

When it Comes to Graduation Rates Size Matters: The Driving Forces Behind High School Graduation Rates

Methodology of High School Graduation Rates

- No common methodology
- Limits state comparability
- Not sensitive to state demography
- National Center for Education Statistics (NCES)

Methodology of High School Graduation Rates

NCES Completion Rate Formula:

High School Completers Year 4

Dropouts (Grade 9 Year 1 + Grade 10 Year 2 + Grade
11 Year 3 + Grade 12 Year 4) + High School
Completers Year 4

Arizona Example

46,986 (High School Completers)

= 63.5%

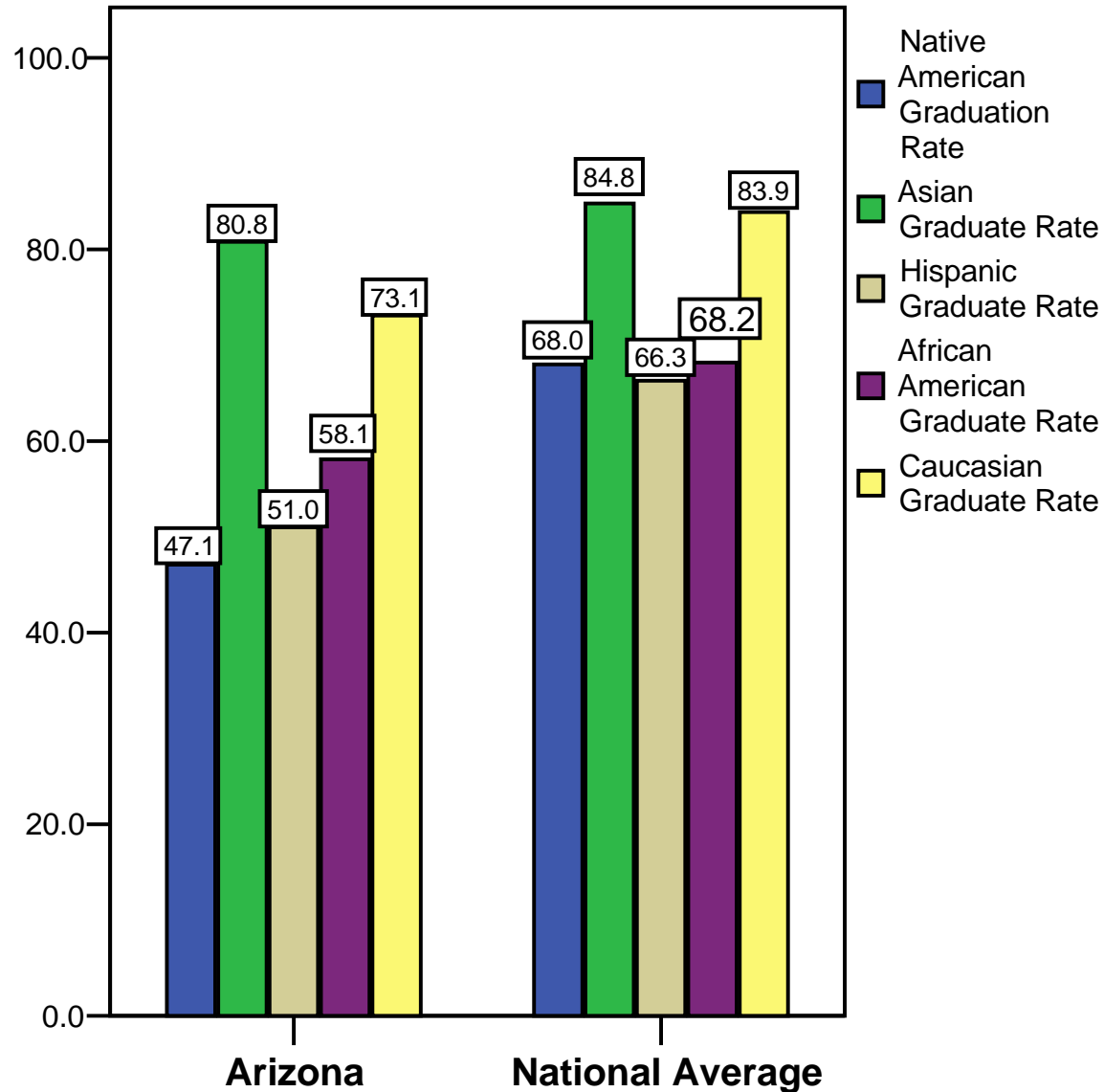
26,959 (Dropouts) + 46,986 (Completers) = 73,945

Methodology of Study

- Used NCES 2001 data
- Established percentage of completing students by ethnic subgroup by state
- Established overall percentage of minority completing students to overall state completing students
- Ranked completion rates by state
- Ranked completion rates by ethnic subgroup by state
- Compared Arizona to other 35 states

NCES High School Completion Rates

Arizona vs. National Averages



ALL ethnic groups are below the national average

NCES 2001 Aggregate High School Completion Rates

State	NCES Rate	NCES Rank
North Dakota	90.1	1
Wisconsin	90.0	2
Iowa	89.2	3
New Jersey	88.0	4
Connecticut	86.6	5
Maine	86.5	6
Massachusetts	86.3	7
South Dakota	84.6	8
Pennsylvania	84.0	9
Nebraska	83.9	10
Virginia	83.8	11
West Virginia	83.4	12
Maryland	83.2	13
Utah	82.6	14
Minnesota	82.5	15
Montana	82.1	16
Delaware	81.6	17
New York	81.6	18

NCES 2001 Aggregate High School Completion Rates

State	NCES Rate	NCES Rank
Missouri	81.0	19
Ohio	81.0	20
Alabama	80.0	21
Rhode Island	79.8	22
Oklahoma	79.2	23
Arkansas	79.1	24
Hawaii	77.7	25
Mississippi	77.3	26
Idaho	76.9	27
Wyoming	76.5	28
Oregon	76.4	29
Illinois	75.8	30
Alaska	75.2	31
New Mexico	74.4	32
Nevada	73.5	33
Georgia	71.1	34
Louisiana	65.0	35
Arizona	63.5	36

NCES 2001 Caucasian High School Completion Rates

State	Comp. Rate	Rank	Overall Rank
Wisconsin	94.2	1	2
North Dakota	92.8	2	1
New Jersey	92.5	3	4
Connecticut	91.1	4	5
New York	90.5	5	18
Iowa	90.3	6	3
Massachusetts	89.9	7	7
South Dakota	88.5	8	8
Pennsylvania	88.2	9	9
Nebraska	87.5	10	10
Minnesota	87.0	11	15
Virginia	86.7	12	11
Maine	86.7	13	6
Maryland	86.3	14	13
Ohio	85.4	15	20
Arizona	73.1	35	36

