

Emergent Bilinguals: Framing Students as Statistical Data?

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Immigrant youth who are designated as English language learners in American schools—whom we refer to as “emergent bilinguals”—are increasingly framed by numerical calculations. Utilizing the notion of assemblage from actor-network theory (ANT), we trace how emergent bilinguals are discursively constructed by officials, administrators, politicians, and the media through the manipulation and publication of school test scores, district data, and state reports. Drawing upon two overlapping, complementary qualitative studies conducted in New York City, we reveal the ways in which this places burdens on emergent bilinguals and their schools and narrows important discussions of bilingual education pedagogies to ones centered on numerical data.

INTRODUCTION

In the United States (U.S.) today, immigrants are being counted and tracked in a range of ways as “products of a distinctly modern world of statistics, censuses, population maps, and other tools of the state” (Appadurai, 2006, p. 41). In this article, we document how children attending U.S. schools are likewise being translated into numerical data points through the current system of testing and accountability and assert that this quantification and its surrounding discourse are

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particularly harmful for students who are designated as English language learners (ELLs)—and whom we, following García (2009, 2011), refer to as “emergent bilinguals.”¹

Our data reveal how emergent bilinguals are often cited as the cause of school and district failures to meet annual English language arts (ELA) and math objectives set by No Child Left Behind (NCLB), the current federal education policy, showing that linguistic diversity is being framed as a liability in schools within this context. NCLB mandates that all students take—and pass—high-stakes state examinations in ELA and math, but emergent bilinguals typically underperform when compared to English monolinguals. Because NCLB’s accountability measures require that test scores be disaggregated and reported by demographic subgroups, emergent bilinguals are translated into quantifiable and comparable subgroup data that are made widely available to the public. Although many researchers have questioned the validity and reliability of assessments used under NCLB to evaluate emergent bilinguals (e.g., Gándara & Baca, 2008; Menken, 2008, 2010; Solórzano, 2008), these students are being defined by their lower scores. While all children are affected by the policy’s standardized high-stakes assessments and the resulting quantifiable demographic subgroup data, the impact on emergent bilinguals is compounded by the larger political discourses surrounding immigration that perpetuate inequalities for these students (Crul & Holdaway, 2009; Gándara & Rumberger, 2009; Koyama & Bartlett, 2011).

In this article, we draw upon two separate but complementary studies analyzing the effects of NCLB on emergent bilinguals in New York City to demonstrate how the discursive framing of these students by the government and educational agencies has shifted to one of numerical manipulation. We reveal the ways in which this places undue burdens on emergent bilinguals and the schools that serve them and narrows important discussions of bilingual education pedagogies to one myopically centered on generating, gathering, and reporting data—with detrimental effects.

We begin with a review of literature that explores the constellation of assessment and accountability systems brought together under contemporary educational policies, including NCLB. Next, we introduce the analytic of *assemblages*, which frames our thinking. Then, we present our methodologies. In the findings, we show how standardized tests, score reports, and other quantifiable data come together and how values become attached to them. We trace the discourses through which emergent bilinguals become cohered by these value-laden numerical devices in ways that are ultimately punitive for these students and reduce the quality of education they receive. While showing that emergent bilinguals are consistently relegated to the numerical bottom, we provide evidence to demonstrate how even NCLB-directed calculations that come to define emergent bilinguals are not necessarily as stable or factual as elected officials and educational administrators make them appear. Finally, we reveal an alternative discourse that challenges the framing of emergent bilinguals as statistical data and shows schools resisting these pressures in order to serve their students well.

¹García (2011, p. 141) has argued for “the use of the term *emergent bilingual* in referring to these children as a way to remind all of us that the effective teaching of English will make them bilingual, not merely teach them English.” Meanwhile, the federal government still uses the term *limited English proficient*, which went out of usage in many school systems for its deficit orientation. In this manuscript, we use *emergent bilingual* in lieu of *English language learner* or *limited English proficient* unless discussing official designation or quoting participants.

NUMERICALLY FRAMING

To meet the demand for accountability in schools, standardized assessments and the technological capacity to measure, compare, and categorize results have become integral to educational policies and practices (Apple, 2006; Au, 2007, 2009; Casas, 2003; Escamilla, Mahon, Riley-Bernal, & Rutledge, 2003; Menken, 2008; Valenzuela, 2005). We have, as explained by Labaree (2011), elevated the statistical view of education so that “the complexities of the educational enterprise [are crammed] into the confines of ledgers, frequency tables, and other summary quantitative representations . . .” (p. 629). Such quantification constructs objects out of children and their teachers to be interpreted and evaluated as part of the activities aimed toward the solution of a perceived educational problem (Popkewitz, 2004). The generation and management of data (in the name of accountability) have emerged as important aspects in the modern governance of education, with large amounts of money spent each year to do so (Ball, 2006; Koyama 2011; Ozga, 2009). The numerical comparison of students and their schools legitimizes political solutions to educational problems and also drives demand for the collection of more data (Lipman, 2002; Nóvoa & Yariv-Marshall, 2003). It frames students materially, politically, and technically.

