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Stats, Social Justice, and the Limits of Interest Convergence: The Story of Tucson Unified’s Mexican American Studies Litigation¹

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Abstract
In 2011, the state of Arizona banned the highly successful Tucson Unified School District Mexican American Studies program through the law ARS § 15-112. This article is a Critical Race Theory counter-narrative regarding the role of statistics in the constitutional challenge to this state law. Through firsthand accounts of this process, we demonstrate how multivariate empirical analyses served as an important component for the overturning of the law ARS § 15-112 in the highest-profile Ethnic Studies legal case in the country’s history (Arce v. Douglas, 2015). We also use this article to explore the limitations of interest convergence (Bell, 1980) using this litigation as a case study.

Keywords: Mexican American Studies, Ethnic Studies, regression analysis, interest convergence, HB2281, ARS § 15-112

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Introduction

In 2018, there was a special issue of *Race Ethnicity and Education* dedicated to the socially transformative potential of quantitative social science methodologies (Garcia, Lopez, & Velez, 2018). This issue was critically important because for years in critical social science research, quantitative methodologies were seen as representing the “dominant paradigm” useful for only recreating racial inequality (e.g., Zuberi, 2001; Zuberi, & Bonilla-Silva, 2008). When it comes to educational research, the key word here is critical, referencing the examination of the underlying histories, causes, and consequences of social oppression (Apple, 2004; Giroux, 2007; McLaren, 2015). This was precisely the epistemic and ontological orientation that guided the development of the Tucson Mexican American Studies (MÁS) program (Cammarota & Romero, 2014). During the 2010 MÁS banning in Tucson Unified School District, quantitative analyses and critical inquiry were frequently seen as mutually exclusive ideas. It was only recently that critical race theory (CRT) and quantitative inquiry started to merge (Garcia et al., 2018).

CRT was central in the creation of the MÁS program (Cammarota & Romero, 2014), and it was also one of the most controversial (e.g., Horne, 2007). CRT in education was not satisfied with individualized notions of racism (e.g., “You are a racist”), instead theorizing the persistence of contemporary White supremacy and the role of educational institutions in perpetuating this system of racial oppression (Cabrera, 2018). Since the mid-1990s when this paradigm was adapted to education from law, there has been a primary focus on qualitative analyses as these were seen as giving a voice to marginalized communities within the exclusionary practices of academic scholarly production (Lynn & Dixon, 2013). This racial exclusion has been so powerfully structured that Delgado Bernal and Villalpando (2002) referred to it as an apartheid of knowledge.

Quantitative empirical analyses, however, have been critically important in litigation around issues like segregation (*Brown v. Board of Education*, 1954) and affirmative action (*Grutter v. Bollinger*, 2003; *Fisher v. Texas*, 2016). However, these court cases have been criticized, especially through CRT, because the scholarly analyses cited in these court rulings centered the needs of White students in what is known as interest convergence (Bell, 1980). For example, educational segregation was found to be unconstitutional, in part, because it did harm to White students (Bell, 1980). Additionally, affirmative action was found to be constitutional, in part, because White students learned better in diverse educational environments (Blanchard & Baez,
The strange component of the MÁS controversy was that the educational needs of Mexican American students served as an end-in-and-of-itself, and this case serves as a pushback against Bells’ (1980) insightful interest convergence thesis.

From this perspective and sticking with CRT, we offer a counternarrative regarding the MÁS litigation (Delgado, 1989; Solorzano & Yosso, 2002). The dominant narrative within the state of Arizona was that the statistics regarding student achievement were irrelevant, and this was particularly articulated by Superintendent of Public Instruction Tom Horne (Palos, 2011). This piece is meant to offer an alternative to that through the “personal stories”2 type of counternarrative (Solorzano & Yosso, 2002). Additionally, the narrative will also function as a counter-counternarrative as well because it pushes back against CRT. Yes, it is true that positivistic statistical analyses have been central to the oppression of minoritized communities historically (Zuberi, 2001). What we reject, however, is the idea that these analytical procedures can simply be reduced to the “master’s tools” (Cokley & Awad, 2013). Instead, we will demonstrate how they can be used for critical, progressive social purposes. What follows is a firsthand account of the role of quantitative social science inquiry in the highest profile Ethnic Studies case in U.S. legal history.


U.S. Supreme Court Justice Louis Brandeis famously declared the states are the “laboratories of democracy” (New State Ice Co v. Liebmann, 1932). Due to the racist and regressive pieces of legislation coming out Arizona in the early 2010s (Santa Ana & González de Bustamante, 2012), this state was affectionately labeled by Jon Stewart on The Daily Show as the “meth lab of democracy” (King, 2010). One of the central pieces of legislation that helped the state gain that label was HB22813 (now A.R.S. § 15-112). Spearheaded by then Superintendent of Public Instruction, Tom Horne, the law allowed the state to withhold 10% of its funding to any school district having a course or class that:

2 The other types of counternarrative are other people’s stories or narratives and composite stories. Both authors were deeply involved in this litigation, so the “personal narrative” version seems most appropriate for this article. As each served in a dramatically different role in the case (Cabrera, statistician; Chang, legal counsel), it is too confusing to bounce back and forth between first person “I” accounts. Therefore, we primarily use third person when describing events, and we use “we” during the analytical components of the piece.

3 There are a lot of moving pieces in this story. To help orient the reader, we have added a timeline of events as Appendix A.
1) Promote the overthrow of the United States government,
2) Promote resentment toward a race or class of people,
3) Are designed primarily for pupils of a particular ethnic group, or
4) Advocate ethnic solidarity instead of the treatment of pupils as individuals (Prohibited courses and classes, enforcement, Arizona Revised Statute, 2010, p. 1).

