The Potential Disparate Impact CAEP Standard 3.2 on the Protected Classes of Alaska Native, American Indian, African American, and Latino Members of Descent

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Abstract

CAEP Standard 3.2 has a demonstrated disparate impact on several protected classes of individuals, including African Americans, Alaska Natives, American Indians, and Latinos. The data from this study clearly shows a national policy that will have an unequal impact for future genrations of minority teacher candidates.

Introduction

A fundamental aspect of good educational practices is built upon a solid framework of rigorous, useful, and appropriate standards. The Council for the Accreditation of Educator Preparation (CAEP), was created by the merger of the National Council for Accreditation of Teacher Education (NCATE) and the Teacher Education Accreditation Council (TEAC). As the sole accreditor of teacher education programs CAEP standards exert a large influence across the educational landscape. These standards are useful and guide many institutions across America. This influence is a great responsibility and when CAEP standards create a negative or Disparate Impact on Protected Classes then CAEP has a professional responsibility to reassess the standards they have created and implemented.

CAEP Standard 3.2 is such a standard that must be revisited as aspects of CAEP Standard 3.2 will have a Disparate Impact on the Protected Classes of Alaska Native, American Indian, African American, and Latino teacher candidates. Here is the CAEP Standard 3.2 as currently written 3.2. The provider sets admissions requirements, including CAEP minimum criteria or the state's minimum criteria, whichever are higher, and gathers data to monitor applicants and the selected pool of candidates. The provider ensures that the average grade point average of its accepted cohort of candidates meets or exceeds the CAEP minimum of 3.0, and the group average performance on nationally normed ability/achievement assessments such as ACT, SAT, or GRE:

- is in the top 50 percent from 2016-2017;
- is in the top 40 percent of the distribution from 2018-2019; and
- is in the top 33 percent of the distribution by 2020.[i]

If any state can meet the CAEP standards, as specified above, by demonstrating a correspondence in scores between the state-normed assessments and nationally normed ability/achievement assessments, then educator preparation providers from that state will be able to utilize their state assessments until 2020. CAEP will work with states through this transition.

Over time, a program may develop a reliable, valid model that uses admissions criteria other than those stated in this standard. In this case, the admitted cohort group mean on these criteria must meet or exceed the standard that has been shown to positively correlate with measures of P-12 student learning and development.

The provider demonstrates that the standard for high academic achievement and ability is met through multiple evaluations and sources of evidence. The provider reports the mean and standard deviation for the group. (CAEP Accreditation Standards, 2013, pg. 8)

This discussion will focus on the performance requirement of "*the group average performance on nationally normed ability/achievement assessments such as ACT, SAT, or GRE: is in the top 33 percent of the distribution by 2020.[i]*" as this is where the Disparate Impact on the Protected Classes of Alaska Native, American Indian, African American, and Latino teacher candidates will be felt the greatest.

This discussion will be grounded in data gathered from multiple sources, including but not limited to:

- ✓ CollegeBoard 2012 College-Bound Seniors Total Group Profile Report.
- ✓ U.S. Department of Education Office for Civil Rights: CIVIL RIGHTS DATA COLLECTION, Data Snapshot: College and Career Readiness, March 2014.
- ✓ Status and Trends in the Education of Racial and Ethnic Groups. NCES 2010-015. *National Center for Education.*

These data sources were selected as they provide large data sets from the test vendors referenced in CAEP Standard 3.2, and/or specifically address the Protected Classes that CAEP Standard 3.2 will have a Disparate Impact on.

Current State of Protected Classes in American Education:

In the 2012 College Bound Seniors Report Total Group Report Table 8 shows the current means on the SAT by Ethnicity. As we can plainly see that the Protected Classes of Alaska Native, American Indian, African American, and Latino test takers perform below the mean for all test takers especially when compared to White and Asian test takers. Even at the 50th percentile the protected classes are showing an emerging disparate impact.