Specifically, NCLB mandates that states “develop and administer an accountability system that assesses students annually (in reading/language arts, mathematics, and science) and, based on those assessments, determines whether schools and districts are making adequate yearly progress (AYP)” (Sunderman & Orfield, 2008, p. 125). Emergent bilinguals are tested in academic content areas (including English language arts as a subject) as well as in English-language proficiency. Each state sets annual performance goals based on complex calculations for individual schools and for up to 40 demographic subgroups, including emergent bilinguals, within each school’s student population. These populations, according to NCLB, become AYP subgroups that are each assigned performance targets based on high-stakes test scores. Schools that miss any single target for two consecutive years face a series of sanctions, the most severe of which include reorganization and closure. Through NCLB’s testing and accountability system, the state and local educational agencies govern and organize achievement, as well as reduce the aims of education to measurable test scores (Abedi, 2006; Loder, 2006; McNeil, 2000; Menken, 2006; Valenzuela, 2005). Moreover, as we argue here, they discursively reframe emergent bilinguals as quantifiable data that, according to several interviewed principals, “really bring down a school’s numbers.”

What makes this accountability system questionable when emergent bilinguals are included is that states rely upon tests administered in English to meet NCLB’s demands for accountability.² By definition, language proficiency mediates performance for these students, so subject tests administered in English are in reality language tests (Menken, 2008, 2010); accordingly, researchers have questioned the validity of using the results of these assessments for high-stakes decisions such as grade promotion, graduation, or school evaluation (Gándara & Baca, 2008; Solórzano, 2008). Not surprisingly, U.S. emergent bilinguals score an average of 20–50 percentage points below other students on state assessments of English language arts and other

²Though a few states—including New York—currently permit test translations for math, science, and/or social studies exams, the vast majority of states only test in English; and those that use translations still require that emergent bilinguals pass an English language arts exam (Sullivan et al., 2005). For the states permitting translations, research indicates that this accommodation fails to truly level the playing field for emergent bilinguals due to lingering issues of validity and reliability (Menken, 2008; Solórzano, 2008).

content-area subjects, and as a result the majority fails to meet AYP targets (Abedi & Diatal, 2004; Government Accountability Office, 2006; Sullivan et al., 2005). This does not mean that the students are failing to learn but more likely reflects that they are indeed *emergent* bilinguals and not yet fully proficient in English for academic purposes. Making a damaging situation worse, emergent bilinguals as a group will always be deemed “low performing” by NCLB, because just as some students acquire enough English to no longer be considered “English language learners,” a set of new arrivals enter the group, ensuring low overall performance (Abedi & Diatal, 2004; Menken, 2008, 2010).

In New York, as elsewhere across the U.S., emergent bilinguals and the schools that serve them are being disproportionately penalized for their performance on tests administered in English. For instance, on the eighth-grade English language arts statewide test, just 4% of emergent bilinguals achieved a proficient score, as compared to 34% of the total student population (New York State Education Department, 2010). The achievement gap is also wide for the state Math test, in that 24% of emergent bilinguals achieved proficient scores as compared to 55% of the total student population, again due to the influence of language proficiency on test performance (Menken, 2008). Among further consequences described subsequently, grade retention rates are higher for emergent bilinguals in New York City elementary and middle schools for failing the citywide ELA and math assessments, as grade promotion rates have been tied to test scores since 2004.³

Consequences are extremely high at the high school level, as all students in New York must pass a set of exams in order to graduate, a policy that yields low pass rates and high dropout rates for emergent bilinguals. The statewide pass rate on the English Regents exam for emergent bilinguals is 41% as compared to 76% for English-proficient students, and 52% on the Math Regents as compared to 77% for English-proficient students (Menken, 2010). Given the linguistic challenges of these exams in combination with their usage as high school exit tests (Menken, 2010), it is not surprising that graduation rates are lower and dropout rates are higher for emergent bilinguals than for other students. The graduation rate for emergent bilinguals is 40.3% as compared to 75.3% for English-proficient students in New York City (New York State Education Department, 2011a). Emergent bilinguals are almost twice as likely to drop out of school; for the 2004 cohort of ninth graders in New York City, 32.6% of emergent bilinguals dropped out by 2010, as compared to 16.9% of English-proficient students (New York City Department of Education, 2011b).

Due to the low test scores emergent bilinguals typically attain, schools serving large numbers of these students at the elementary and secondary levels are far more likely to be at risk of sanctions such as closure or restructuring for failure to make AYP, in accordance with NCLB’s accountability system. For instance, 49% of the “Persistently Lowest-Achieving” schools in New York serve above-average numbers of emergent bilinguals, meaning that schools serving significant numbers of these students are far more likely to be penalized under federal policy. Penalties or corrective actions, including the replacement of leadership and up to 50% of the teaching faculty, create instability that affects all students, especially emergent bilinguals who already suffer from a shortage of trained teachers, resources, and adequate curriculum.

The current accountability system has also galvanized the closure of bilingual education programs in city schools since the passage of NCLB (Menken & Solorza, in press). While

³In an effort to reverse this problem, in July 2012 a new chancellor’s regulation A-501 revised the promotion policy such that English language proficiency test scores can now be used for emergent bilinguals to determine grade promotion.

approximately half of all emergent bilinguals were enrolled in bilingual education programs in 2000, just prior to the passage of NCLB, the proportion of emergent bilinguals in city schools enrolled in bilingual education has decreased to 22% since then (New York City Department of Education, 2011a). School administrators and teachers interviewed all identify the pressure of improving scores on tests administered in English as a primary reason their schools dismantled their bilingual education programs (Menken & Solorza, in press). NCLB and local reforms numerically reframe emergent bilinguals, castigating their low performance and turning their language proficiency into a liability.