This was Mr. Horne’s third attempt to pass the bill, and he was very direct that he intended this piece of legislation to eliminate the Mexican American Studies (MÁS) program in Tucson Unified School District (TUSD). Horne (2007) claimed that the MÁS program was racist against White people, representing a type of ethnic chauvinism, and that programmatic elimination was the only path forward (Palos, 2011).

Supporters of the program argued educational efficacy, especially for Mexican American students, should be at the forefront of the discussion. While there were a number of analyses of the TUSD program that pointed to the program’s efficacy (e.g., Cappellucci et al., 2011; Department of Accountability and Research, 2011a, 2011b; Romero, 2008; Romero, Arce, & Cammarota, 2009; Save Ethnic Studies, 2011), these statistics were descriptive in nature and not able to actually determine impact. For example, when it was repeatedly shown that MÁS students passed state standardized tests and graduated at higher rates than their peers (Cabrera, 2014; Cappellucci et al., 2011; Department of Accountability and Research, 2011a, 2011b), critics of the program offered questions such as:

- While the students in the MÁS program tend to be low-income Mexican Americans, how do we know that the teachers and administrators didn’t simply find the best performing students in this demographic and push them to take these courses?
- We know that female students tend to perform better academically than male students. How do we know that the teachers and administrators didn’t simply recruit more female students into these classes and that accounts for these results?

From a scholarly perspective, these questions are important and relevant. The difficulty was that they were rarely lodged from a place of concern for rigorous empirical analyses. Rather, it was meant as a way to shut down the debate about programmatic efficacy, even though they are legitimate points raised.
Additionally, there was a major political hurdle in this debate. Tom Horne was clear that he thought the possibility of MÁS raising student achievement was irrelevant in the controversy. Specifically, he said the following in the documentary Precious Knowledge:

There are better ways to get students to perform academically and wanting them to go into college than trying to infuse them with racial ideas (Palos, 2011, 24:00)…And, uh, anybody who says kids can’t learn unless they’re subject (sic) to that kind of militancy is... is... uh... the clearest example of racism that I can think of. (Palos, 2011, 55:45)

In both quotations, Horne primarily focused on the “radical ideas” in the course that he found objectionable, and he dismissed educational achievement. He went so far as to say that if people believed MÁS was the way to educate Mexican American students, that this was a form of racism in-and-of-itsel.

The consummate politician, Horne wanted the issue of educational achievement to leave the MÁS debate. The optics are really bad when a State Superintendent of Public Instruction continues to publicly state that educational achievement is irrelevant in an educational controversy. Within this context, Horne commissioned a fatally flawed study that showed no effect of taking MÁS courses (Franciosi, 2009), but this was almost an afterthought in the debate around MÁS. Leading up to the eventual elimination of the classes, more analyses questioning the efficacy of MÁS began to emerge.

For example, TUSD released a descriptive report where the author argued that the effects of taking MÁS classes were the same as participating in extra-curricular activities such as sports or student government (Scott, 2011, as cited in Huicochea, 2011). It was another fatally flawed statistical report, not in terms of the analysis itself, but in terms of stepping beyond the parameters of what the results could reasonably say. With respect to the analysis that Scott produced at the request of Superintendent Pedicone, he argued there was a negligible impact of MÁS classes because TUSD students who participated in extracurricular activities graduated at similar rates to those who took MÁS courses. There were no statistical controls in the analysis, and the timing of the report’s release begged the question of to what degree political pressure led to the analysis being conducted in the first place.

The reports release coincided with the Administrative Law Judge (ALJ) hearing and increased political pressure coming down on TUSD. Some context is necessary. When TUSD was initially found out of compliance with A.R.S. § 15-112, the board agreed to appeal the ruling.
after intense local pressure applied by activists—the most high profile of which was when student organizers chained themselves to board members’ chairs before a meeting could start (Cabrera, Meza, & Rodriguez, 2011). The ALJ hearing was a sham, and we use that term intentionally. Even if the judge ruled that there were no violations of A.R.S. § 15-112 within TUSD, it was up to then State Superintendent Huppenthal whether or not he would abide by that ruling. Given that Huppenthal campaigned on the slogan, “If elected, I will stop la raza,” there did not seem to be any way that he would stop until the program was fully eliminated. When Judge Kowal ruled that there were violations of state law, it only strengthen Huppenthal’s political resolve to terminate the program.

On January 10, 2012, the TUSD board voted 4-1 to eliminate the MÁS program, but the fight was far from over. This became the larger context for the definitive analysis on the MÁS program’s educational efficacy which became the basis for Dr. Cabrera’s expert testimony in the federal trial. However, to get to this point, we have to wade through the TUSD 40-year-old desegregation case. Yes, there are a lot of moving parts in this story and it becomes exceedingly complicated as we progress.

**Round 1: Desegregation and the Special Master**

Fast-forward to 2012. The ALJ hearing has commenced. The findings of non-compliance stand. The district caves to the state’s political and economic pressure, and the TUSD governing board eliminates the program. There was a wildcard in this situation. TUSD was under a 40-year-long federal desegregation order. University of Maryland professor emeritus Dr. Willis “Bill” Hawley was assigned by Judge David Bury as the “special master” on the desegregation case. Judge Bury tasked Dr. Hawley with creating a plan for TUSD that, if properly implemented, would allow them to get out from under the federal desegregation scrutiny and move toward post-unitary status. As part of this designation, Special Master Hawley was guaranteed “access to staff, governing board members, schools and district data” (Huicochea, 2012), and he was not only interested in integrating the schools but also eliminating race-based academic achievement gaps in the district. He heard about the academic achievement of students who took the MÁS courses, but there was a problem. The analyses to this point were descriptive and therefore not able to assess the efficacy of the program.