NCES 2001 Hispanic High School Completion Rates

State	Comp. Rate	Rank	Overall Rank
Maine	84.9	1	6
Maryland	84.3	2	13
West Virginia	83.1	3	12
New Jersey	78.4	4	4
North Dakota	76.1	5	1
Mississippi	74.2	6	26
Virginia	73.3	7	11
Montana	73.2	8	16
Missouri	72.3	9	19
Alabama	71.9	10	21
South Dakota	71.4	11	8
Wisconsin	70.5	12	2
Hawaii	70.4	13	25
Delaware	70.2	14	17
New Mexico	68.5	15	32
Arizona	51.0	35	36

NCES 2001 Native American High School Completion Rates

State	Comp. Rate	Rank	Overall Rank
Alabama	90.1	1	21
Delaware	88.2	2	17
New Jersey	85.2	3	4
Maine	82.0	4	6
Maryland	81.7	5	13
Virginia	80.4	6	11
Massachusetts	80.2	7	7
Missouri	80.1	8	19
Oklahoma	79.7	9	23
West Virginia	77.3	10	12
Connecticut	75.9	11	5
New Mexico	73.9	12	32
Iowa	73.7	13	3
New York	73.1	14	18
Wisconsin	73.1	15	2
Arizona	47.1	32	36

NCES 2001 African-American High School Completion Rates

State	Comp. Rate	Rank	Overall Rank
West Virginia	78.6	1	12
Alabama	78.6	2	21
Connecticut	77.4	3	5
Virginia	77.1	4	11
North Dakota	77.0	5	1
Maryland	76.9	6	13
New Jersey	76.7	7	4
Massachusetts	76.6	8	7
Maine	76.3	9	6
New Mexico	75.8	10	32
Montana	75.0	11	16
Delaware	74.6	12	17
Arkansas	73.8	13	24
Idaho	73.7	14	27
Mississippi	73.6	15	26
Arizona	58.1	32	36

NCES 2001 Asian High School Completion Rates

State	Comp. Rate	Rank	Overall Rank
New Jersey	94.8	1	4
West Virginia	94.2	2	12
Iowa	93.9	3	3
Maryland	93.5	4	13
Delaware	91.3	5	17
Connecticut	90.4	6	5
Ohio	90.1	7	20
Illinois	89.9	8	30
Alabama	89.3	9	21
South Dakota	89.2	10	8
Oklahoma	88.6	11	23
Wisconsin	88.6	12	2
Missouri	87.6	13	19
Virginia	87.5	14	11
New York	87.5	15	18
Arizona	80.8	27	36

NCES 2001 % of Caucasian Completers to Total State Completers

<u>State</u>	<u>% of Completers</u>	<u>Rank</u>	<u>NCES Rank</u>
Maine	97.3	1	6
West Virginia	95.1	2	12
Iowa	92.4	3	3
North Dakota	91.1	4	1
South Dakota	90.0	5	8
Wyoming	89.5	6	28
Idaho	89.1	7	27
Utah	88.4	8	14
Montana	87.6	9	16
Nebraska	85.8	10	10
Wisconsin	85.1	11	2
Minnesota	85.0	12	15
Missouri	82.3	13	19
Oregon	82.1	14	29
Ohio	82.0	15	20
Arizona	62.0	28	36

NCES 2001 % of Hispanic Completers to Total State Completers

<u>State</u>	<u>% of Completers</u>	<u>Rank</u>	<u>NCES Rank</u>
New Mexico	47.5	1	32
Arizona	25.6	2	36
Nevada	20.5	3	33
New Jersey	18.4	4	4
New York	15.5	5	18
Illinois	12.2	6	30
Rhode Island	11.6	7	22
Connecticut	11.0	8	5
Massachusetts	9.2	9	7
Oregon	8.6	10	29
Idaho	8.0	11	27
Utah	6.7	12	14
Wyoming	5.9	13	28
Pennsylvania	5.8	14	9
Nebraska	5.4	15	10

NCES 2001 % of Native American Completers to Total State Completers

<u>State</u>	<u>% of Completers</u>	<u>Rank</u>	<u>NCES Rank</u>
Alaska	22.2	1	31
Oklahoma	15.7	2	23
New Mexico	11.1	3	32
Montana	9.3	4	16
South Dakota	7.6	5	8
North Dakota	6.9	6	1
Arizona	5.5	7	36
Wyoming	2.6	8	28
Minnesota	2.1	9	15
Oregon	1.9	10	29
Nevada	1.7	11	33
Utah	1.4	12	14
Nebraska	1.3	13	10
Wisconsin	1.1	14	2
Idaho	1.1	15	27

NCES 2001 % of African-American Completers to Total State Completers

<u>State</u>	<u>% of Completers</u>	<u>Rank</u>	<u>NCES Rank</u>
Mississippi	50.9	1	26
Louisiana	45.3	2	35
Georgia	37.9	3	34
Maryland	35.6	4	13
Alabama	34.2	5	21
Delaware	28.2	6	17
Virginia	24.6	7	11
Arkansas	23.0	8	24
Illinois	20.1	9	30
New York	18.0	10	18
New Jersey	16.2	11	4
Ohio	15.0	12	20
Missouri	14.7	13	19
Connecticut	12.4	14	5
Pennsylvania	11.2	15	9
Arizona	4.2	23	36

NCES 2001 % of Asian Completers to Total State Completers

<u>State</u>	<u>% of Completers</u>	<u>Rank</u>	<u>NCES Rank</u>
Hawaii	73.1	1	25
New York	6.5	2	18
New Jersey	6.2	3	4
Alaska	6.1	4	31
Nevada	6.1	5	33
Minnesota	4.8	6	15
Massachusetts	4.7	7	7
Virginia	4.7	8	11
Maryland	4.5	9	13
Oregon	4.2	10	29
Illinois	3.7	11	30
Rhode Island	3.5	12	22
Connecticut	3.0	13	5
Utah	2.7	14	14
Wisconsin	2.7	15	2
Arizona	2.7	16	36