Demographic Information

SAT: Mean Scores by Gender Within Ethnicity

Table 8: Total Mean Scores by Ethnicity

SAT	Test-Takers		Critical Reading		Mathematics		Writing	
Test-Takers Who Described Themselves As:	Number	Pct	Mean	SD	Mean	SD	Mean	SD
American Indian or Alaska Native	9,716	1	482	106	489	106	462	103
Asian, Asian American, or Pacific Islander	192,577	12	518	125	595	126	528	129
Black or African American	217,656	13	428	98	428	97	417	94
Mexican or Mexican American	108,238	7	448	96	465	97	443	92
Puerto Rican	27,793	2	452	103	452	104	442	101
Other Hispanic, Latino, or Latin American	136,602	8	447	105	461	105	442	102
White	852,144	51	527	103	536	103	515	103
Other	62,340	4	491	121	516	120	491	119
No Response	57,413	3	444	131	502	127	448	125
Total	1,664,479	100	496	114	514	117	488	114

SOURCE: CollegeBoard 2012 College-Bound Seniors Total Group Profile Report.pg. 3

Does this mean the protected classes are inherently less qualified under CAEP Standard 3.2? This is where we need to uncover the story behind the story.

SAT Mathematics:

One of the three major areas tested by the Scholastic Aptitude Test (SAT) is Mathematics, as previously noted this is where the Protected Classes appear to be falling far below the established cutoffs proposed by CAEP. The area of mathematics is of particular interest as the access to rigorous mathematical courses to properly prepare students for success on the nationally normed tests is crucial. The following chart shows 26 percent of all SAT test takers had at least one year of Calculus and another 29 percent took Pre-calculus as part of their high school curriculum.

Mathematics	Test-Takers		Percent by Gender		SAT Mean Scores		
Years of Study	Number	Pct	Male	Female	Critical Reading	Mathematics	Writing
More Than 4 Years	267,165	20	48	52	534	574	529
4 Years	744,563	57	45	55	506	516	496
3 Years	230,110	18	43	57	464	466	454
2 Years	31,102	2	48	52	458	476	451
1 Year	12,403	1	48	52	446	478	442
1/2 Year or Less	20,043	2	47	53	426	447	418
No Response	359,093		51	49	476	505	472
AP/Honors Courses	474,790	36	46	54	558	589	551
Highest Level of Mathematics Achieved*							
Calculus	325,493	26	50	50	562	607	559
Pre-calculus	367,323	29	44	56	513	530	504
Geometry	521,493	41	43	57	459	455	447
Algebra II	17,583	1	47	53	453	456	442
Algebra I	7,707	1	48	52	411	393	399

SOURCE: CollegeBoard 2012 College-Bound Seniors Total Group Profile Report.pg. 6

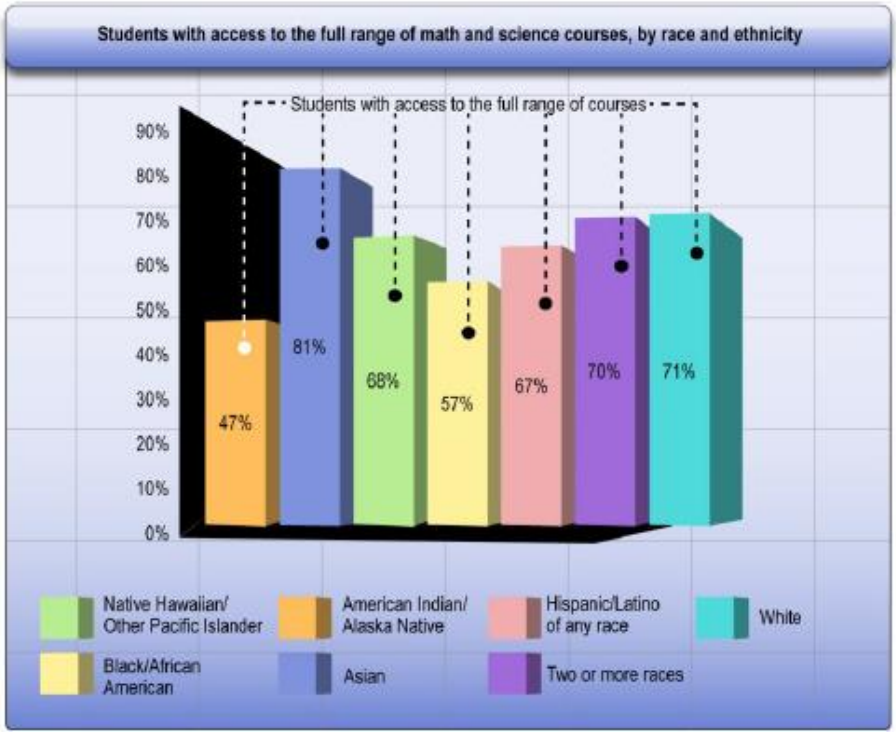
SAT math scores show a strong connection to level of math taken in high school and SAT performance. Success on the SAT certainly requires that students who will be taking the SAT to have taken a rigorous set of mathematics courses. However, what happens when this opportunity to take rigorous math courses does not exist in equal opportunity for all students, especially when the students not being afforded equal

