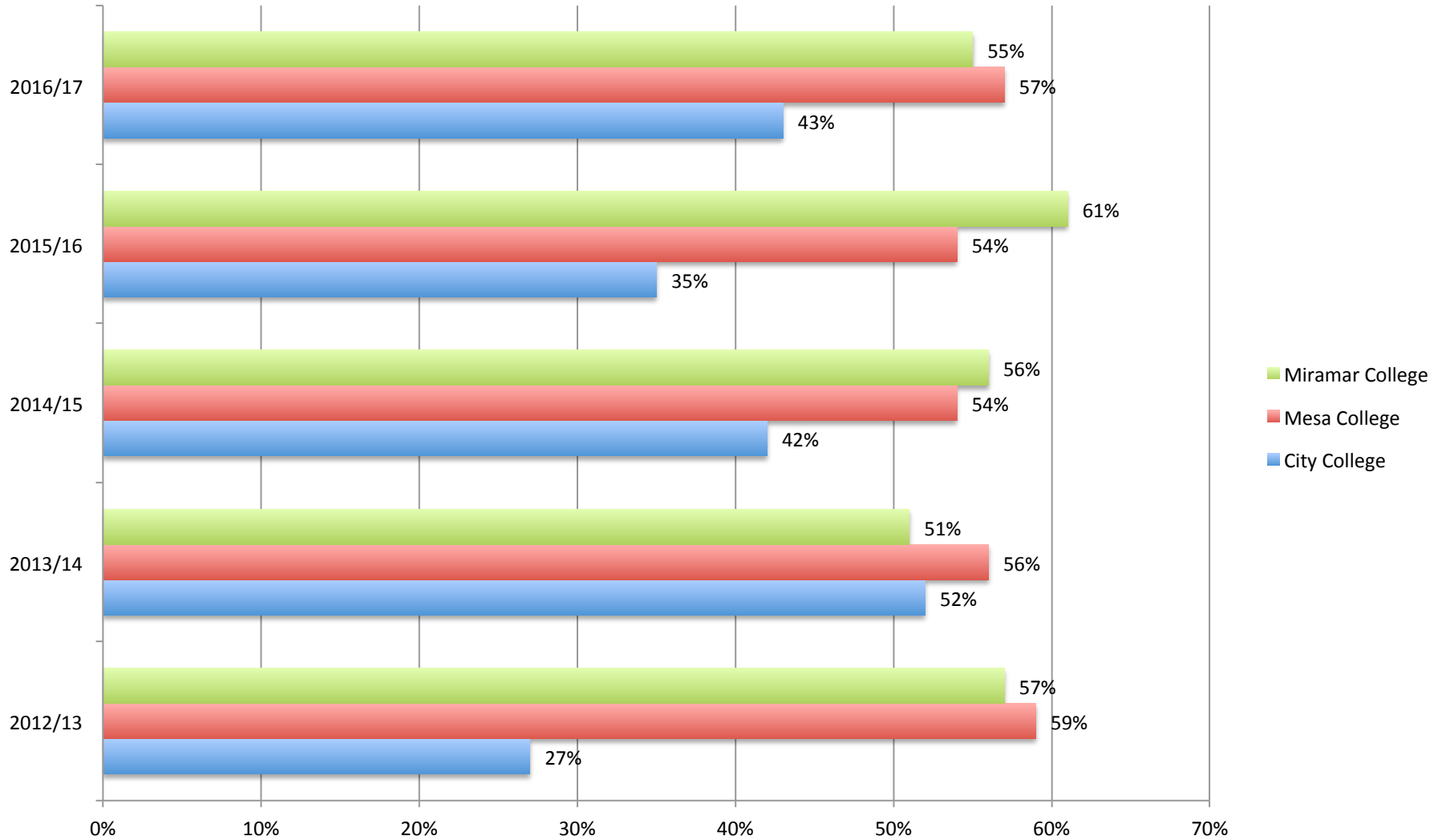


# Math 96 Course Success

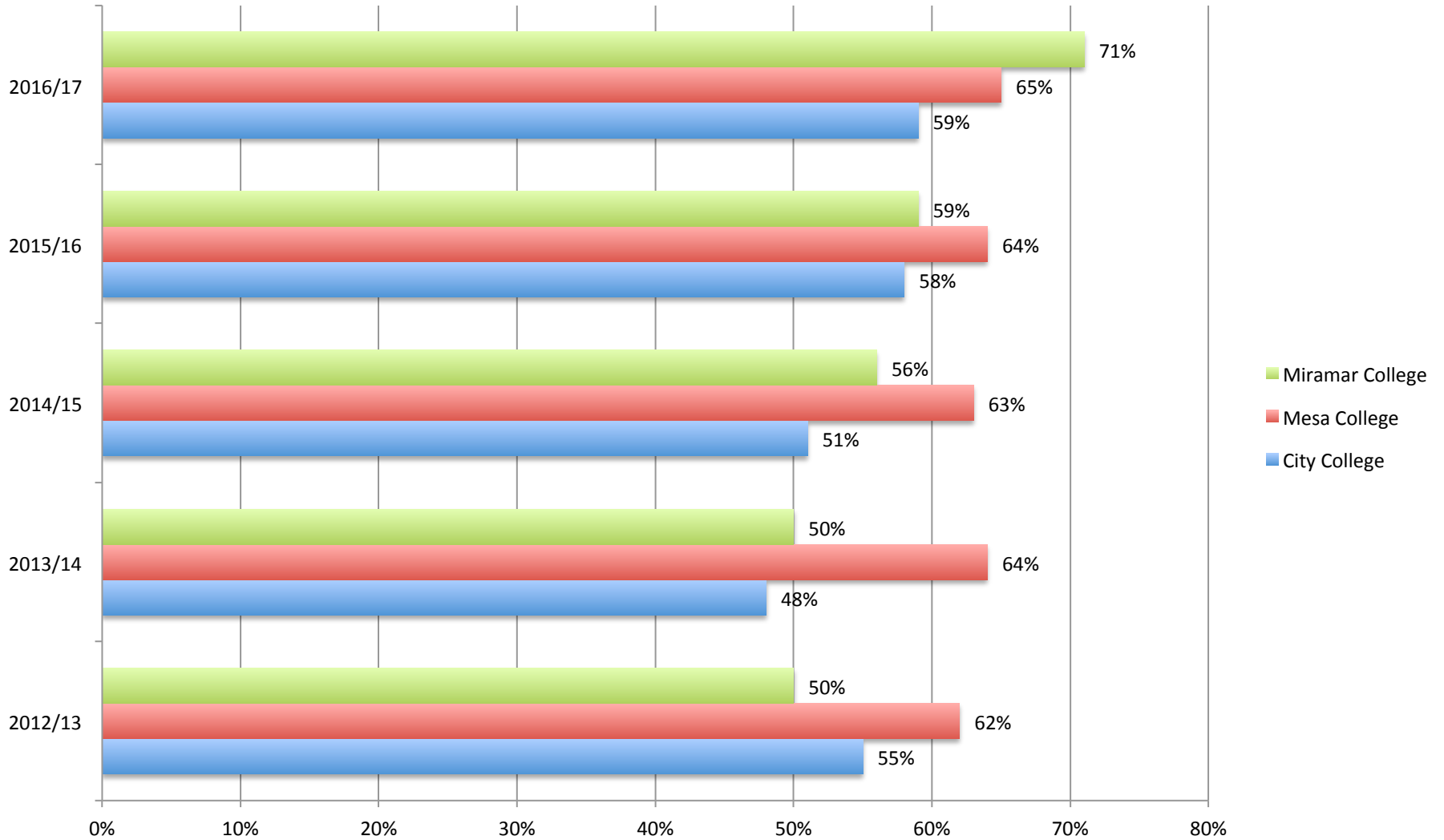