NCES 2001 % of Total Minority Completers to Total State Completers

<u>State</u>	<u>% of Completers</u>	<u>Rank</u>	<u>NCES Rank</u>
Hawaii	80.2	1	25
New Mexico	62.2	2	31
Mississippi	52.1	3	26
Louisiana	48.8	4	35
Maryland	43.8	5	10
Georgia	43.2	6	34
New Jersey	41.1	7	4
New York	40.4	8	21
Arizona	38.0	9	36
Nevada	37.8	10	33
Alabama	36.7	11	18
Illinois	36.2	12	32
Alaska	35.2	13	30
Delaware	34.9	14	13
Virginia	33.5	15	8
Oklahoma	32.0	16	22
Arkansas	26.7	17	23
Connecticut	26.6	18	6

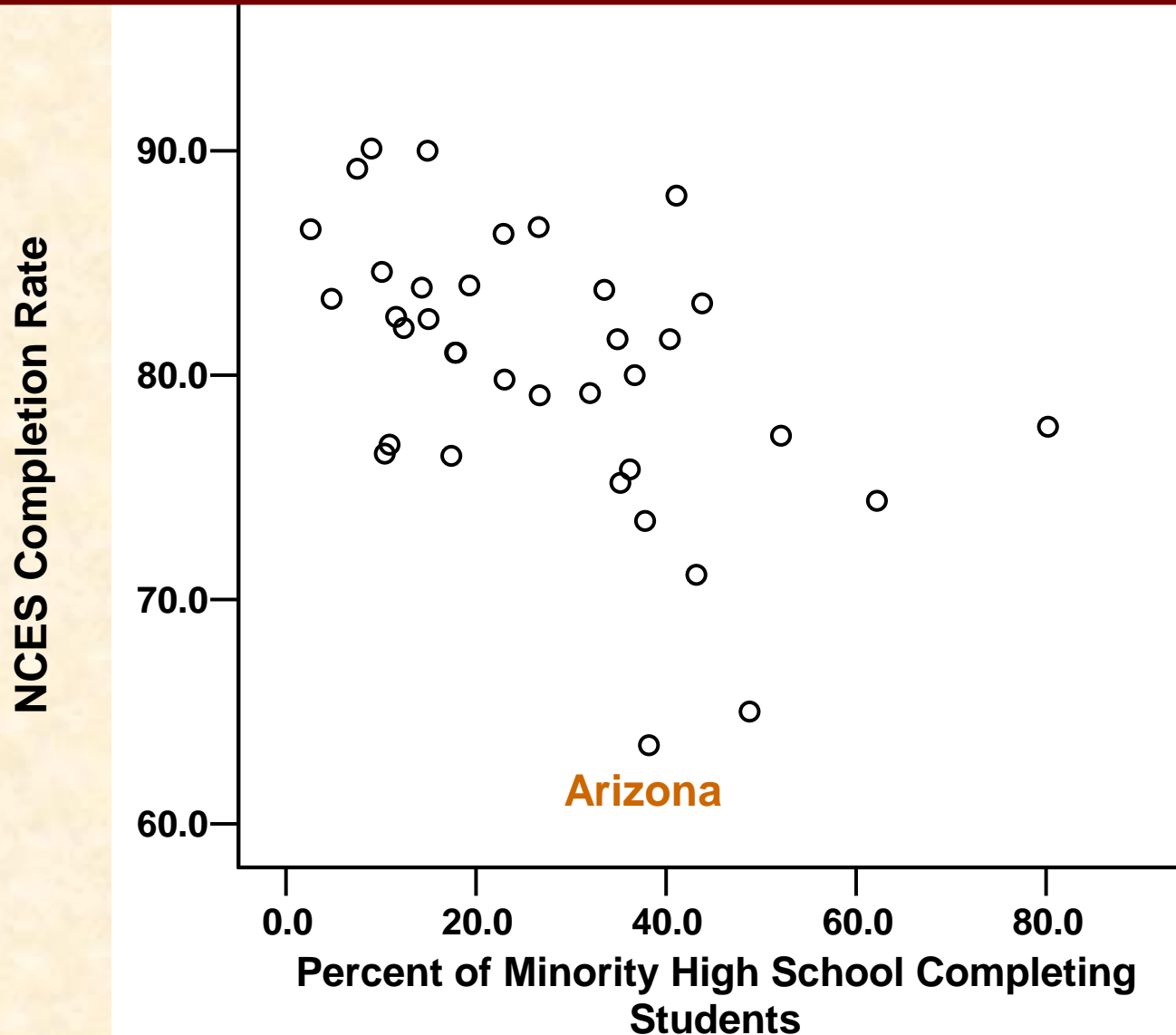
NCES 2001 % of Total Minority Completers to Total State Completers

<u>State</u>	<u>% of Completers</u>	<u>Rank</u>	<u>NCES Rank</u>
Rhode Island	23.0	19	23
Massachusetts	22.9	20	7
Pennsylvania	19.3	21	13
Ohio	17.9	22	20
Missouri	17.8	23	17
Oregon	17.4	24	29
Minnesota	15.0	25	19
Wisconsin	14.9	26	3
Nebraska	14.3	27	11
Montana	12.4	28	16
Utah	11.6	29	12
Idaho	10.9	30	27
Wyoming	10.4	31	28
South Dakota	10.1	32	13
North Dakota	9.0	33	2
Iowa	7.5	34	1
West Virginia	4.8	35	9
Maine	2.6	36	5

Findings

- Caucasian & Asian completion rates higher
- Percentages of minority students matter

Correlation: % Minority Completing Students to Total State Completers & NCES Completion Rate