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4 Yes, he really ran on that. He discussed it with Amy Goodman on Democracy Now! [https://www.youtube.com/watch?v=nZyzzwqmy5U](https://www.youtube.com/watch?v=nZyzzwqmy5U)
(Cappellucci et al., 2011; Department of Accountability and Research, 2011a, 2011b; Romero, 2008; Romero et al., 2009; Save Ethnic Studies, 2011; Scott, 2011, as cited in Huicochea, 2011).

Special MÁSter Hawley made his career on empirical analysis, where that which could be rigorously observed, tested, and analyzed, deserved to be elevated in the public policy discourse. Within this context, he tasked a group from the University of Arizona, led by Dr. Nolan Cabrera, with conducting the most rigorous assessment of the MÁS program to date. Along with Dr. Cabrera on the analytical team were Dr. Jeffrey F. Milem, associate dean of the College of Education, and Dr. Ronald W. Marx, dean of the College of Education. Both of these co-authors also made their careers conducting sound, rigorous, empirical analyses, and Dr. Milem in particular, has had his work cited by the Supreme Court in affirmative action cases.

Two of the three members of this research team (Milem and Marx) previously offered to conduct these analyses for Superintendent Pedicone pro bono, but he refused. Now, with Special Master Hawley making a request on behalf of the federal government, Pedicone had no other option but to open up the data for external scrutiny. It was, however, a nerve-wracking time for the three scholars involved for a number of reasons. The timeline was tight. They had to write-up a proposal, work with the human subjects boards of both UA and TUSD, obtain the data, clean the data, conduct the analyses, write up the results, realize they did the analyses incorrectly, conduct the analyses (again), write them up (again), and submit the final report to Special Master Hawley in six weeks.

The final report (Cabrera, Milem & Marx, 2012) was dubbed by the Tucson media and local activists as The Cabrera Report. Returning to the analysis, it accounted for confounding issues such as race, gender, SES, and school services (e.g., being ELL), and came to one consistent conclusion: “These results suggest that there is a consistent, significant, positive relationship between MÁS participation and student academic performance” (Cabrera, Milem, & Marx, 2012, p. 7). Academic performance in this instance meant passing AIMS (state standardized tests) after initial failure as well as graduating from high school.

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5 As a side note, Cabrera has always had issue with this label because it erases the contribution of his co-authors, and it also makes the report seem more about him than the MÁS program. As that is the colloquial name of it now, he reluctantly uses it as well.
After the release of the report, Special Master Hawley and a number of representatives of the federal government hosted a series of sessions through the district where they heard concerns from community members, and the MÁS courses were fresh on many people’s minds. At one of the meetings, former MÁS teacher José Gonzalez specifically referenced *The Cabrera Report* as evidence that the classes should be reinstated.

The final Unitary Status Plan (USP) was a disappointment for supporters and opponents of MÁS alike. Special Master Hawley did find the results of *The Cabrera Report* compelling, but he also was not going to challenge the constitutionality of state law. Based upon the strength of the analysis and the community push, the final USP\(^6\) in part read:

> By the beginning of the 2013-2014 school year, the District shall develop and implement culturally relevant courses of instruction designed to reflect the history, experiences, and culture of African American and Mexican American communities. Such courses of instruction for core English and Social Studies credit shall be developed and offered at all feasible grade levels in all high schools across the District... (p. 37)

While this opened up new possibilities for MÁS, it was also incredibly restricted because the district was still bound by state law. That is, they had to offer classes that were similar to the banned MÁS ones, also offer ones in African American Studies, and still be in compliance with A.R.S. §15-112. The last component meant that MÁS could not come back in the way its advocates wanted. However, the results from *The Cabrera Report* and its subsequent development became a critically important part of the legal strategy to challenge the constitutionality of the anti-MÁS state law.

**Round 2: 9th Circuit Court of Appeals**

While all of this was happening within the Tucson community, the lawsuit challenging the Constitutionality of A.R.S. §15-112 on 1st and 14th Amendment grounds was making its way through the federal courts. The plaintiffs lost the first trial as Judge Tashima offered a summary judgement upholding, on its face, three of the four subsections that described violations (e.g., Promoting the overthrow of the US government). The one he did find unconstitutional, A.R.S. §15-112(A)(3) was the one that prohibited courses “designed primarily for pupils of a particular ethnic group.” The plaintiffs appealed to the 9th Circuit Court in San Francisco.

An important difference between 9th Circuit and the District Court trial was the addition of Erwin Chemerinski to the plaintiffs’ legal team. Chemerinski is one of the premier 1st Amendment legal scholars in the country and was then Dean of the UC Irvine Law School. He agreed to join the legal team and deliver the oral arguments before the three-judge panel. While it is beyond the scope of this article to detail the legal nuances of this trial, it is worth noting that was the first time the in-depth statistical analyses played a role in the legal arguments.

On January 12, 2015, the trial began. Outside, a Danza Azteca group did the four corners ceremonia under the surveillance of U.S. Marshalls and Department of Homeland Security police. In front of an overflow audience, Dean Chemerinski began the plaintiffs’ oral arguments. A core component centered on demonstrating the racial animus the representatives of the state acted in creating and applying A.R.S. §15-112. This poses as difficult problem. If scholars of race/racism are correct, overt expressions of racism (e.g., “I think Black people are mentally inferior”) have been largely driven underground (Bonilla-Silva, 2006; Cabrera, 2018; Omi, & Winant, 2015). Within this paradigm, how can one demonstrate that racial animus is at play in a specific action?