opportunity to prepare for the exam are the same individuals that CAEP Standard 3.2 will have a Disparate Impact on. This is the exact situation as the Protected Classes of Alaska Native, American Indian, African American, and Latino teacher candidates are being placed in a position to meet CAEP requirements that they are not afforded equal opportunity to prepare for.

A quarter of high schools with the highest percentage of black and Latino students do not offer Algebra II; a third of these schools do not offer chemistry. Fewer than half of American Indian and Native-Alaskan high school students have access to the full range of math and science courses in their high school. (CRCD College and Career Readiness Snapshot, 2014) pg. 1

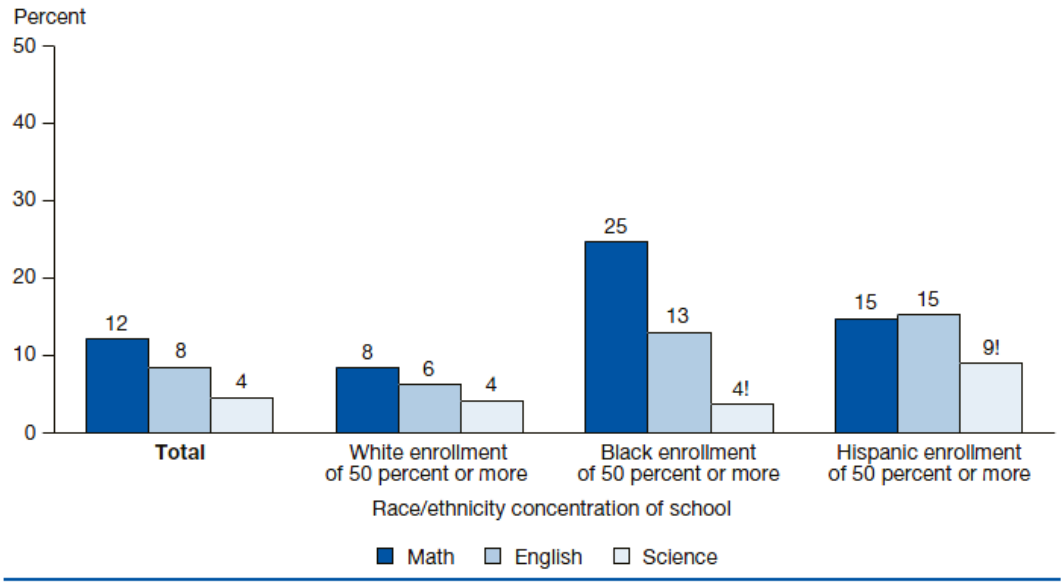
If students do not have equal access to the courses that would prepare for them for success on the nationally normed exams, an unequal requirement is being placed on a group of individuals. Furthermore, when such an inequality can be shown to exist upon racial lines then such an issue becomes a civil rights concern. This issue is further exacerbated but the fact that of those teaching math courses in many schools that are predominantly attended by students of color are not as qualified as one would expect.

In 2007–08, about 25 percent of secondary mathematics teachers who taught in schools with at least half Black enrollment had neither a certification nor a college major in mathematics, compared to 8 percent of secondary mathematics teachers who taught in schools with at least half White enrollment. *(Indicator 9.1)* Aud, S., Fox, M., KewalRamani, A., & National Center for Education Statistics, (2010), pg. 6.
This unequal access is further quantified in the following two tables.



SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12.pg. 8

Figure 9.1. Percentage of public high school teachers with neither a college major nor standard certification in the subject that is their main teaching assignment, by race/ethnicity concentration of schools and subject: 2007–08



SOURCE: Aud, S., Fox, M., KewalRamani, A., & National Center for Education Statistics, (2010), pg. 48. This is a connection that cannot be dismissed, two separate data sets show that the Protected Classes of Alaska Native, American Indian, African American, and Latino are being held to standard that they are not Being afforded an equal opportunity to prepare for in either courses offered or quality of instruction.