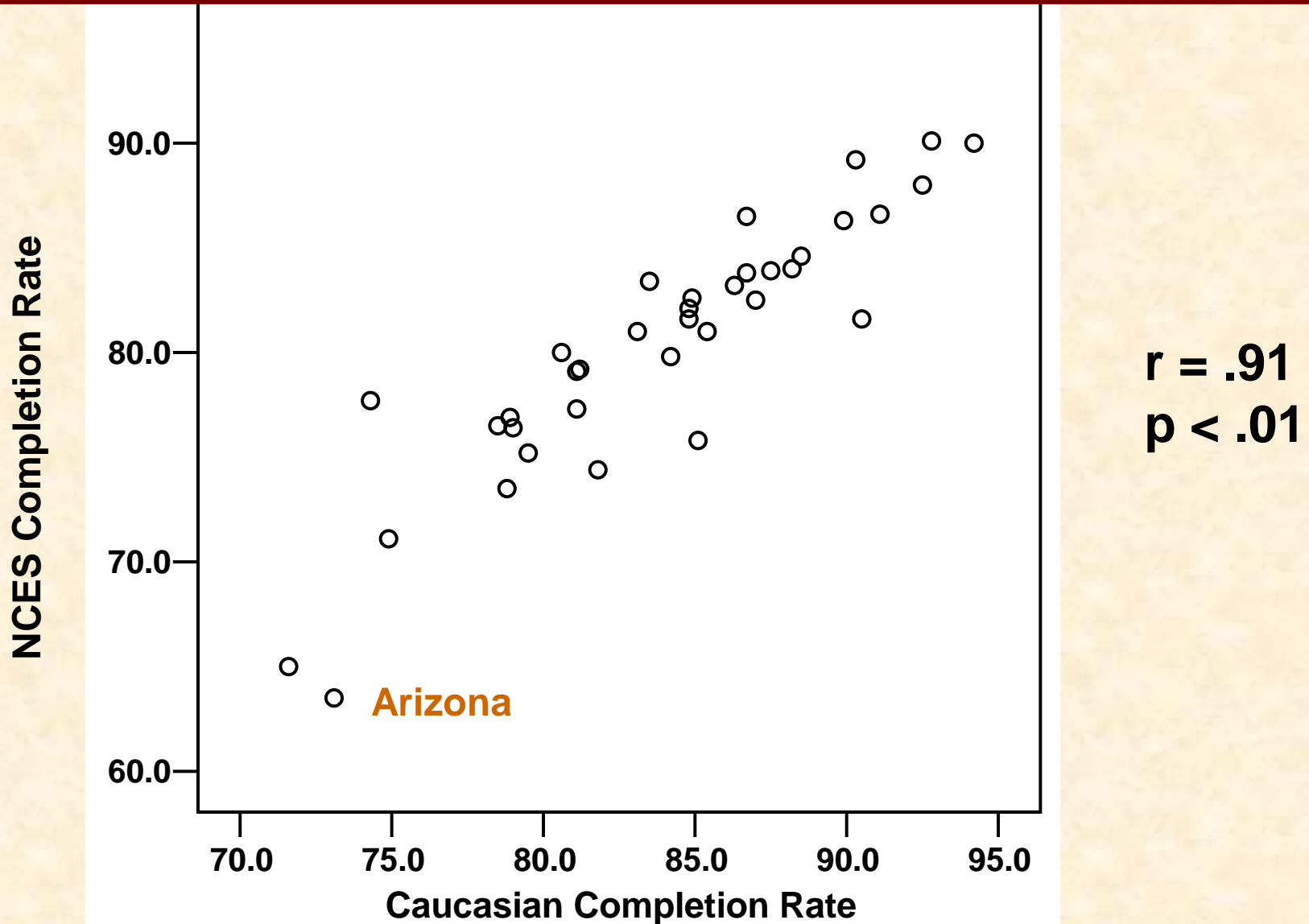


$r = -.50$
 $p < .01$

Findings

- Caucasian & Asian completion rates higher
- Percentages of minority students matter
- Caucasian completion rate matters

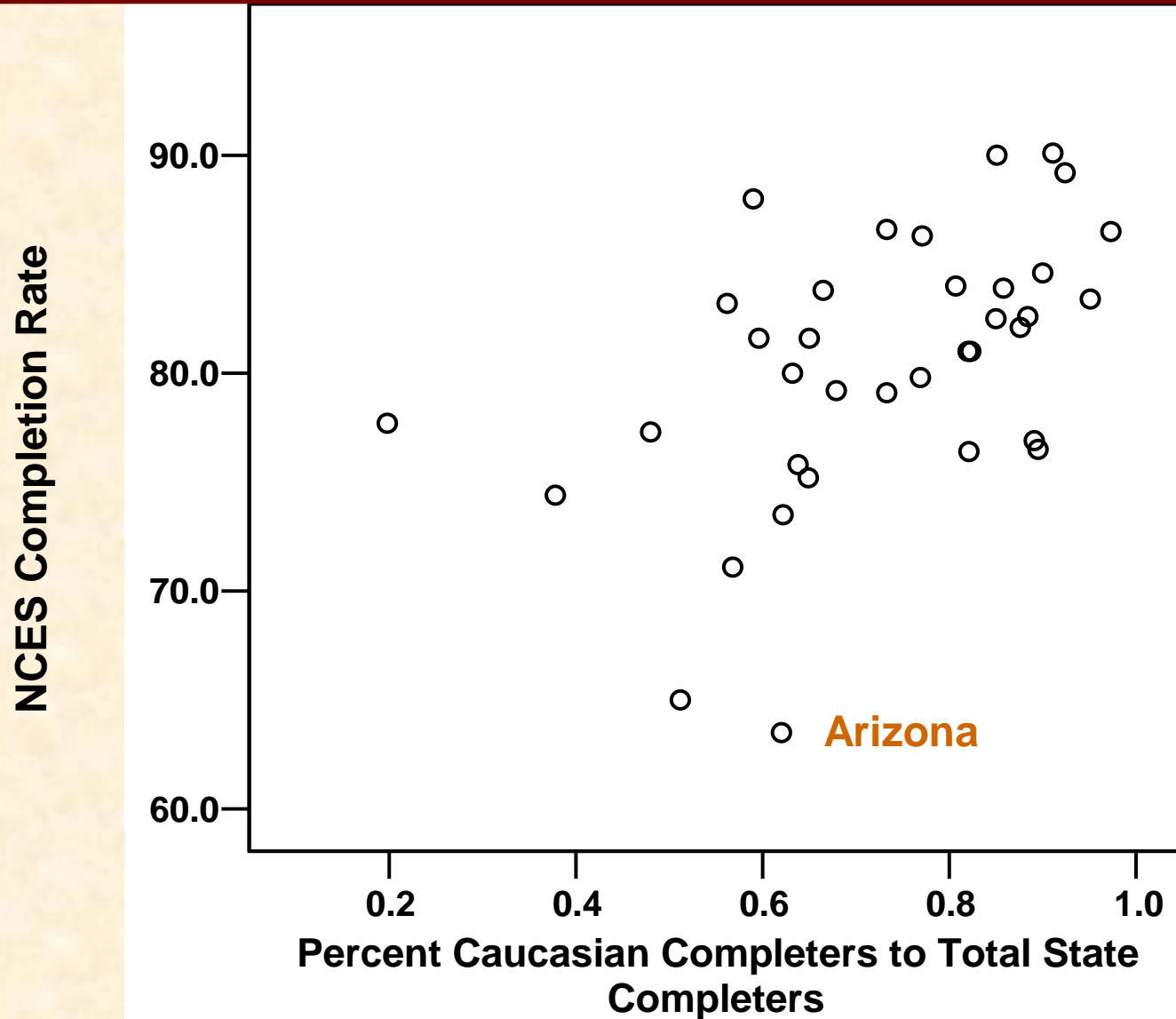
Correlation: Caucasian State Completion Rate & NCES Overall State Completion Rate