“TRANSLATING” EMERGENT BILINGUALS

To explore the ways in which emergent bilinguals are discursively converted into numerical expressions, we draw upon the notion of *assemblages* from actor-network theory. The theory, which was initially developed (and then challenged and reworked) by Latour (1988, 2005), Callon (1986; Callon & Latour, 1981), and Law (1986) as a theoretical framework of science studies and technology, frames “. . . how different people, materials, and practices meet to somehow cobble together shared worlds, worlds that are always under negotiation and always dynamic, yet somehow manage to cohere” (Spinuzzi, 2003). It is particularly useful in the study of controversies, characterized by the struggle of various groups to establish the authority and legitimacy of ideas and practices (Latour, 2005; Venturina, 2010). In this study, the controversies explored center on who and what, and under which conditions, come to decide that emergent bilinguals have met the achievement conditions mandated by NCLB. This approach emphasizes the ways in which policy processes materialize or animate knowledge, identities, and action. More specifically, utilizing assemblage here allows us to focus on how people, such as teachers and policymakers, and the material objects they create, including AYP formulations and test score reports, combine with discourses to construct and then attend to accountability issues.

As explained by Fenwick and Edwards (2010), “. . . a network is an assemblage of materials brought together and linked through processes of translation that perform a particular function” (p. 12). Applied to our study, assemblage provides a productive frame in which to discuss test scores and reports as an accumulation of particular forms of knowledge, practice, and discourse that order students in space and time (McGregor, 2004). Putting assemblage to work in policy study (Gorur, 2013) allows us to trace the effects of sociomaterial practices, such as “constructing” emergent bilinguals. As argued by Fenwick and Edwards (2011), such an approach “emphasizes the materiality of social processes, highlighting the specific *materializing* processes through which policymaking actually works to animate educational knowledge identities, and practices” (p. 710). Using the notion of assemblage allows us to ask, among other queries, how tools like standardized tests—that is, the assemblies of texts, aims, histories, resources, and practices that instantiate what we recognize as standardized assessments—come to discursively reframe students, especially subgroups, such as emergent bilinguals, in schools.

In ANT, human actors and nonhuman objects join to create vectors of agency. Complex human/nonhuman relations mediate educational practices and “shape intentions, meanings, relationships, routines . . .” (Fenwick & Edwards, 2010, p. 6). Latour (2005) uses the term *translation* to describe the process by which actors, human and nonhuman, connect and change one another. At each linkage, “an entity has worked upon another to *translate* or change it to become part

of a collective or network of coordinated things and actions” (Fenwick & Edwards, 2010, p. 9). *Translation* refers here to the chain of actions and activities whereby dynamic, incongruous, and complex parts of everyday schooling are quantified and become nearly unquestioned facts. The test scores, through translations, become detached from their origins and are made commensurate and analogous with other scores across the district, the state, and the nation for the purposes of fitting into the ongoing activities of NCLB. They are amplified and transported from location to location, school to district to state, and act at a distance from the experience from which they were extracted. Test scores are then evoked as scientific evidence and authorized knowledge in support of NCLB. They are, in Latour’s (2005) terminology, “immutable mobiles” that circulate across messy, dynamic, and contested everyday practices—both changing the practices and being changed by them.

Tests scores, calculations, and data points, which are often presented as “scientific evidence” to justify NCLB’s accountability and legitimize its necessity, actually transform and modify other actors and influence actions. Through multiple translations, teaching and learning become test scores, comparable data, and publically circulated data points through exceedingly specialized statistics and calculations (Koyama, 2011). In this article, we focus specifically on what happens to emergent bilinguals, who, through NCLB mandates, are not only translated by their encounters with the tests, but also become mired in a network of calculable conditions made available for demographic subgroups of students. These youth become positioned as aggregates of test scores—“textual things” (Law & Hetherington, 2003) that both reflect and reify the language of NCLB. We also demonstrate how translation need not be deterministic; we show how the “immutable mobiles” (Latour, 2005) that result from the assessment calculations, by which so many educational decisions are now made, become penetrable and undone.

From an ANT perspective, calculations involve three processes:

First, relevant things are sorted, detached and displayed in single frame. Second, these entities are manipulated and transformed to show or create relationships between them. Third, a result is extracted such as a new thing, a ranking or a decision. (Fenwick & Edwards, 2010, p. 123)

Calculations are enacted through material practices and multiple translations.

CONSIDERING METHODOLOGIES

This article draws upon two studies we conducted in New York City (NYC). In the studies, we examined how standardization, accountability, and high-stakes assessments, the cornerstones of contemporary federal and local educational policy in the U.S., affect teaching and learning. While the second author focused on emergent bilinguals, the first looked more broadly at the effects of NCLB, with emergent bilinguals as one sub-area of examination. Here, we focus on the effects of NCLB on emergent bilinguals.