Income and Test Performance:

Another aspect of the SAT that puts the protected classes of Alaska Native, American Indian, African American, and Latino in the category of Disparate Impact is the connection to family income and SAT test performance. The chart below shows a direct connection to test performance in relation to income as a whole, this is important because CAEP requires EPP's to meet Standard 3.2 as a group mean therefore an average score of all of your applicants.

SAT	Test-Takers		Critical Reading		Mathematics		Writing	
	Number	Pct	Mean	SD	Mean	SD	Mean	SD
Family Income								
$0 - $20,000	105,680	14	433	105	461	119	428	104
$20,000–$40,000	125,982	17	463	103	481	111	453	101
$40,000–$60,000	109,444	14	485	102	500	108	473	101
$60,000–$80,000	97,649	13	499	102	512	106	486	101
$80,000–$100,000	83,659	11	511	103	525	106	499	102
$100,000–$120,000	72,776	10	523	103	539	107	512	104
$120,000–$140,000	38,556	5	527	103	543	106	517	104
$140,000–$160,000	29,437	4	534	103	551	106	525	105
$160,000–$200,000	35,474	5	540	105	557	108	534	108
More than $200,000	57,487	8	567	107	589	107	566	110
No Response	908,335		496	117	515	119	490	116

SOURCE: CollegeBoard 2012 College-Bound Seniors Total Group Profile Report.pg. 4

If your teacher education program is receiving a majority of it's applicants from populations of low income

students then meeting the standard is basically unattainable, and once again it is the protected classes of Alaska Native, American Indian, African American, and Latino that will have to endure a disparate impact. The connection to race and poverty levels is also evidenced by the following pieces of data.

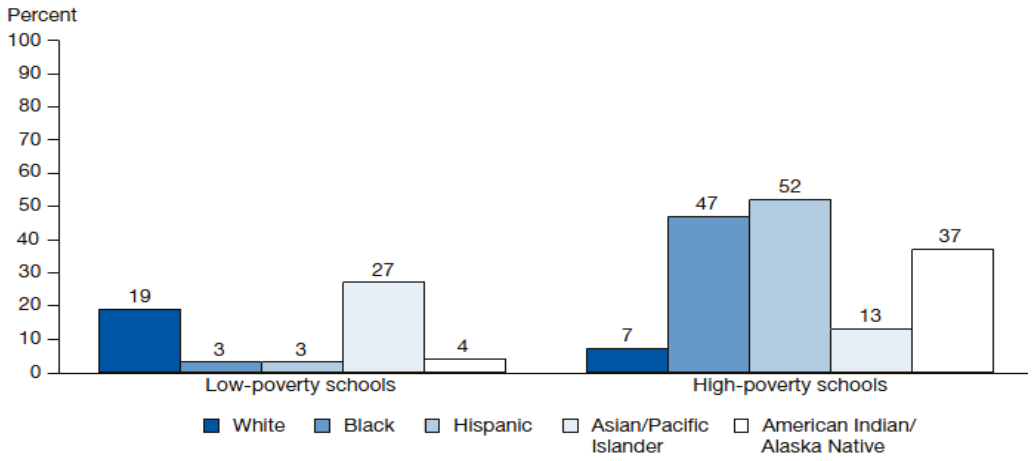
Forty-eight percent of public school 4th-graders were eligible for free or reduced price lunches in 2009, including 77 percent of Hispanic, 74 percent of Black, 68 percent of American Indian/Alaska Native, 34 Percent of Asian/Pacific Islander, and 29 percent of White 4th-graders. *(Indicator 7.5)* Aud, S., Fox, M., KewalRamani, A., & National Center for Education Statistics, (2010), pg. 6.

This connection to poverty shows that groups that exceed the national average of 48 percent of 4th graders that are eligible for free or reduced lunch are of Alaska Native, American Indian, African American, and Latino descent and are the same groups that will perform below average on the nationally normed test requirement.

Here is a graphic that more clearly quantifies the connected aspects of race and poverty.