Findings

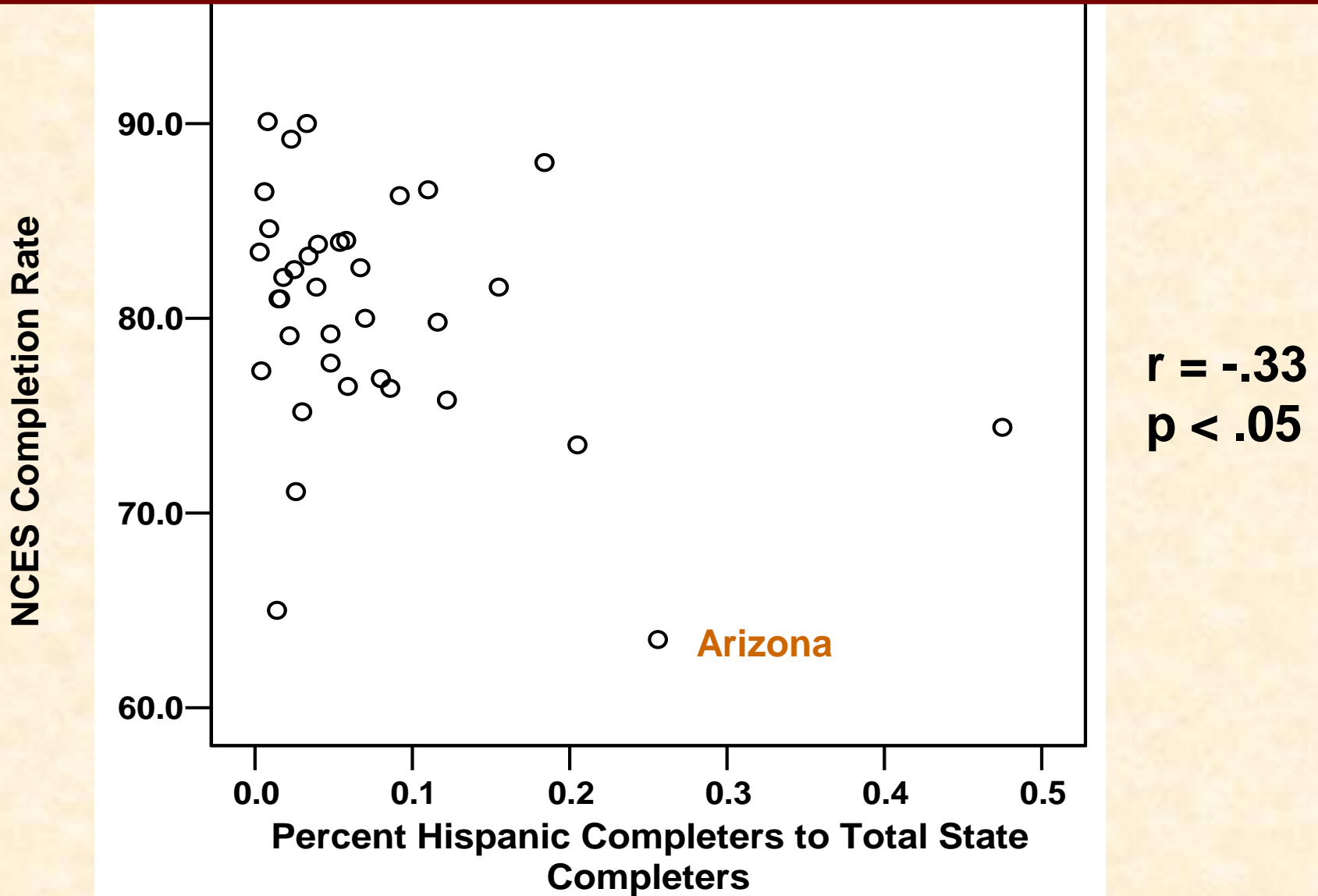
- Caucasian & Asian completion rates higher
- Percentages of minority students matter
- Caucasian completion rate matters
- Percentage of completing Caucasian, Hispanic, & African-American students to total completers matters

Correlation: % Caucasian Completing Students to Total State Completers & NCES State Completion Rate



$r = .50$
 $p < .01$

Correlation: % Hispanic Completing Students to Total State Completers & NCES State Completion Rate



Other Findings

- Overall completion rates in more diverse states where ratio of majority to minority population is smaller are more affected by the minority completion rates

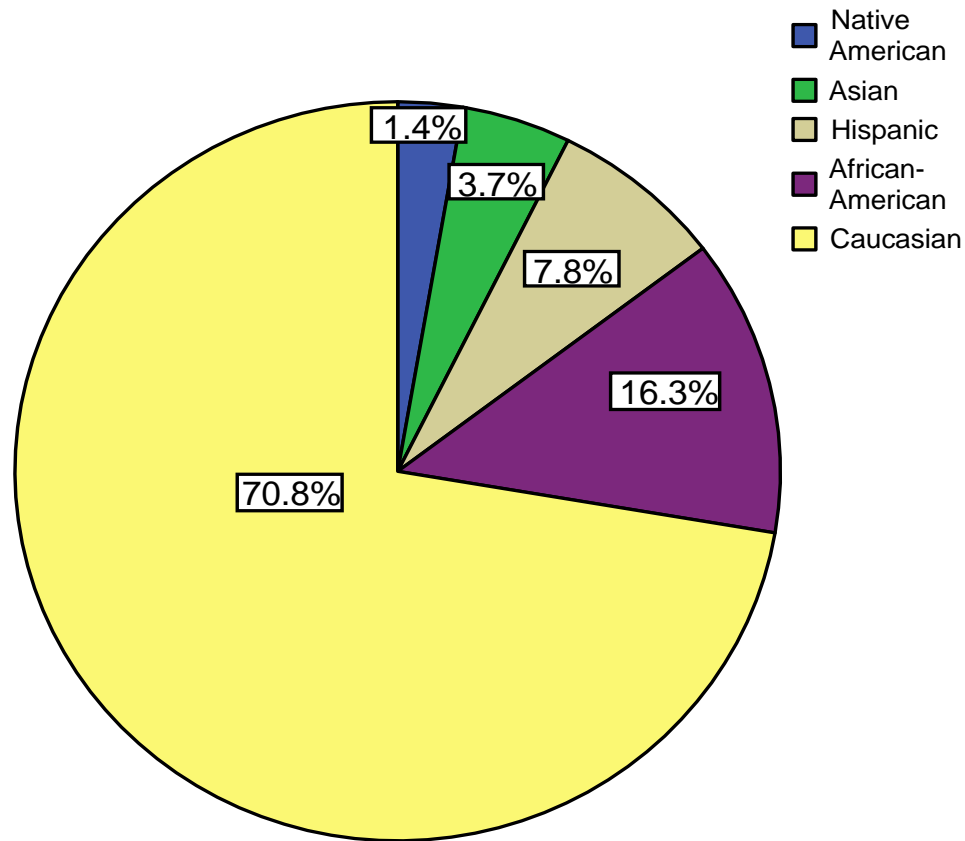
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Georgia	43.2	6	34
New Jersey	41.1	7	4
New York	40.4	8	21
Arizona	38.0	9	36
Nevada	37.8	10	33
Alabama	36.7	11	18
Illinois	36.2	12	32
Alaska	35.2	13	30
Delaware	34.9	14	13
Virginia	33.5	15	8
Oklahoma	32.0	16	22
Arkansas	26.7	17	23
Connecticut	26.6	18	6