The ethnographic study conducted by the first author focused on how NCLB was appropriated through local reforms and politically informed practices. For that larger study, data were collected between June 2005 and October 2011. Data collected between 2009 and 2011 were gathered with an emphasis on critical policy analysis amidst the educational politics of NYC. Data for the entire study included interviews with principals, assistant principals, parent coordinators, and

other school staff, as well as others associated with the Department of Education's regional superintendent offices, the Office of Strategic Partnerships, the 32 Community Education Councils, the Division of Contracts and Purchasing Vendors, and a variety of other boards and panels associated with NCLB and local reforms in New York City. By 2008, nearly 90 interviews with school administrators—principals, assistant principals, and deans—had been completed; some administrators, including more than half of the 45 principals in the initial study, were interviewed more than once. Fifteen school and district administrators who had been interviewed between 2005 and 2008 agreed to be interviewed about changes in policy and practices during 2009, 2010, and 2011.

In addition to the interviews conducted with educational administrators, interviews with various for-profit educational support companies, as well as observation and participation in after-school tutoring or SES programs, governmental meetings, DOE hearings, school meetings, teacher-training workshops, community assemblies, and policy forums contributed to the data. Overall, including the previously mentioned interviews with administrators, 87 informal interviews were conducted and more than 144 semistructured audiotaped interviews completed. Nearly 800 NCLB-related documents were reviewed, and greater than 300 pages of typed observational notes were amassed, which along with the interviews were initially broadly analyzed, using inductive coding with the qualitative data software NVivo 2.0 (and later version 8.0). As clear themes or categories emerged, the analysis moved from descriptive to analytical categories.

The effect of NCLB on emergent bilinguals emerged as a consistent and reoccurring theme from the initial data review through the analysis of the 2011 interviews. Of the 45 principals in the study, 41 discussed “English language learners” as one of their main concerns under NCLB. Thirty-four of them, in fact, led schools where more than 15% of the total student population was identified as ELLs. All 15 principals who were interviewed between 2009 and 2011 belonged to this group of 34.

The second author gathered data examining the impact of the testing and accountability policies of NCLB on emergent bilinguals in New York City over two phases. For the first phase of research, data were gathered in 2003–2004 through in-depth qualitative research in 10 New York City high schools to examine the effects of the emphasis of high-stakes testing on the instruction and educational experiences of emergent bilinguals. Data for the second phase of research were gathered from 2009–2011 and examined the impact of NCLB accountability policies on programming for emergent bilinguals, through qualitative research in ten New York City elementary, middle, and high schools and from publicly available student and school performance reports. Semistructured interviews served as the primary source of data in both phases of data collection, and interviews were conducted with city officials, school principals, assistant principals, and teachers; secondary students were also interviewed in the first phase of research. A total of 128 participants were interviewed in the first phase, including 61 emergent bilingual students. In the second phase, a total of 20 participants were interviewed in-depth, including 12 principals, four assistant principals, and four teachers. Interviews in both phases of data collection were recorded by digital recorder, transcribed, coded, and analyzed to identify prevalent themes (LeCompte & Preissle, 1993; Miles & Huberman, 1994). Codes were refined after initial data analysis, and revised accordingly; the findings reported here draw from the most prevalent themes identified. Relevant school policy documents and performance data were also analyzed to contextualize findings from the interviews.

Taken together, findings from the studies by both authors provide deeper understandings of the numerical reframing and treatment of emergent bilinguals in school, in the wake of NCLB's test-based accountability policy and practices.

TRANSLATING STUDENTS INTO DATA: THE "AYP NOOSE"

Dependent on statistical expertise, the data produced through NCLB-mandated calculations narrow complex issues to technical accounts that remain difficult for the public, and even some school staff, to interrogate. Through the dual construction of academic achievement and NCLB demographic subgroups, knowledge about emergent bilinguals becomes exclusively framed by discourses based on advanced numeracy.

The following excerpts from interviews with school administrators reveal how powerful and taken for granted the discourse has become. They also demonstrate how daily practices change as students are translated into numbers and also how these translations are affected by practices. A Bronx elementary school assistant principal reported:

We've already narrowed curriculum for ELLs [English language learners], moved them to basics, trying to get them up. They can really drag down the AYPs [Adequate Yearly Progress targets]. Here, they threatened our ability to meet our numbers. . . . I'm not saying anything new. It's just that NCLB ramps that all up for us. Bottom line, and I hate to say this, but you know, ELLs mean low numbers. (interview, August 12, 2008)

This point is supported by a Manhattan high school principal, whose school is at risk of closure for poor performance of emergent bilinguals on the English Regents, which is the state's high school exit exam assessing English language arts. This exam was never intended for emergent bilinguals, who are in the process of learning English, but was instead designed to assess the college readiness of native English speakers after 11 years of schooling (Menken, 2008). When asked why his school was on the state's list of "schools in need of improvement," the principal responded by saying the following:

The state data, not enough kids were passing English Regents. That was one of the factors. This school was cited for years, from what I can see, for years the school was cited for not meeting the performance index for ELLs. (interview, July 6, 2009)

The Manhattan high school principal was new to the school at the time of the interview and had been brought in specifically to "turn around" the performance of emergent bilinguals at this school on these high-stakes standardized tests.