This is where the statistics demonstrating the programmatic efficacy played a central role in determining motivation. Chemerinsky began by offering, “The district court said that Secretary Horne’s not following procedures raised sparks and red flags of discriminatory animus. We suggest it is much more than that when you look at the record here.”7 The procedural irregularities were critically important because there must be a reason when someone deviates from established protocols. What might be those protocols have been? Chemerinsky continued:

It is also notable that when [Huppenthal] took office, he commissioned his own study that found no evidence of violation of the statute, found that the courses were rigorous and very effective… He then ignored the report and found his own violations.8

If the State Superintendent of Public Instruction was following protocol, he would follow the recommendations of his own commissioned report which found the MÁS program to be

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7 Full oral arguments were broadcast and are archived on this C-SPAN website: https://www.c-span.org/video/?323730-1/maya-arce-v-john-huppenthal-oral-argument&start=882 We will refer to the time mark for each of the subsequent quotations in this section. The current one footnoted can be found at the 13:10 mark.
8 Ibid 13:40
educationally sound, effective, and in compliance with state law (Cappellucci et al., 2011).
Instead, he continued to find the program out of compliance with A.R.S. §15-112 despite contrary evidence.

Dean Chemerinsky subsequently used the statistics in the report to the Special Master to further drive home this point:

The statistics here I point you to on page 202 and 203 of the report from The Cabrera Report, students who participated in this program had a 108% greater chance of graduating than those who didn’t. They found that those who participated passed the standardized math test 144% more. The writing test, 162% more. The reading test, 168% more… In light of these statistics, is there anything else to explain this than discriminatory animus?9

It was an interesting argument because it centered the educational responsibilities of the State Superintendent of Public Education. This office is concerned with promoting educational opportunities for all students. Here is a demonstrably effective program that serves an overwhelmingly Mexican American student population, yet both Horne and Huppenthal fought extremely hard to eliminate it. Returning to Chemerinsky’s point, “Is there anything else that can explain this?”

When the ruling came down, the role of statistics did not play a role because the judges were primarily focusing on whether or not the A.R.S. §15-112 was “overly broad” or “vague.” That is, on their face, were the core tenets of A.R.S. §15-112 unconstitutional? They affirmed the district court ruling that A.R.S. §15-112 (A) (3) was unconstitutional, the other three (for the time being) were, but they also overturned the summary judgement ruling. That is, the case got kicked back down to the lower court to more deeply explore whether or not the creation and execution of A.R.S. §15-112 violated the 1st and 14th Amendment rights of Mexican American Students in TUSD. This was the time when the statistics played a critically important role in the litigation.

**Round 3: AERJ, Stats, and Deposition**

As the district grappled with how to proceed with the USP and the case was remanded back to Judge Tashima’s court, the statistical analyses continued to be refined to include the

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9 *Ibid* 15:00
results of 125 regression models, an additional analyst Dr. Ozan Jaquette was added to the team, and the results were eventually published in the prestigious *American Educational Research Journal (AERJ)* (Cabrera, Milem, Jaquette, & Marx, 2014). This continual refinement would be increasingly important as the federal trial regarding to the constitutional challenge to A.R.S. §15-112. The reworked analysis not only confirmed the original one submitted to Special Master Hawley (Cabrera, Milem, & Marx, 2012), but it also showed that the more students took MÁS classes, the higher their likelihood of academic success.

This article became the basis for Dr. Cabrera’s expert report regarding the efficacy of the MÁS program. For this report specifically, additional analyses were run for only Mexican American students and a new disparate impact analysis was also included (for the methodology, see Santos, Cabrera, & Fosnacht, 2010). Leading up to what would be the final trial in this political fiasco, the state only hired one expert witness—Dr. Thomas Haladyna, an educational psychologist out of Arizona State University. Even though former State Superintendent of Public Education Tom Horne frequently said that educational efficacy was irrelevant in this case (Palos, 2011), the actions of the defense seemed to indicate otherwise.

Dr. Haladyna’s primary critique was that the results were simply not believable, and he continually walked a fine line suggesting that cheating might have been at play while not making an all-out accusation:

> Such unusual growth in student achievement warrants investigation as to what, exactly, is the cause. Often, such growth is found to be the result of inappropriate test coaching or cheating. My comment is not intended to accuse the school district of cheating.

While Dr. Haladyna says that usually these types of results come from cheating, he did not want to make that claim directly. He also postulated that grade inflation might be the cause of the remarkable results: “… and we don’t know if the grades earned in the MÁS classes are disentangled from achievement in grades in other classes. So, there may have been an inflation.” These are very serious accusations, and in both his deposition and his trial testimony, Dr. Haladyna called for further investigation regarding cheating and grade inflation, although he himself did not investigate despite having access to all raw data, cleaned data, syntax, and results from Dr. Cabrera’s previous analyses. He received these due to four subpoenas from the state of Arizona’s Attorney General to Dr. Cabrera and the University of Arizona.
At deposition, the continual refinement of the statistical analyses via the publication in *AERJ* was critically important. Dr. Haladyna tended to argue that MANOVA was a better method than logistic regression, and that a continuous variable (e.g., test scores) were more appropriate dependent variables than the binary pass/fail. However, his arguments were primarily theoretical instead of empirical as he did not conduct any independent analysis of his own:

A: I have evaluated the results, but I haven’t analyzed the data.
Q: So you haven’t done your own analysis of the data, right?
A: That’s correct.
Q: And you didn’t do your own analysis because it would have taken weeks, even months, to do that analysis, right?
A: That’s correct.