Status and Trends in the Education of Racial and Ethnic Groups

Figure 7.5b. Percentage of public school 4th-graders in low-poverty and high-poverty schools, by race/ethnicity: 2009



SOURCE: Aud, S., Fox, M., KewalRamani, A., & National Center for Education Statistics, (2010), pg. 38

Further Evidence:

To further demonstrate the connections discussed to this point another data set was located to show the long term connections on nationally normed tests to Alaska Native, American Indian, African American, and Latino descent and that there is a disparate impact of using such test scores. Here are NAEP scores by race and by various grade level and the trends are similar to trends demonstrated to this point on SAT scores.

Table 11.2. Percentage distribution of students at National Assessment of Educational Progress (NAEP) mathematics achievement levels, by race/ethnicity and grade: 2005 and 2009

Grade, year, and achievement level	Total[1]	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native
4th grade, 2009						
Below *Basic*	18	9	36	29	8	34
At *Basic*	43	40	48	49	31	45
At or above *Proficient*	39	51	16	22	60	21
At *Advanced*	6	8	1	1	17	2
8th grade, 2009						
Below *Basic*	27	17	50	43	15	44
At *Basic*	39	40	37	40	31	38
At or above *Proficient*	34	44	12	17	54	18
At *Advanced*	8	11	1	2	20	3
12th grade, 2005						
Below *Basic*	39	30	70	60	27	58
At *Basic*	38	41	25	32	37	36
At or above *Proficient*	23	29	6	8	36	6!
At *Advanced*	2	3	#	#	6	1!

SOURCE: Aud, S., Fox, M., KewalRamani, A., & National Center for Education Statistics, (2010), pg. 60

CAEP top 33 percent of the distribution requirement:

Based on the evidence as currently reported, Minority Serving Institution's (MSI's), specifically MSI's that serve predominantly Alaska Native, American Indian, African American, and Latino teacher candidates are going to suffer a disparate impact as a result of CAEP Standard 3.2. While CAEP is willing to work with institutions during the transition to the 2020 requirement. The data clearly shows that this issue has a much longer historical perspective in regards to performance on nationally normed exams. The following table shows SAT math scores by ethnicity over an extended period of time starting in 1986 through 2012.

SAT mean scores of college-bound seniors, by race/ethnicity: Selected years, 1986–87 through 2011–12

Race/ethnicity	1986–87	1990–91	1996–97	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12
SAT-Mathematics																
All students	501	500	511	514	514	516	519	518	520	518	515	515	515	516	514	514
White	514	513	526	530	531	533	534	531	536	536	534	537	536	536	535	536
Black	411	419	423	426	426	427	426	427	431	429	429	426	426	428	427	428
Mexican American	455	459	458	460	458	457	457	458	463	465	466	463	463	467	466	465
Puerto Rican	432	439	447	451	451	451	453	452	457	456	454	453	450	452	452	452
Other Hispanic	462	462	468	467	465	464	464	465	469	463	463	461	461	462	462	461
Asian/Pacific Islander	541	548	560	565	566	569	575	577	580	578	578	581	587	591	595	595
American Indian/Alaska Native	463	468	475	481	479	483	482	488	493	494	494	491	493	492	488	489
Other	482	492	514	515	512	514	513	508	513	513	512	512	514	514	517	516

SOURCE: Last retrieved from http://nces.ed.gov/fastfacts/display.asp?id=171 on October 11, 2014

The long term scores reported above show the trends among race and ethnicity are well established and show no reason for CAEP to expect the sudden increase required by the components of CAEP Standard 3.2, especially when the connections to achievement on nationally normed tests is mitigated by larger social

issues such as poverty and equality of opportunity. An interesting fact is education is one of the fields that these protected classes have made substantial in-roads and success.

The success of the Protected Classes of Alaska Native, American Indian, African American, and Latino in the field of education is shown to be at a much greater rate than other fields of study when achieving advanced degrees.