Another Brooklyn principal agreed and pointed to what she considered the universal resituating of emergent bilinguals as "AYP concerns":

There are 1,000 or more opportunities to learn each day . . . but NCLB hammered those opportunities into very few strict measures, testable ones. . . . I mean for ELLs what I see now is basically the old drill and kill method. We don't have time to make meaningful learning situations. And we're pretty convinced that this kind of teaching improves our test scores quickly. It's not what we'd like to be doing, but it's our reality—our AYP noose. . . . And it's not just here. We're like everyone else who's trying to pound out those numbers from ELLs. (interview, May 13, 2009)

Other administrators concurred, noting that the NCLB-required annual assessments altered the time frame for mastering skills and learning content for emergent bilinguals.

Some school principals aimed to reduce their number of “low-performing ELLs” and improve their test scores by barring admission to emergent bilinguals—a practice that is in violation of local and federal policy but occurs nonetheless. One acknowledged that she used her test score reports to determine how many emergent bilinguals the school could admit the following year.

I look at the distribution of scores, try to decide how many low scores can be improved and then I’ve already gotten our data team talking about how many ELLs we can handle, you know number-wise, before I even consider meeting with my curriculum team. (personal communication, July 19, 2007)

Several media stories, including a *New York Times* article by Samuel G. Freedman (May 9, 2007), support this principal’s account. Freedman reported that as comprehensive schools were being divided into smaller or minischools, hundreds of emergent bilinguals were being barred from admission to these new schools and instead disbursed to other schools across the district, resulting in some schools (typically the remaining large comprehensive schools) receiving a percentage of emergent bilinguals that far exceeded the district average.

Charged with localizing NCLB, many of the administrators in our research became complicit in promoting and supporting a discourse that, in ANT terminology, translated emergent bilinguals into quantifiable data. The construction and comparison of the data were presented to the public, typically as factual data points. This concealed the reduction of schools to conduits of information, of teachers and school administrators to managers of data flow, and of emergent bilinguals and other demographic subgroup members to AYP target threats.

(Mis)Using Test Scores

While many, not all, school administrators are attending to emergent bilinguals as numerical liabilities, district administrators and politicians are (mis)using the discourse of quantification to construct quite a different story. The high stakes attached to a single test score creates an incentive for politicians and school officials to do so in ways that serve their interests. These mis(uses) range from more egregious examples of cheating to improve test scores, to subtler “modifications” or misrepresentations of testing data. Examples of the latter include, for instance, school officials changing the regulations to achieve more desirable outcomes or only presenting partial truths to the public.

Accusations of cheating are increasingly common and have gained momentum each year since NCLB was enacted. In 2011 alone, Baltimore, the District of Columbia, Atlanta, and Pennsylvania all faced accusations of systemic cheating. In Georgia, state investigators recently released a scathing report alleging a long-standing pattern of cheating on state standardized tests in Atlanta in at least 44 schools, incriminating everyone from teachers and principals to the superintendent (Samuels, 2011). Most recently, in NYC, a threefold increase in “annual allegations of test-tampering and grade-changing” (Otterman, 2011) has been reported. All of the cases that have arisen, particularly that of Atlanta, have received a great deal of media attention.

More subtly amidst the spectrum of testing misuses, the New York State Education Department (NYSED) recently lowered the bar by which “proficiency” was determined, in order to meet the federal pressure to increase test scores. In 2006, students in all grades needed to earn nearly

60% on the mathematics exam, but by 2009, they needed to earn less than 50% (Ravitch, 2009). Further, as is the case in many states, for several years there has been a growing gap between students earning proficient scores on the state tests administered under the terms of NCLB and those earning proficient scores on the National Assessment of Education Progress (NAEP) tests. In a notable statewide example from 2008, “the percentage of eighth-graders reaching proficiency on the state’s math test rose from 58.8% in 2007 to a stunning 80.2% in 2008” (Stern, 2010), even as NAEP math scores remained nearly unchanged for the same period.

The Board of Regents, which governs the NYSED, and the state’s education commissioner at the time, failed to investigate the incongruent state and national test scores. NYC Mayor Bloomberg and then Schools Chancellor Klein touted the increased state test scores as evidence of the success of their reforms. In Bloomberg’s third mayoral reelection bid, his campaign publically highlighted the achievement gap reduction between White students and Latino and Black students. After the state recalibrated the 2010 test scores, many fewer students met or exceeded the new mathematics and English proficiency standards in 2010 than in previous years; the greatest drop-off in proficiency levels were seen for Black and Latino students, as well as emergent bilinguals, as many of these students “had been just above the minimum proficiency rates under the old standards” (Medina, 2010). Still, Bloomberg and Klein continued to claim that NYC students were making substantial academic progress (Zraick, 2010).

Here, the problem of closing the racial achievement gap, which had been rendered technical and not overly controversial, becomes complicated by contradictions and conflicting evidence. The validity of the calculations has been (successfully) challenged, and new experts have spoken. Thus, the technical issue has become a “socio-technical controversy” (Callon, Lascoumes, & Barthe, 2001) in which several actors are trying to legitimately and competently engage and direct the discussion about what groups of students are, and are not, proficient on NCLB’s tests. Some actors, like Bloomberg and Klein, scramble to revise their interpretations.