While methodologist may debate the relative merits of MANOVA versus logistic regression analysis, it was extremely difficult for the results to be “fatal flaw” as Dr. Haladyna contended because that would also mean that an unsubstantiated argument was able to pass through the rigorous peer-review process of one of the most impactful journals in the entire field of education. That is, the academic prestige of the journal in addition to the rigor of the study helped solidify its importance in the overall case. Ultimately, Dr. Haladyna testified that, “If Dr. Cabrera’s claims are true, then we have an incredibly important intervention in education that will help millions of students, including Mexican-American and other ethnic/racial groups.” We could not agree more.

**Round 4: Federal Trial, Stats, and Willfully Misunderstanding ‘White Supremacy’**

Three Stanford-educated Chicana/os served as the expert witnesses for the plaintiffs’ case. Dr. Stephen Pitti, a full professor at Yale University, is an expert on the history of Mexican Americans and anti-Mexican American discrimination (Pitti, 2004). Dr. Angela Valenzuela, a full professor at UT Austin, is an expert on curriculum and pedagogy in particular educational approaches that honor and develop Mexican American students’ sense of self through additive instead of subtractive approaches to education (Valenzuela, 1999). The final expert was Dr. Cabrera who would testify about the MÁS statistical evidence, and he was also the only expert witness testifying against the same state the employed him. The three-pronged strategy using these experts involved Dr. Cabrera testifying as to the educational efficacy of the
program. Dr. Pitti was to testify on the historical context leading to the passage of HB 2281, including a close examination of the role that animus played, including how it was expressed by key actors in veiled form. Dr. Valenzuela was to testify about the MÁS curriculum and how its pedagogical approach was intended to overcome what she described in her work as the subtractive model of schooling (Valenzuela, 1999). For the purposes of this article, we will focus on Dr. Cabrera’s testimony even though all played important roles in the final ruling.

When a party intends to use experts in litigation, they must identify the expert and typically the expert submits a report that is given to the opposing party. This gives the opposing party the opportunity to know in advance what the expert will testify about so that they can plan how to counter the expert, which might include engaging their own expert to offer an opinion that rebuts or counters the first expert or to exclude an expert’s testimony altogether by filing what is commonly called, in federal court, a Daubert motion. Whether or not testimony by an expert is permitted is governed by Federal Rule of Evidence 702, which states:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

(a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
(b) the testimony is based on sufficient facts or data;
(c) the testimony is the product of reliable principles and methods; and
(d) the expert has reliably applied the principles and methods to the facts of the case.

This rule, and the standard developed in Daubert v. Merrell Dow Pharmaceuticals (1993), is intended to empower the trial court to act as a gatekeeper to prevent unreliable expert testimony that might mislead the factfinder. This issue would become critically important as the state continually tried to disqualify Dr. Cabrera from testifying, and this also spoke to how potentially impactful they saw his testimony.

As might be expected, the state filed Daubert motions to exclude each of plaintiffs’ experts. Plaintiffs opposed the state’s Daubert motions; the state opposed plaintiffs’; the state replied to the plaintiffs’ oppositions; the plaintiffs’ replied to the state’s opposition. Plaintiffs
opposed the state’s motion for partial summary judgment on viewpoint discrimination. The state replied. Then the judge ruled.

On Feb. 10, 2017, Judge Tashima denied the state’s motions to exclude Drs. Cabrera, Valenzuela, and Pitti. These rulings “cleared the decks” for the trial to proceed. The bench trial was set for Monday, June 26, 2017, at 9:00am in Courtroom 6B of the Evo A. DeConcini U.S. Courthouse in Tucson, Arizona. The trial was to proceed for one week followed by a two-week break, to recommence on Monday, July 17.

On Day 4, Dr. Cabrera took the stand as an expert witness. Judge Tashima had ordered that the direct testimony of expert witnesses be submitted by May 12, 2017, more than a month before the trial started. While this had the benefit of streamlining the presentation of his testimony, it gave the defense attorneys over a month to prepare their cross examination. The extra preparation time appeared not to have helped as their first line of questioning attempted to again exclude Dr. Cabrera’s testimony despite Judge Tashima’s ruling to the contrary.

After asking Dr. Cabrera about the dates when he had performed his analysis of TUSD student achievement, and eliciting from him that his analysis of the efficacy of MÁS was submitted in January 2012 and June 2012 to the special master in the long-running desegregation case involving TUSD, Ms. Cooper stated:

On this basis, plaintiffs [sic] would move to exclude Dr. Cabrera as an expert witness. He doesn’t have any information about student achievements that would have been available to the defendants before the program was terminated by TUSD. It thus cannot go to their state of mind.

Though Ms. Cooper did not explicitly say this, she was in essence making an argument that Dr. Cabrera’s testimony was irrelevant. Her point was that by the time Dr. Cabrera’s analyses and reports became publicly available in 2012, the Defendants had already made their decision to find TUSD in violation of the statute.

This attempt to exclude Dr. Cabrera took plaintiffs’ counsel by surprise because they thought the issue regarding admissibility of his testimony had already been decided. As described briefly above. In September 2016, the state had filed Daubert motions against each of plaintiffs’ experts, including against Dr. Cabrera. In their filing on September 26, 2016 to exclude Dr. Cabrera’s testimony, Defendants stated: “Notably, all of his analyses post-date
TUSD’s decision to eliminate the MÁS program,” which was similar to the argument they were making on Day 4 of the trial. However, Judge Tashima earlier ruled on this issue.