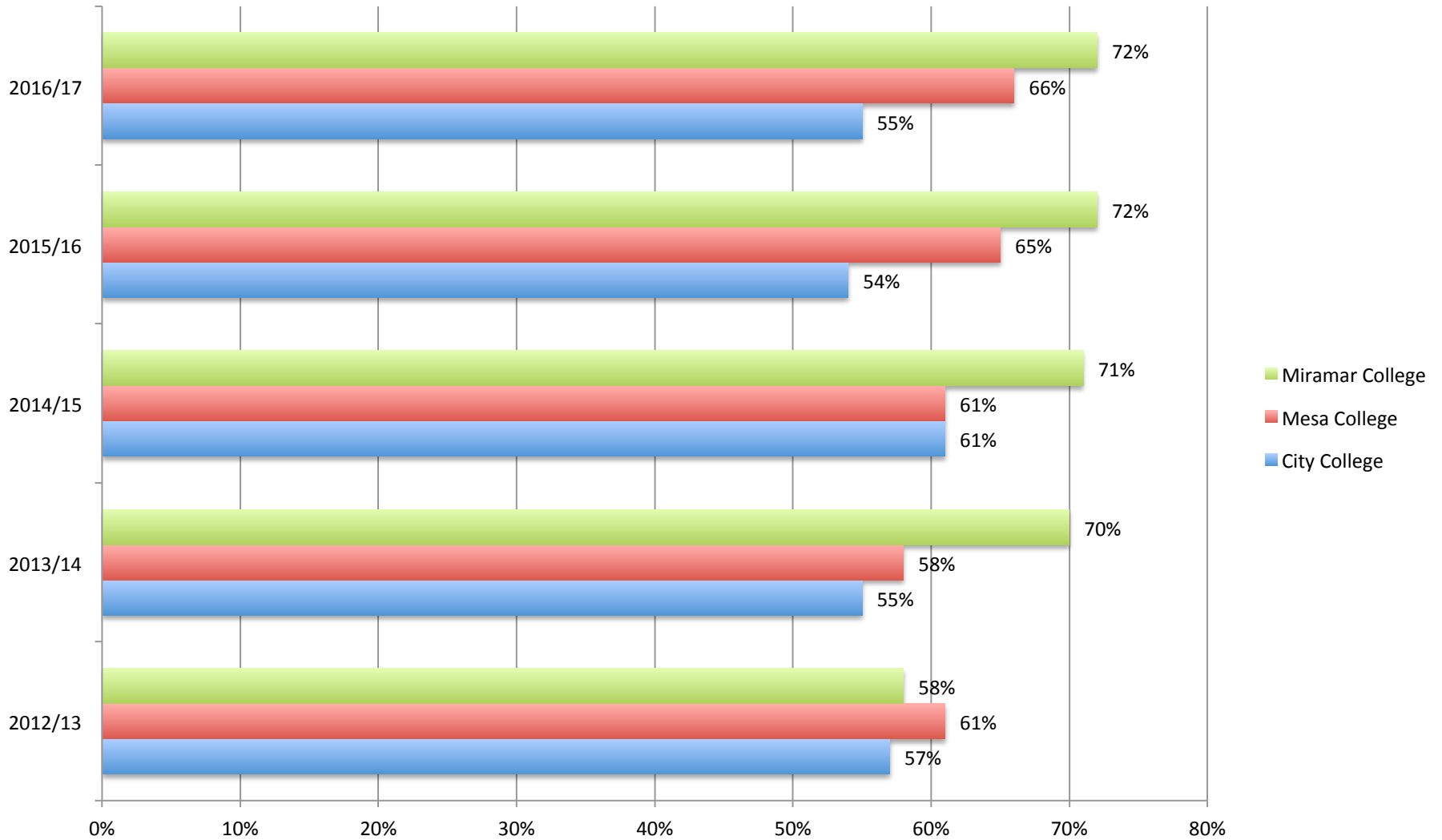
# Math 104 Course Success



# Math 116 Course Success



# Math 119 Course Success