In schools under great pressure to perform to the levels set by NCLB, inconsistencies like these from the state and district leadership lay the groundwork for a range of manipulations in the name of improving test scores. At a Queens high school participating in research by the second author (Author 2), all students—including emergent bilinguals—were told by school administrators and teachers that the passing score on the state exams was 65, when in actuality it was 55 at the time of the interview (it has since changed). The school required that the students retake exams as many times as necessary until they attained that score—even if they scored above 55. In the following exchange, an ESL coordinator at that school explains (Author 2’s voice in italics):

Now kids who got a 55 have to take the Regents again and get above a 65 because we could fall into a certain category, I don’t recall. High schools are evaluated in certain levels. And if a lot of kids get 55, that’s not a good level. The school looks good when students get 65, and has a good reputation . . .

Isn’t 55 the requirement for a high school diploma?

This is where this interview has to be confidential. We don’t tell them that. We tell them they have to get 65 and above according to the State Department of Education. And plus, the statistics, the department is changing their main score, switching back and forth what’s passing, and it’s very unclear. So each year we make them take it for a 65, and personally I find that unfair for ESL students. (interview, March 23, 2004)

As the ESL coordinator explains, the fluctuations and inconsistencies in state policies regarding passing scores opened a space for staff within this school to engage in manipulations of

their own. And, given the high stakes of NCLB-driven assessments, there are great incentives to mislead the students in this way. In this instance, teachers and administrators all become actors involved in a performance to engineer students into believing that their passing scores were failures. While perhaps not cheating, such manipulations are at the very least unethical for their dishonesty and the unnecessary additional stress placed on the students.

Likewise, the test scores that are presented publicly as technical data are in actuality quite human. For instance, teachers in many states across the U.S. score the exams taken in accordance with federal mandates. While there are test items with clear right or wrong answers, most exams also include open-ended test items where correctness is subject to interpretation. On the English Regents exam, teachers must evaluate an essay using a rubric developed by the state. The transcript below records the comments of four teachers at a Bronx high school as they evaluate a group of emergent bilinguals on their essay portion of the exam.

T2: I have a feeling this is not a stack of scholars here.

T1: No, this isn't the stack of [honors] kids we had before . . .

T2: This is awful.

T1: Okay, some of these are going to be a three and others a four [out of six].

T3: This is so cute, he keeps saying addiction instead of addition.

T4: This is ESL, right? They have coherent sentences going on and good ideas.

T3: I go easy on them. (observation, January 29, 2004)

This passage shows how there are discrepancies between teachers in their responses to essays written by emergent bilinguals and how knowing the students are emergent bilingual changes how these students are assessed as compared to English-proficient students. While T1 and T2 immediately make negative comments and score the essays accordingly, T3 and T4 were found to score the essays of emergent bilinguals more leniently. Examples such as these draw into question the numerical values assigned to students in the form of testing data, as they show how even within the seeming rigidity of the accountability system there is room for the views and ideologies of the scorers to shape the numerical values they assign.

From an actor-network perspective, what comes to count as a correct answer is mediated by various actors who are assembling the emergent bilinguals. T3 and T4 assemble the “data” in one configuration while T1 and T2 gather the “facts” differently. Even what is to qualify as available for calculation is at question. Clearly from T4's comments, s/he considers the designation of “ESL” as qualifying for inclusion in the scoring of the student's response. Callon and Law (2005) provide the concept of “qualculation,” in which things, both quantitative and qualitative, are manipulated into calculations. These things, some material and some human, must then qualify for calculation in a common frame.

Omissions of key information in public presentations also reflect a common manipulation. A 2008 presentation by a NYSED official illustrates a case in point, when a positive slant serves his interests by making it appear that he is doing his job well. Figure 1 represents the slide presented to the audience with the following heading: “There was an increase in the percentage of ELLs scoring at Levels 3 and 4 except for Grade 8.”

Figure 1 shows how emergent bilinguals improved on the English language arts (ELA) exam from 2007 to 2008. The presentation summary states: “In 2008, the percentage of ELLs meeting the ELA standards increased from 18% in 2007 to 25% in 2008; the percentage of ELLs showing serious academic deficiencies in ELA decreased from 29% in 2007 to 18% in 2008” (New York

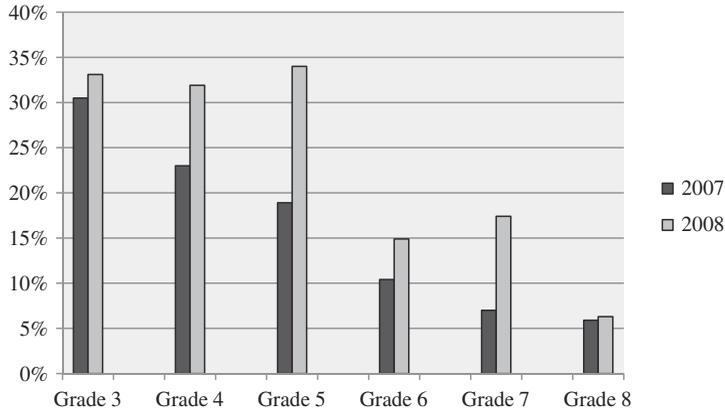


FIGURE 1 Testing spin: Performance of emergent bilinguals on English Language Arts Exam, 2007–08 (the slide shown publicly with the caption: “There was an increase in the percentage of ELLs scoring at levels 3 and 4 except for Grade 8”).