In opposition to the original Daubert motion to exclude testimony by Dr. Cabrera, plaintiffs made three points: (1) Dr. Cabrera’s evidence demonstrates that the MÁS Program had positive academic effects for Mexican American students; (2) Dr. Cabrera’s expert evidence demonstrates that the defendants’ termination of the MÁS Program disparately impacted Mexican American students; and (3) Dr. Cabrera’s expert evidence demonstrates that defendants’ termination of the MÁS Program was not based on pedagogical reasons. These points were then related to the legal tests and factors relevant to prove plaintiffs’ 14th and 1st Amendment claims.

Judge Tashima, on Feb. 10, 2017, denied defendants’ motion to exclude Dr. Cabrera’s expert evidence, finding:

If the MÁS program increased graduation and test passage rates, two of the principal markers for success in secondary education, then it is more likely that the program was terminated for pretextual reasons that are not “reasonably related to legitimate pedagogical concerns.” The report also speaks to whether the official action “bears more heavily on one race than another”… If Mexican-American students derived greater educational benefits from the MÁS program than did other groups, it follows that Mexican-Americans were disproportionately impacted when the program was terminated. Finally, the report bears on whether the official action was a “[d]eparture from the normal procedur[es]” or normal “[s]ubstantive” conclusions.

Given that academic programs that advance academic goals are normally continued, terminating a program in spite of its educational benefits deviates from normal practice. As previously discussed, because this had already been argued and decided, plaintiffs’ attorneys were surprised by this attempt to exclude Dr. Cabrera during the course of the trial. As plaintiff’s attorney Steve Reiss pointed out, “Your Honor, we’ve litigated this in motions in limine. Your Honor had briefing, extensive briefing. Your Honor ruled that his expert testimony is admissible. We’ve resolved this issue, Your Honor.” Judge Tashima closed his eyes, thought for a moment, and then agreed and denied Ms. Cooper’s motion to exclude Dr. Cabrera as a witness. Questioning then resumed.
The questioning regarding the statistics themselves was relatively (and surprisingly) brief. Instead, the state shifted to a line of questioning that centered their oversimplified understanding of the nature of racism. While they thought would be a “gotcha” moment, it instead hampered their ability to win the case. The attorneys for the state appeared to believe that for racism to occur, you needed to have individual racists, understood as people who harbor explicit views about racial superiority and inferiority, and express dislike or hatred of other races.

Within this narrow paradigm, Ms. Cooper closed her questioning with the following colloquy regarding an article that Dr. Cabrera published in 2012 in the *Journal of Curriculum and Pedagogy* entitled, “A State-Mandated Epistemology of Ignorance: Arizona’s HB 2281 and Mexican American/Raza Studies” (Cabrera, 2012). Ms. Cooper questioning Dr. Cabrera on this article and on others he had published, intending to show that his expert opinion should be disregarded because it reflected bias, that he was a supporter of MÁS and a critic of HB 2281. She particularly took issue with the use of the term “White supremacy”:

Q: Your article begins with a reference to White Supremacy, right?
A: Yes. It’s right there.

Q: Who are the White supremacists that you’re referring to in this article?
A: That’s not what Charles Mills is talking about.

Q: I want to know not what Charles Mills is talking about, but whether you are referring—to whom you are referring when you use the phrase “white supremacist.”
Mr. Reiss: Objection. Misstates the article. She’s reading.
The Court: Overruled. You may answer
The judge here may not have understood why Dr. Cabrera was having difficulty understanding Ms. Cooper’s question and what exactly Mr. Reiss was objecting to. Dr. Cabrera’s (2012) article begins with the following sentence: “Charles Mills (1997) argues White Supremacy relies upon a denial that racism exists, or, “an inverted epistemology, an epistemology of ignorance” (italics original, p. 18).” Not understanding this issue, Ms. Cooper thought she had Dr. Cabrera. If White Supremacy derives from white supremacists, then Dr. Cabrera would have to directly identify those he thought were white supremacists (e.g., Horne and Huppenthal).
Despite objections by the plaintiffs, the line of questioning continued:
A: In this conception, White supremacy does not derive from White supremacists, in the same way that capitalism doesn’t derive from capitalists. The ideas that racism is a systemic reality that we are all complicit in maintaining, and the name of that systemic racism, as Charles Mills, who I am citing, argues is named “White supremacy.” But that systemic reality does not require to be held up by people with overtly White supremacist viewpoints.

Q: Who are the representatives of the White supremacy to which you refer in this article?

A: Exactly the same response that I just gave. I don’t – I am not intent on articulating that one’s [sic] individual is a White supremacist. That’s not what this does. It’s talking about a systemic reality of racial privilege and oppression that he—that— and the relationship between that and this law.

Q: And so you see HB2281 as a furtherance of that systemic oppression?

A: It continues to enhance it.

Q: And you see the persons, Mr. Horne and Mr. Huppenthal, as persons who are responsible for that, correct?

A: They are key actors in it, but it’s a lot bigger than two individuals.

Ms. Cooper rested at this point, likely believing that she had made her point. This “gotcha” was intended to paint Dr. Cabrera as a biased witness who equated HB 2281 with White supremacy but who refused directly to describe or accuse Mr. Horne and Mr. Huppenthal of being White supremacists.

Mr. Reiss followed with a short redirect examination, with no re-cross by Ms. Cooper. Commenting on the fact that there would be no re-cross by Ms. Cooper, Judge Tashima said, “Good. I have to say Dr. Cabrera, I think you’re a lucky guy because you can go home now. You won’t have to deal with this mess again. All right? Except in a scholarly manner. Thank you very much, sir, for appearing and you’re excused.” This article and the subsequent book became the opportunity to re-engage this trial “in a scholarly manner” as Judge Tashima offered.