Level and field of study	Total[1]	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native
Master's degrees						
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Biological and biomedical sciences	1.5	1.4	0.9	1.3	3.0	1.7
Business	24.9	22.1	31.6	23.2	36.4	22.6
Computer and information sciences	2.7	1.5	1.7	1.3	5.1	1.4
Education	28.1	33.0	27.7	32.7	12.2	32.2
Engineering and engineering technologies	5.5	3.4	1.9	3.5	10.6	2.7
Health professions and related clinical sciences	9.3	10.1	9.4	8.9	11.1	10.8
Psychology	3.4	3.7	4.5	4.6	2.4	3.4
Public administration and social services	5.3	5.1	9.5	7.5	3.8	7.8
Social sciences and history	3.0	2.9	2.0	2.6	2.5	2.4
Visual and performing arts	2.3	2.4	1.0	1.8	2.3	1.4

SOURCE: Aud, S., Fox, M., KewalRamani, A., & National Center for Education Statistics, (2010), pg. 138

This success in advanced degrees is even more prevalent when looking at Doctoral Level achievement for Alaska Native, American Indian, African American, and Latino members of descent.

Level and field of study	Total[1]	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native
Doctor's degrees						
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Biological and biomedical sciences	10.9	10.1	6.2	11.1	16.4	6.3
Business	3.3	2.8	5.8	2.6	3.2	5.5
Computer and information sciences	2.7	1.4	0.8	0.6	2.8	0.0
Education	13.3	15.4	36.8	19.4	7.8	22.4
Engineering and engineering technologies	12.8	6.5	3.6	6.1	15.3	5.9
Health professions and related clinical sciences	15.5	21.3	11.7	15.8	15.9	16.5
Physical sciences and science technologies	7.5	6.1	2.4	5.3	6.7	2.9
Psychology	8.3	10.8	9.2	14.3	8.8	16.2
Social sciences and history	6.4	6.2	4.7	7.1	5.7	5.5
Visual and performing arts	2.3	2.6	1.1	1.5	2.4	1.8

[1] Includes degrees conferred to nonresident aliens not separately shown.
NOTE: Reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported. Detail does not sum to totals because degree-granting institutions conferred degrees in many other fields not shown separately. Race categories exclude persons of Hispanic ethnicity.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2007–08 Integrated Postsecondary Education Data System (IPEDS), Fall 2008.

SOURCE: Aud, S., Fox, M., KewalRamani, A., & National Center for Education Statistics, (2010), pg. 138

As noted in the above charts the single greatest area of doctoral degrees awarded for Alaska Native, American Indian, African American, and Latino descent is in the field of education. These doctoral candidates had to start with entrance into the educational field, CAEP Standard 3.2 would likely have terminated many of these same advanced degree achievements before they even started.

Using an estimate of 8% of all SAT test takers from the Protected Classes achieving a score 600 on SAT math (National Science Foundation. (n.d.)), and 5% of all SAT test takers intending to go into the field of education (CollegeBoard, College-Bound Seniors Total Group Profile Report.pg. 13) means a coarse calculation and potential loss of 99.6 % of all current members of the Protected Classes of for Alaska Native, American Indian, African American, and Latino descent being eliminated from MSI's depending on the cohort average.

While this projected number may seem high, the fact is the data from multiple point sources demonstrate a clear and Disparate Impact on the Protected Classes of Alaska Native, American Indian, African American, and Latino descent by CAEP Standard 3.2.

Summary:

CAEP serves a great and influential aspect in the field of education, more specifically teacher education preparation. CAEP national standards create a benchmark for many Education Preparation Programs to aspire to and such standards are needed as their impact serves the greater good of the profession.

The CAEP Standards are in general useful and serve to elevate the educational profession. However, CAEP Standard 3.2 deserves further review and should be suspended as currently worded, as it has been shown to have a Disparate Impact on several protected classes, specifically: Alaska Native, American Indian, African American, and Latino members of descent.

This Disparate Impact cannot and should not be allowed to continue as it appears to be in a direct violation of Title VII of the Civil Rights Act., specifically the Supreme Court decision, in *Griggs v. Duke Power Co.*, 401 U.S. 424, 91 S.Ct. 849, 28 L.Ed.2d 158 (1971), as there is compelling evidence that there is a disproportionate impact on several protected classes.

Aud, S., Fox, M., KewalRamani, A., & National Center for Education Statistics, (2010). Status and trends in the education of racial and ethnic groups. NCES 2010-015. *National Center for Education*

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The Supreme Court, in *Griggs v. Duke Power Co.*, 401 U.S. 424, 91 S.Ct. 849, 28 L.Ed.2d 158 (1971)

US Department of Education Office of Civil Rights. (2014). *Civil rights data collection: Data snapshot college and career readiness* (3rd ed.). In . (Ed.).