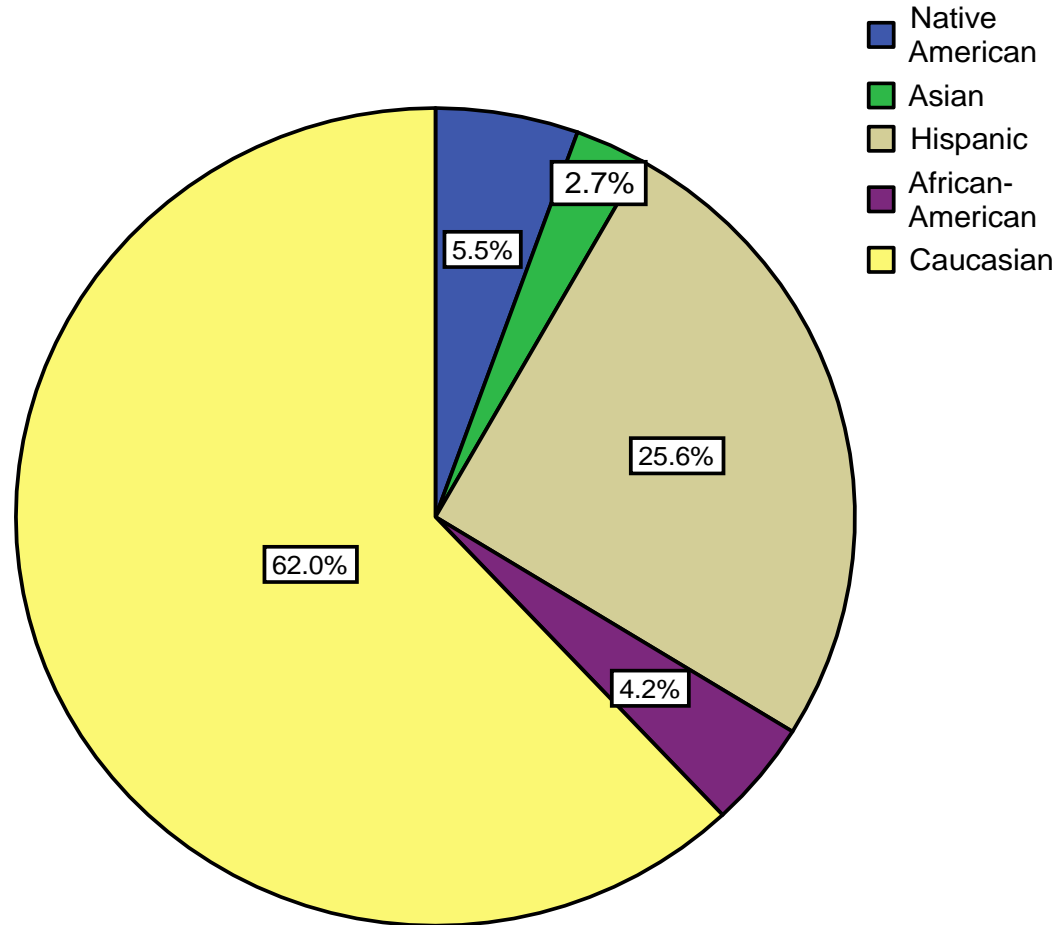
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State	NCES Rate	NCES Rank
Missouri	81.0	19
Ohio	81.0	20
Alabama	80.0	21
Rhode Island	79.8	22
Oklahoma	79.2	23
Arkansas	79.1	24
Hawaii	77.7	25
Mississippi	77.3	26
Idaho	76.9	27
Wyoming	76.5	28
Oregon	76.4	29
Illinois	75.8	30
Alaska	75.2	31
New Mexico	74.4	32
Nevada	73.5	33
Georgia	71.1	34
Louisiana	65.0	35
Arizona	63.5	36

Percentage of High School Completers by Ethnicity to Total High School Completers All 36 States