**Round 5: Judge Tashima’s Ruling**

August 22, 2017, seemed like an average Tuesday in the Old Pueblo. It was hot in the desert, and the cicada were humming telling of a pending monsoon. Rain in the desert is
cleansing, and the citizens of Arizona especially needed it because on that same day President Trump held a rally in Phoenix where he lent support for Sheriff Joe Arpaio who was under fire for racially profiling Latinos and violating court orders. Trump at his rally said, “So was Sheriff Joe convicted for doing his job?” hinting at the potential of a pardon that would later come (Park, 2017). With all of the attention on Phoenix, the news of a trial verdict caught many off guard.

On this average Tucson summer day (racist rallies are normal in Arizona), Judge Tashima issued his ruling. In a blistering 42-page opinion, he was very clear in his ruling that the state violated both 1st and 14th Amendment protections of TUSD Mexican American students when both creating and enforcing the law. In particular, the law was developed and enacted for partisan political gain by fostering racial animus. His rationale was nuanced, but due to the subject of this article, we will focus on the role statistical analyses played in his decision. Please do not misunderstand, there were many other components to this trial, and all worked together to form a multipronged strategy to challenge the constitutionality of A.R.S. § 15-112.

In his ruling, Judge Tashima began by accepting Dr. Cabrera’s analysis and rejecting Dr. Haladyna’s. Core to his decision was that Dr. Haladyna critiqued Dr. Cabrera’s work extensively, but he could not offer alternative interpretations for the trends in the data. Judge Tashima stated:

The result, according to Dr. Haladyna, is that some common feature of this self-selected group, other than the fact that they all took MÁS courses, could explain the improvements. But Dr. Haladyna offers no plausible hypothesis of what that common feature might be. Moreover, defendants offered no evidence to contradict Dr. Cabrera’s findings, i.e., showing that the MÁS program had no positive effect on student performance. Dr. Haladyna did not conduct his own statistical analysis of the MÁS program data.

Again, it was incredibly important that during the time between the 9th Circuit hearing and this one that Dr. Cabrera and his research team were able to continually refine the analyses, but it was equally important in this ruling that Dr. Haladyna did not conduct any of his own.

This played an important role in establishing the racially discriminatory impact that eliminating MÁS had on Mexican American students. Additionally, to the extent that it was a
highly effective program, its elimination served no broader educational purpose. Again, Judge Tashima elaborated:

At the time the program was terminated, approximately ninety percent of the students enrolled in MÁS courses were Latino. Moreover, Dr. Cabrera’s report showed that the MÁS program was “particularly” beneficial to the Latino students who were enrolled. Accordingly, there can be no question that the enactment of A.R.S. § 15-112, which targeted the MÁS program, had a disproportionate impact on Latino students.

This discriminatory impact began to lead Judge Tashima to discriminatory intent, which directly linked to Dr. Stephen Pitti’s testimony on anti-Mexican American racism in Arizona and the contemporary “dog-whistle” racism in the politics surrounding the MÁS case. Ultimately, Judge Tashima ruled that the creation and application of A.R.S. § 15-112 was based on racial animus and partisan political gain and was therefore unconstitutional on both 1st and 14th Amendment grounds. The statistical analyses played a small significant role in this overall ruling. On December 26, 2017, Judge Tashima order a permanent injunction against the law. The state did not appeal his decision, and after nearly a decade in litigation, the case was closed.

**Discussion**

If Derrick Bell’s (1980) theory of interest convergence held in the MÁS controversy, one would think that the empirical results would need to show a demonstrable, significant, positive impact for White students taking these classes. That was simply not the case in this trial, and Judge Tashima actually highlighted those analyses that only had Latino students in the regression models. While Bell’s (1980) theory has a great deal of explanatory power and has been applied to a number of legal and educational issues, we argue that the MÁS controversy highlights the limits of interest convergence theory. Simply put, we do not see the ruling advancing the interests of White people, even tangentially. This points to the power of coalition-building and developing community agency. Yes, Bell (1980) is correct that due to power differentials, the interests of Communities of Color are usually only advanced to the extent that they also benefit White people as well. However, this is not deterministic. There is power within Communities of Color, their allies, and strategic coalition building like that in the MÁS controversy help harness the power of self-determination. It also requires a sympathetic ear by those in power—in this case the judge’s ruling on the case. This motley crew of teachers, students, activists, educators, professors, and lawyers, exercised their power, collectively strategized, and
effectively overthrew the racist state law A.R.S. § 15-112. The one area Bell (1980) underestimated was the potential power embedded in collective community action. That is, his theorizing about interest convergence is a great descriptor of what is but it hits its limits when considering what is possible?

It is important to note that the statistical analyses played a central role in the overturning of A.R.S. § 15-112, in part, because Dr. Cabrera temporarily took leave of his traditional roles as an educational advocate and instead played the role of objective social scientist. This was extremely difficult, but it was important to allow that statistics to be utilized by attorneys in the cases to utilize them for their legal goals. Even with this framing, the state did try to frame Dr. Cabrera as a biased witness because of his work in Critical Whiteness Studies, in particular his use of the term “White supremacy.” Therefore, we are not arguing that being an “objective social scientist” meant Dr. Cabrera was immune to attacks from the state. Instead, we postulate that these attacks would have likely been fiercer had he taken the more overt position of educational advocate.