State Education Department, 2008). The NYSED official presenting this information highlights improvement that, upon further investigation, proves to be disingenuous.

This presentation excluded several important facts, which paint a different portrait altogether. NYSED’s own data for 2006 show how the performance of emergent bilinguals had actually worsened from 2006 to 2007, for Grades 3 through 7—as can be seen in Figure 2. The NYSED

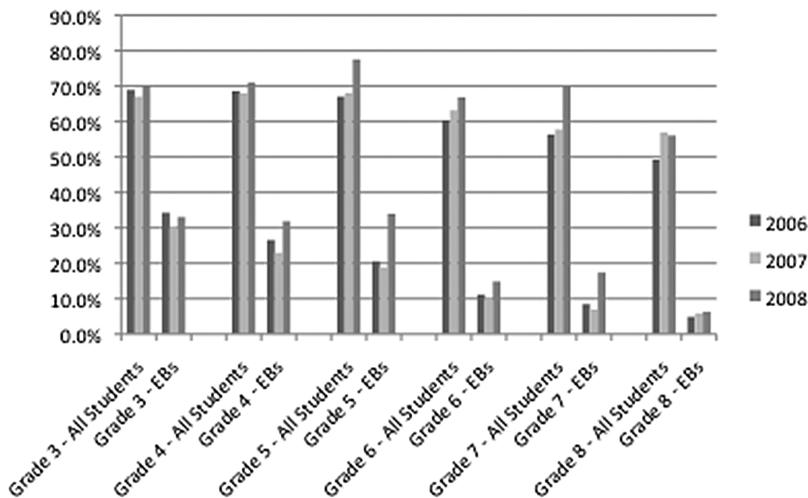


FIGURE 2 Performance of emergent bilinguals (EBs) compared to total population on English Language Arts Exam, 2006–2008 (the slide that was not shown publicly by officials).

official chose to omit the 2006 scores in his presentation, thereby offering a more favorable depiction of the test results. In addition, the official did not compare the performance of emergent bilinguals to other students. In Figure 2, the performance of emergent bilinguals is compared to all students in New York and reveals a wide achievement gap between these student groups that shows no evidence of narrowing. Lastly, the official did not discuss the fact that emergent bilinguals seem to perform worse on this exam as they progress from grade to grade, with far fewer students in eighth grade achieving proficiency than in third grade.

Presented to the public as unbiased and scientific, examples such as these highlight the subjective nature of quantification and calculation (or qualculation). Testing data are typically accepted at face value and thus are potentially very dangerous for the power they wield—particularly in instances where it is in the interest of vested officials to present partial truths rather than address the many longstanding inequities for emergent bilinguals in the state (García, 2011; Reyes, 2006).

Here, we see how state officials, city politicians, school administrators, and teachers negotiate the translation of test scores to score reports, maximizing their own positions and political aspirations by temporarily repositioning the scores in the broader NCLB accountability frames. The score reports are continuously performed and publicly circulated, but they are also precarious as multiple and diverse translations and effects of the assembled data are possible. Technical calculations evolve into sociotechnical qualculation controversies. What is assembled as knowledge and fact by one actor rarely resembles what is assembled by another. As a result, the high-stakes testing and accountability, elevated by NCLB, and translated into presentable data points, are but one form of transmutable and unstable educational knowledge.

Resisting the Discourse: “I told them I’d do it, but I didn’t.”

While many educators comply with NCLB, we have found numerous examples of those who resist the discourse and regard emergent bilinguals and their languages as assets rather than as numerical liabilities. An interview with the principal of an elementary school in Queens with a well-established dual-language bilingual education program offers an example of this counterdiscourse. The principal laments the negative impact that NCLB-driven testing has had on emergent bilinguals, while at the same time displaying how she resists these pressures (interviewer’s voice in italics):

Testing is a big thing. . . . And so, really, I find that since No Child Left Behind had said all this testing has to be taking place, and we now do this, it’s gotten worse.

Do you feel a lot of pressure on you in that way?

You know what, no I don’t! And I’ll tell you why. . . . If you have a good well-structured bilingual program it’s going to work and those kids are going to be able to move. (interview, February 26, 2009)

School principals in NYC typically succumb to the pressures of accountability by eliminating their bilingual programs in an effort to increase scores on tests administered in English and by preventing emergent bilinguals from attending their schools (Menken, 2011; Menken & Solorza, in press). By contrast, this principal reasserts her support for bilingual education in this excerpt. She argues that student learning is more important than high test scores, though it is worth noting that emergent bilinguals in her school have performed well on accountability measures because of the programming they receive.

Similarly, two Brooklyn middle school principals describe what they both refer to in a joint interview as their “disregard” for the NCLB testing focus for “ELLs:”

Principal 1: I don’t know about you [to other principal], but I just can’t change everything that we’re doing for NCLB. . . .

Principal 2: We say we do, but we don’t, not really.

Principal 1: Our ELLs were steadily improving, but we got heat from someone at the district to add more test prep, but they don’t call it test prep. They called it test support or something. Anyway, I told them I’d do it, but I didn’t. . . . Our ELLs aren’t our problem. They [the district administrators] are!