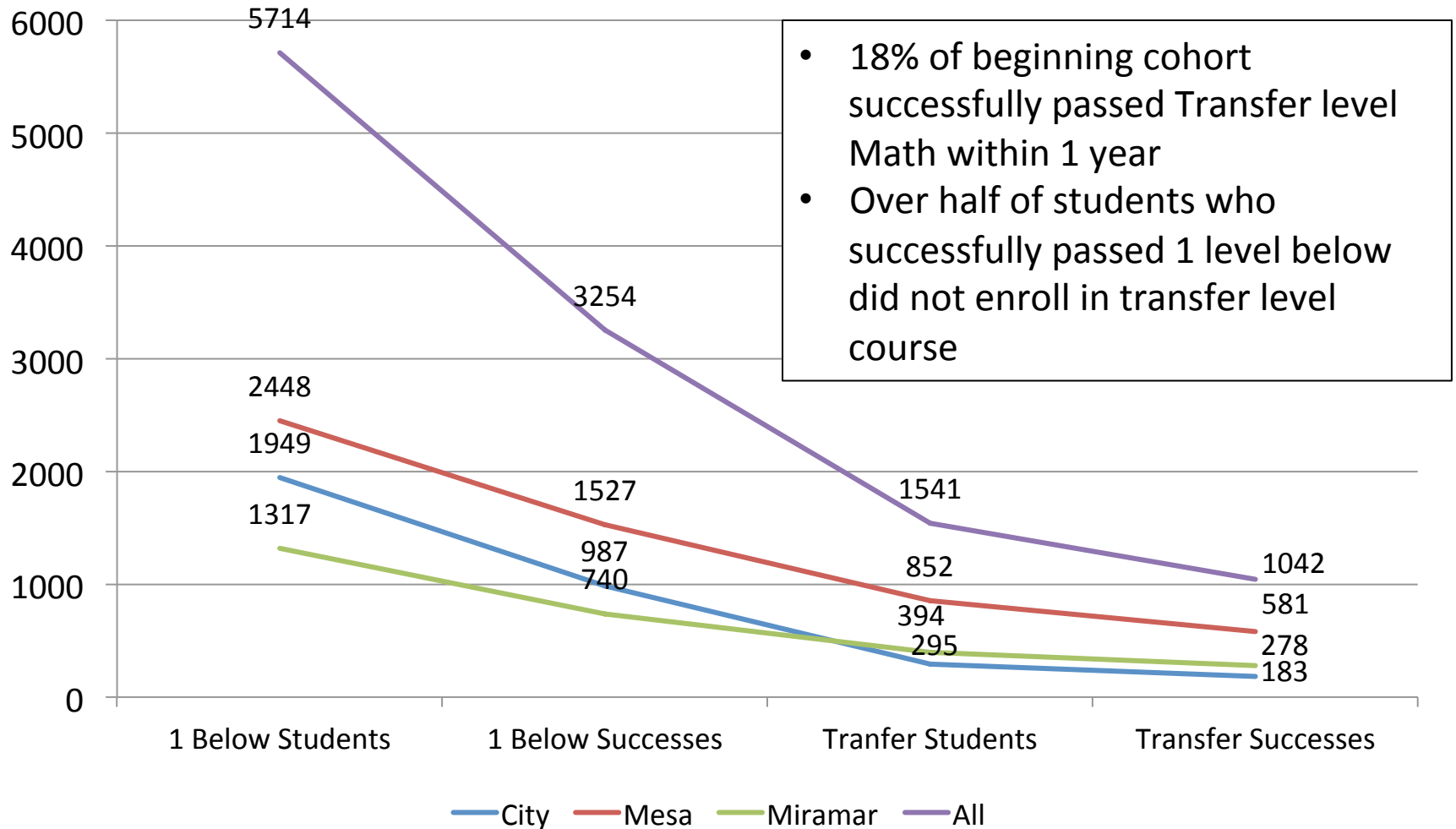
# **SEQUENCE PROGRESSION/ THROUGHPUT**

# Basic Skills Cohort Tracker

- Fall 2010-Fall 2014 cohorts
- Tracked for 1 and 2 years
- % of original cohort who reach the transfer course
- % of transfer attempts that are successful