Thus, there was a strange paradox in this litigation—the less that Dr. Cabrera was an overt advocate for MÁS, the stronger his (and his co-authors’) analyses became in support of MÁS. Please keep in mind, we are not arguing this is a prescription for every educational controversy where statistical analyses can play a role in the eventual outcome. Rather, we are arguing that given the particularities of this case, it was the most appropriate course of action in order to put forth the strongest case against the now demonstrably racist law A.R.S. § 15-112.

Conclusion

This story followed an almost Hollywood-esque arch. The racist state (a Goliath, if you will) created a law to criminalize the teaching of Mexican American Studies. A dedicated collective of MÁS teachers (our David) to which we were connected challenged the state policy as unconstitutional. Despite the massive imbalance in resources and power, David took down Goliath, paving the way for the continued resurgence of Ethnic Studies nationally. The victory in the highest profile Ethnic Studies case in U.S. history has only propelled this expansion, and this begs a larger question. What would have happened if the researchers hit the “Return” button and the regression coefficients came back either non-significant or negative?
References


Department of Accountability and Research. (2011a, January 6). *AIMS achievement comparison for students taking one or more ethnic studies classes: Initial passing rate versus cumulative passing rate by AIMS subject and cohort year*. Tucson, AZ: Tucson Unified School District.


### Appendix A: Timeline of Events

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tr>
<td>1998</td>
<td>“Hispanic Studies Department” is created at TUSD.</td>
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<td>2002</td>
<td>Deputy Superintendent Dr. Becky Montaño appoints Augustine Romero Director (NCLB mandate highlights the White/Latino “Achievement” - or rather opportunity – Gap)</td>
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<td>April 3, 2006</td>
<td>Labor leader Dolores Huerta gives a speech at Tucson where she says that based on their legislative agenda (especially the anti-immigrant, draconian HR4437), &quot;Republicans hate Latinos&quot;</td>
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<td>May 12, 2006</td>
<td>Margaret Garcia Dugan gives a rebuttal saying that she was an example that Republicans don’t hate Latinos. Attendance was mandatory, and there was no opportunity for Q&amp;A. Students staged a silent protest, and Horne blamed Mexican American Studies for teaching students to be &quot;disrespectful.&quot;</td>
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<td>2008</td>
<td>HB 1108 is introduced as part of a Homeland Security Bill as the first attempt to eliminate Mexican American Studies (failed, supported by Horne, Governor veto)</td>
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<td>2009</td>
<td>HB 1069 is drafted by Tom Horne and introduced (Judicial Bill, failed)</td>
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<td>2010</td>
<td>HB 2281: Horne drafts a bill to &quot;get rid of the MAS program. Governor Napolitano (D) becomes part of the Obama administration and Jan Brewer (R) is appointed. 2010 is a midterm election in the middle of a nation-wide recession, and both HB 2281 and the anti-migrant SB 1070 are part of the larger political strategy. (passed)</td>
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<td>October 18, 2010</td>
<td>11 MAS teachers file suit alleging HB 2281 violates their 1st and 14th Amendment protections</td>
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<td>December 30, 2010</td>
<td>Horne prematurely issues TUSD findings of non-compliance two days before the statute is enacted</td>
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<td>January 1, 2011</td>
<td>A.R.S. § 15-112 goes into effect</td>
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<td>February 2011</td>
<td>Cambium selected by Superintendent Huppenthal's office to conduct an independent audit of the MAS program</td>
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<td>May 2, 2011</td>
<td>Cambium Report finds there were no observable violations of the law, and that taking MAS classes likely led to increased student academic success</td>
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<td>June 22, 2011</td>
<td>TUSD files an appeal of Superintendent Huppenthal’s findings of non-compliance to an Administrative Law Judge hearing. The case is remanded to Judge Lewis Kowal.</td>
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<td>December 27, 2011</td>
<td>Judge Kowal issues his recommended decision, upholding Superintendent Huppenthal’s Finding of Violation</td>
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<tr>
<td>January 10, 2012</td>
<td>Judge Tashima dismisses the teachers and administrator from the</td>
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lawsuit; leaves Maya Arce and Korina Lopez as student-plaintiffs; dismisses plaintiffs’ 1st Amendment Free Association claim; denies plaintiffs’ motion for preliminary injunction.

January 10, 2012  TUSD Board votes to eliminate MAS program (4-1) - halts all MAS activities in classrooms, begins unannounced visits to former MAS teachers to ensure compliance, and bans MAS teaching materials, including books, removing them from classrooms and putting them in storage

Winter, 2012  Willis “Bill” Hawley is appointed the Special Master on the TUSD desegregation case

June 20, 2012  The Cabrera Report is submitted

October, 2012  The Cabrera Report is released to the public

February 20, 2013  Special Master Hawley releases the Unitary Status Plan where he cites The Cabrera Report to support the creation and offering of Mexican American and African American Studies courses throughout TUSD

January 12, 2015  9th Circuit Court of Appeals hears oral argument in the appeal of Judge Tashima’s ruling

July 7, 2015  9th Circuit ruling: Affirmed Judge Tashima’s original ruling, but highlighted a number of areas where the state likely violated the constitutional rights of Mexican American students in TUSD (2-1 ruling). Kicks case back to Judge Tashima.

Summer 2017  Bench trial before Judge Tashima, June 26-30 and July 17-21

August 22, 2017  Judge Tashima finds that A.R.S. § 15-112 was enacted and enforced because of racial animus and partisan political gain, violating the 1st and 14th Amendment rights of Mexican American students in TUSD.

December 27, 2017  Judge Tashima issues the final judgment and permanent injunction against the state regarding any enforcement for A.R.S. § 15-112

January 27, 2018  Arizona fails to appeal Judge Tashima’s ruling. Case closed.