Principal 2: Not ours either. I’d trade in all the slackers and gang wannabes for ELLs and we’d do a hell of a lot better than we are. . . . ELLs are just some easy scapegoat for the district. I swear if we just let them be, progressing, you know, like they would in time, they’d be fine and we wouldn’t have to have three district employees running around telling us how to improve their test scores. I keep telling them that kids are not test scores. (interview, October 14, 2008)

Both principals’ schools had failed to meet AYP targets for three years in a row, but in the third year, both schools met their AYP targets for emergent bilinguals. Neither followed what they considered the districts’ overemphasis on teaching test-taking skills to emergent bilinguals; instead, they continued to add bilingual teachers and paraprofessionals, and the second principal developed a shared-decision-making team composed of an assistant principal, a literacy specialist, a handful of teachers, two Spanish-speaking parents, and a Mandarin-speaking community leader. She credits the team with changing the entire school’s attitude toward the emergent bilingual students: “All it took was to get the right people who cared about the ELLs and before you knew it, we knew what we needed to do.”

As demonstrated by these examples, contested spaces, which emerged locally within the assemblage of NCLB’s assessment and accountability mandates, can become productive sites in which a discourse of linguistic multiplicity as an asset gains purchase. The principals engaged variably with the testing practices and protocols, and heterogeneous pedagogies and performances resulted. The school administrators resisted or selectively enacted the mandates but refused to accept the dominant discourse. Their alternative representations of emergent bilinguals motivated them to assemble together actors to intervene and disrupt the discourse.

RETHINKING THE ASSEMBLAGE

The local (mis)representation of emergent bilinguals as numerical data in everyday educational discourses in NYC is but part of a larger assemblage of neoliberally informed educational movements and political discourses. NCLB and its local corollaries construct the world of educational reform through textual and performed language, and new positions are made available to those for whom the policy is intended. Under NCLB, the positions for emergent bilinguals are limited by the powerful notions of increasing academic achievement and “meeting AYPs” that monopolize current educational concerns. The Obama administration’s recent blueprint for revising NCLB, which changes several features of the legislation, will continue the focus on increasing academic proficiencies, as measured by annual standardized assessments, and thereby retain many aspects of NCLB’s “test and punish” approach to educational reform.

Test scores and reports, which are widely circulated, become a discursive proxy for emergent bilinguals. Through translations, they become detached from their origins and are then evoked as scientific evidence and authorized knowledge in support of NCLB—to the detriment of bilingual education programming and pedagogy. This article reveals how NCLB organizes fragmented activities and heterogeneous materials to appear rationally (and quantifiably) aimed toward meeting AYP targets under NCLB. Seeing achievement and improved test scores as *a*, if not *the*, valuable knowledge became taken for granted.

Our analysis unveils the multiplicities and contestations of quantitative measures, which have come to dominate current U.S. educational reform. Our work interrogates the discourses legitimized by these measures. Specifically, assemblage allows us to look at how quantifiable data is translated into “what works,”—i.e., high achievement data both reflects and justifies practices—that then becomes translated in “best practices” across highly variable school contexts and student populations. It beckons us to reconsider the ways in which emergent bilinguals are discursively constructed in schools so that we may advocate for reform that replaces “objective” and technical formulations with those that are subjective and yet authentic, resulting in the improved education of these students.

There are therefore several practical implications of our work. As we move toward the adoption of new federal education and immigration legislation, those concerned about emergent bilinguals need to understand the linkages between immigration, bilingualism, and the education of emergent bilinguals. Such understanding will facilitate educators in advocating for emergent bilinguals through regular communication with parents, community, local political representatives, and other policy makers, and even colleagues about these students and their educational needs, including the important role of students’ home languages in their learning. Consistent reminders to policy makers from educators and the informed public not to overrely on standardized tests in English for high-stakes decision making are needed, as any single assessment with too many stakes attached lends itself to manipulations and gaming of the system reported here. Instead multiple measures of student achievement from a range of samples of student work must be included, offering a more holistic and human (rather than merely numerical) portrait of each emergent bilingual student. Doing so can potentially foster the creation of an accountability system that makes more sense for this population of students, one that supports rather than undermines their education.

There is also much to be done in schools. We have found that schools best able to negotiate the pressures of NCLB are those with a knowledgeable, well-prepared principal and teaching staff, and where the school has in place a strong and coherent schoolwide language education policy in which emergent bilinguals and their languages are embraced as resources. In these schools, the education of emergent bilinguals always remains at the epicenter of the school’s mission, regardless of the top-down policies like NCLB that they are called upon to implement, so this mission and whatever effective programming had been put in place to develop the students’ home languages while learning English remain in essence unmoved and immutable in the face of demands for testing and accountability. We have seen how there is always the possibility for educators within schools to “open up ideological and implementational spaces for multilingualism and social justice, from the bottom-up” (Hornberger, 2010, pp. 562–563), even in the face of highly invasive and restrictive policies like NCLB (see Menken & García, 2010 for further discussion of the powerful role of educators as language policymakers). There is much to be learned from these schools that have been best able to contest and negotiate the quantification of

education in ways that make sense, generating new discourses that support emergent bilinguals and their learning.

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