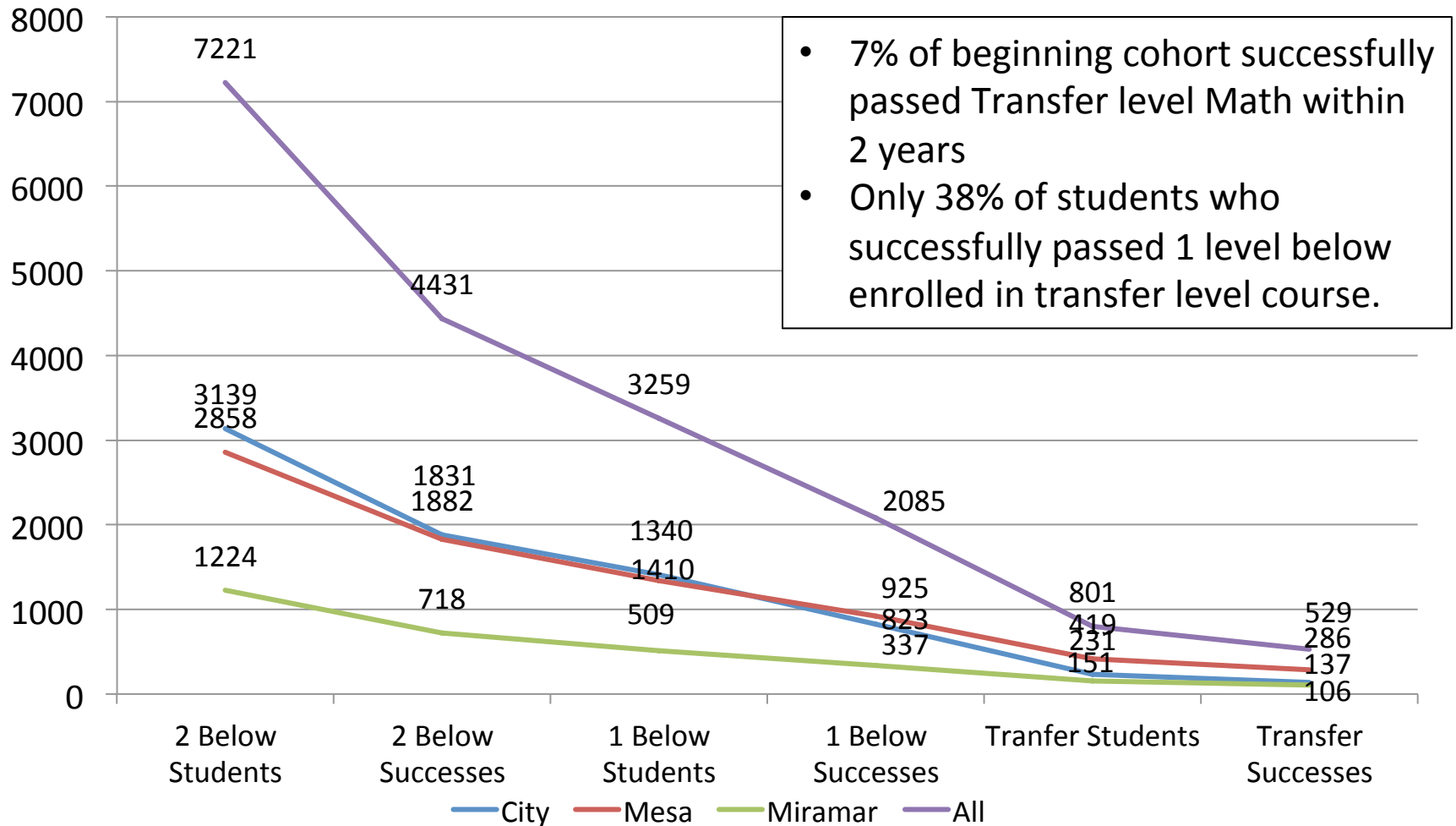
# Basic Skills Math Progression

## 1 year rate



# Basic Skills Math Progression

## 1 year rate



# Non Math courses

	City		Mesa		Miramar	
MATH104	96	22%	194	25%	97	26%
MATH116	81	19%	182	23%	90	24%
MATH119	179	41%	281	36%	166	45%
BIOL200			8	1%		
BUSE115			9	1%	1	0%
PSYC258	80	18%	111	14%	17	5%
Total	436	100%	785	100%	371	100%



# Cohorts beginning at 1 Level Below

**Table 9. Math Placement One Level Below Transfer – One Year to Transfer Math**

	One Level Below Transfer			Transferable			% Reach Transfer	Success Rate
	Students	Attempts	Success	Students	Attempts	Success		
City College	1,949	2,488	987	295	398	183	15%	46%
Mesa College	2,448	2,920	1,527	852	1,206	581	35%	48%
Miramar College	1,317	1,563	740	394	532	278	30%	52%
<b>All Colleges</b>	<b>5,714</b>	<b>6,971</b>	<b>3,254</b>	<b>1,541</b>	<b>2,136</b>	<b>1,042</b>	<b>27%</b>	<b>49%</b>

Source: CCCCO Datamart

**Table 10. Math Placement One Level Below Transfer – Two Years to Transfer Math**

	One Level Below Transfer			Transferable			% Reach Transfer	Success Rate
	Students	Attempts	Success	Students	Attempts	Success		
City College	1,949	2,592	1,024	376	672	253	19%	38%
Mesa College	2,448	3,019	1,573	1,023	1,907	734	42%	38%