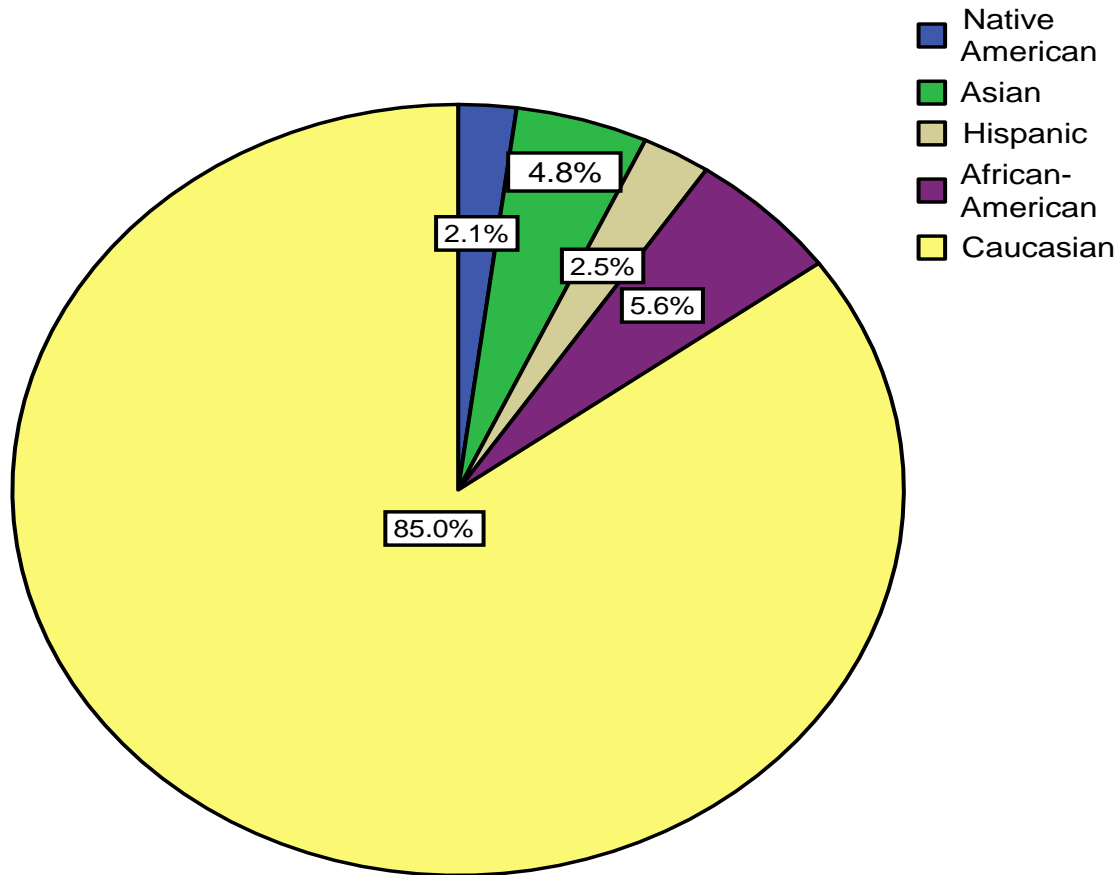


Percentage of Arizona High School Completers by Ethnicity to Total High School Completers



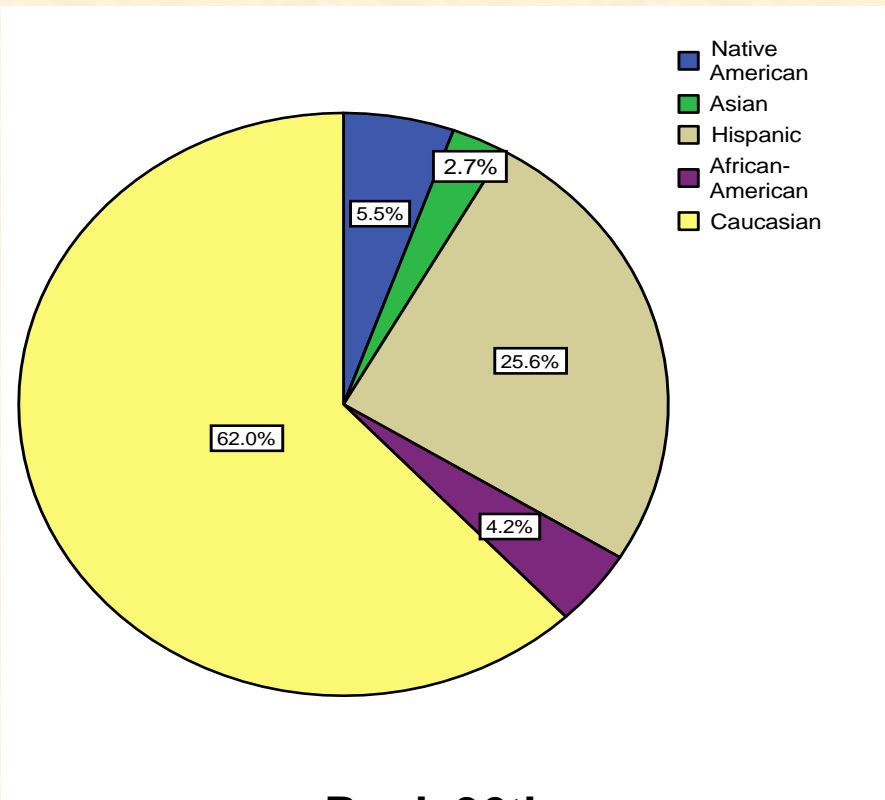
Rank 36th

Percentage of Minnesota High School Completers by Ethnicity to Total High School Completers

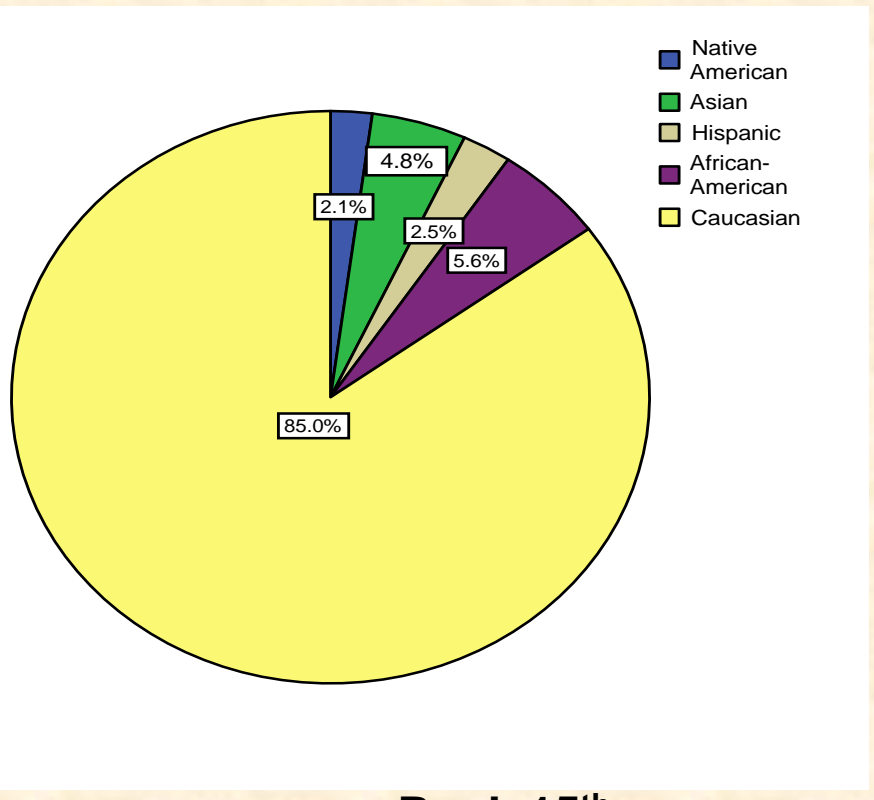


Rank 15th

Comparison of Percentage of Minnesota & Arizona High School Completers by Ethnicity to Total High School Completers