Miramar College	1,317	1,635	785	482	858	375	37%	44%
<b>All Colleges</b>	<b>5,714</b>	<b>7,246</b>	<b>3,382</b>	<b>1,881</b>	<b>3,437</b>	<b>1,362</b>	<b>33%</b>	<b>40%</b>

Source: CCCCO Datamart

# Cohorts beginning at 2 levels below

**Table 11. Math Placement Two Levels Below Transfer – One Year to Transfer Math**

	Two Levels Below Transfer			Transferable			% Reach Transfer	Success Rate
	Students	Attempts	Success	Students	Attempts	Success		
City College	3,139	3,859	1,882	231	265	137	7%	52%
Mesa College	2,858	3,308	1,831	419	460	286	15%	62%
Miramar College	1,224	1,392	718	151	158	106	12%	67%
<b>All Colleges</b>	<b>7,221</b>	<b>8,559</b>	<b>4,431</b>	<b>801</b>	<b>883</b>	<b>529</b>	<b>11%</b>	<b>60%</b>

Source: CCCCO Datamart

**Table 12. Math Placement Two Levels Below Transfer – Two Years to Transfer Math**

	Two Levels Below Transfer			Transferable			% Reach Transfer	Success Rate
	Students	Attempts	Success	Students	Attempts	Success		
City College	3,139	3,945	1,910	402	693	260	13%	38%
Mesa College	2,858	3,404	1,883	683	1,146	492	24%	43%
Miramar College	1,224	1,433	734	243	368	186	20%	51%
<b>All Colleges</b>	<b>7,221</b>	<b>8,782</b>	<b>4,527</b>	<b>1,328</b>	<b>2,207</b>	<b>938</b>	<b>18%</b>	<b>43%</b>

Source: CCCCO Datamart