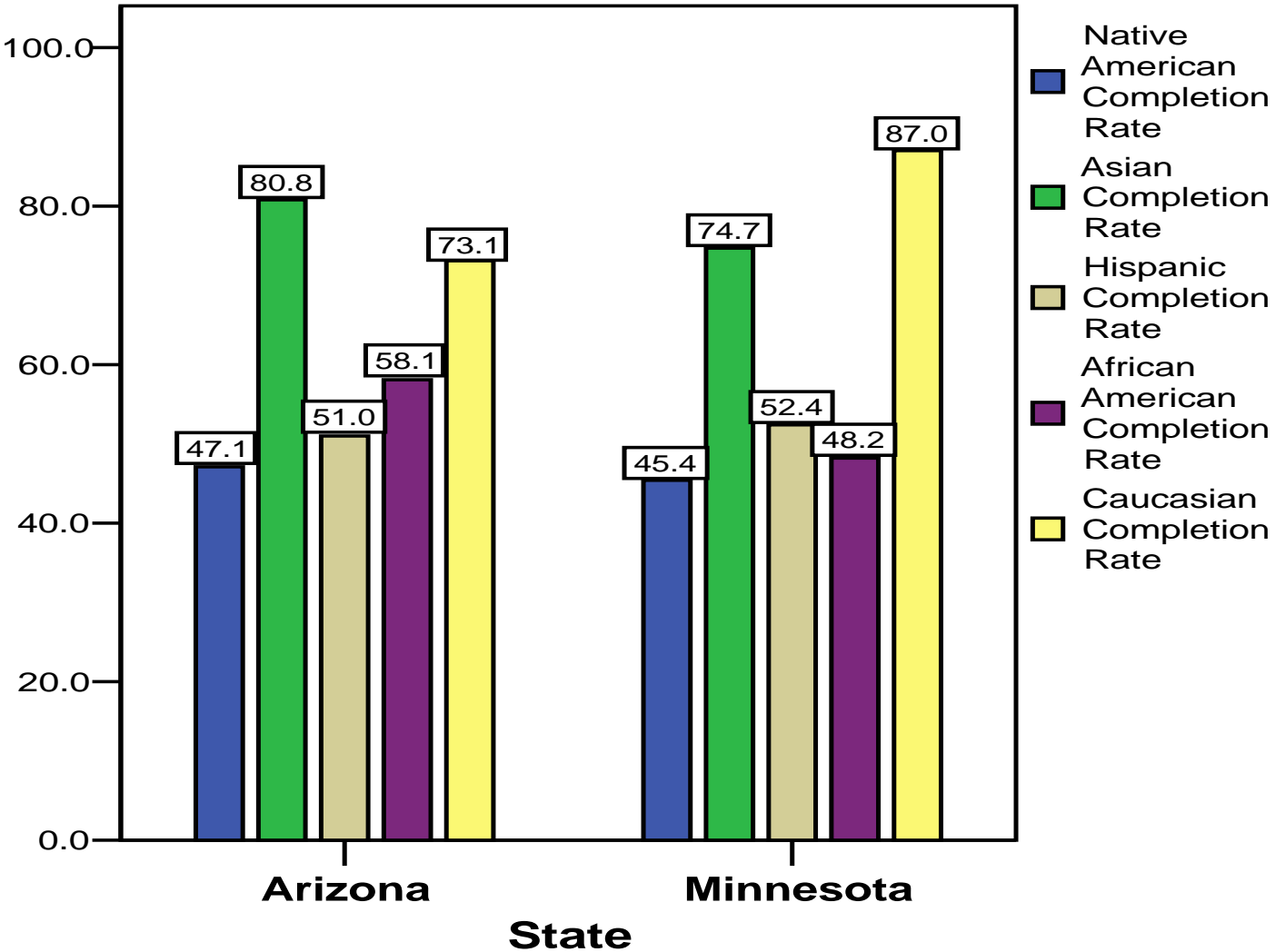
Rank 36th



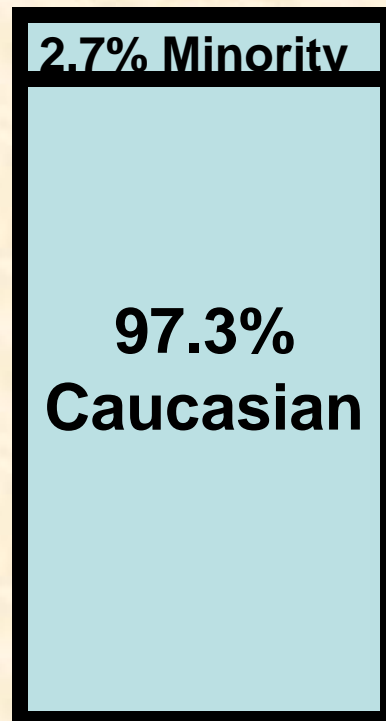
Rank 15th

Comparison of Completion Rate % by Ethnic Subgroup

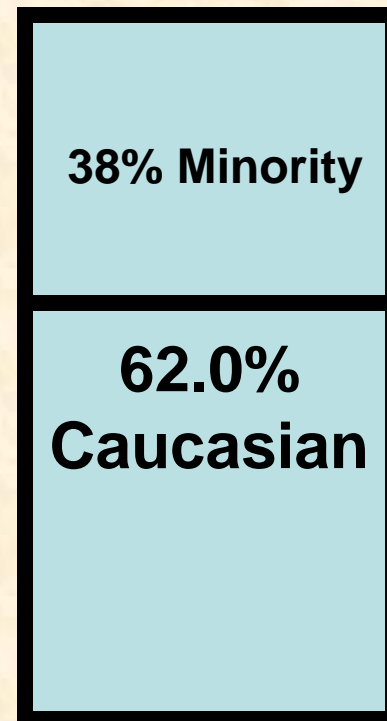
Arizona and Minnesota



Do Demographics Matter?



Maine
Rank 6th



Arizona
Rank 36th

Implications

- This puts more diverse states at a relative disadvantage when determining state-to-state comparisons.
- Might need to consider completion rates weighted with a diversity index.