

Beyond Knowledge Ventriloquism and Echo Chambers:
Raising the Quality of the Debate on Teacher Education

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Abstract

Background/Context:

For over two decades, there has been a steady call for deregulating U.S. teacher education, closing down allegedly poor quality college and university programs, and creating greater market competition. In response to this call to disrupt the dominance of colleges and universities in teacher education, and because of the policies and funding allocations of the U.S. Education Department and private foundation funding, non-university providers of teacher education have proliferated in certain areas of the country. A critical aspect of the current call for greater deregulation and market competition in teacher education has been the declaration that university teacher education has failed. While there is no dispute about the need for improvements in the dominant college and university system of teacher education, it is also important to critically evaluate the warrants for the value of programs that critics claim should replace college and university programs.

Purpose:

The focus of this paper is to illustrate how research has been misrepresented to support policies and programs that would simultaneously reduce the role of colleges and universities in preparing U.S. teachers and support the expansion of the role of non-university providers. We also examine the print news media's role in uncritically reproducing a narrative of failure about university teacher education and promoting the success of new non-university programs—attention that has served to inflate the public perception of these organizations and programs beyond what is warranted by the available evidence.

Research Design:

Four cases are presented that illustrate the efforts to manufacture a narrative of the failure of colleges and universities in preparing teachers, and to construct a narrative of success for the non-university programs that have been funded to replace them. The authors use the concepts of

echo chambers and knowledge ventriloquism to show how this process operates.

Conclusions/Recommendations:

Following the presentation of the cases, specific recommendations are offered for raising the quality of the debates about the future of U.S. teacher education. These include greater transparency in the process of reform, better communication between researchers and stakeholders, using research that has been vetted to inform the debates, and genuinely exploring different policy options for teacher education.

For over two decades, there has been a steady call for deregulating U.S. teacher education, closing down allegedly poor quality college and university programs, and creating greater market competition (Chubb, 2012; Finn & Kanstroom, 1999; Hess, 2001; Knowles, 2013; Walsh, 2001). In response to this call to disrupt the dominance of colleges and universities in teacher education, and because of the policies and funding allocations of the U.S. Education Department and private foundation funding,¹ non-university providers of teacher education have proliferated in certain areas of the country. Some of these providers, like the Relay Graduate School of Education (Schorr, 2012) and the Sposato Graduate School of Education—both independent education schools founded by charter school organizations—and the American Museum of Natural History, have been empowered by their states to award Master’s degrees with full teacher certification. Other for-profit teacher education programs such as A+ Texas Teachers and iteachTEXAS, along with teacher education programs at online for-profit universities like the University of Phoenix, Grand Canyon University, and Kaplan University, have also emerged and are preparing many teachers across the nation. Currently, approximately 20-30 percent of teachers in the U.S. enter the workforce through a non-university pathway (National Research Council, 2010), although in certain states like Texas, and in certain local

labor markets like New Orleans, the percentage is much higher. The graduates of these non-university programs tend to be concentrated in low-income urban and rural areas (Darling-Hammond, 2004; Zeichner, 2014).

Although colleges and universities dominated teacher preparation in the U.S. from approximately 1960-1990, beginning in the mid-1980s, more alternative pathways into teaching beyond the traditional undergraduate and post-graduate models emerged (Zeichner & Hutchinson, 2008). As Fraser (2007) has pointed out, diversity in pathways into teaching has been the norm in the U.S. rather than the exception. What is new in the current push toward greater diversity in pathways into teaching in the U.S. is the active support of the U.S. Department of Education in promoting non-college and university programs and the investment of substantial amounts of corporate and government money into developing chains of non-college and university sponsored programs like Relay, Match, The New Teacher Project (TNTP), Teach For America, and the Urban Teacher Center² whose standardized models can be scaled up and spread across the country (Zeichner & Pena-Sandoval, 2015). Much of this new activity is linked to preparing teachers for the growing number of K-12 charter schools in certain areas of the country (Stitzlein & West, 2014).³

A critical aspect of the current call for greater deregulation and market competition in teacher education has been the declaration that university teacher education has failed and represents an “industry of mediocrity”(Keller, 2013). Kate Walsh, president of the National Council on Teacher Quality (NCTQ) has been quoted as declaring, “it is an accepted fact that the field is broken” (Kronholz, 2012). These assessments of teacher education have also been used to justify and promote greater federal accountability for teacher education programs (Crowe, 2010; Duncan, 2011; U.S. Department of Education, 2014a), including the highly controversial use of

student test scores of program graduates to evaluate the quality of teacher education programs, a practice that many experts in educational assessment and the American Statistical Association have criticized (American Statistical Association, 2014; Berliner, 2014a; Baker, et al., 2010; National Academies, 2010).

There is no dispute about the need for improvements in the dominant college and university system of teacher education. The field itself has a history of self-critique that has called for substantive changes in how teachers are prepared (e.g., Goodlad, 1998; Holmes Partnership 2007; NCATE, 2010). Yet, just as scholars within the field have raised important critiques about university based teacher education practices (Fullan et al., 1998), it is also important to critically evaluate the warrants for the value of programs that critics claim should replace college and university programs.

One notable characteristic of current debates about the future of teacher education in the U.S. is the ways in which research has been distorted and misused in order to justify efforts to deregulate and privatize teacher education. Our focus in this paper is to illustrate how research has been misrepresented to support policies and programs that would simultaneously reduce the role of colleges and universities in preparing U.S. teachers and support the expansion of the role of non-university providers, many of which are funded by philanthropists, and promoted by the U.S. Department of Education (Zeichner & Pena-Sandoval, 2015).

We also contend that the print news media has given disproportional attention to allegedly innovative non-college and university programs developed by educational entrepreneurs and to organizations like the National Council on Teacher Quality (NCTQ)—attention that has served to inflate the public perception of these organizations and programs beyond what is warranted by the available evidence. The media has also reproduced in an

uncritical way some of the claims about the poor quality of college and university teacher preparation and about the research on alternative pathways into teaching—claims that have been made based on blatant misrepresentations of research. The media’s role in uncritically reproducing a narrative of failure about university teacher education and promoting the success of new non-university programs is, in part, a result of: (1) the considerable effort that non-university programs and the advocacy organizations, funders, and think tanks that promote them devote to branding and marketing these programs and (2) the reduction of budgets and staff in traditional media outlets and the need for them to now compete for the attention of readers/viewers with new non-traditional forms of communication (Bowden, 2009; Lubienski, Scott, & DeBray, 2014; Malin & Lubienski, 2015; Yettick, 2015). The media’s reproduction of this narrative of failure contributes to the limited or biased use of research in policymaking.

Contrary to the ideal of policymakers carefully weighing research evidence on complex issues as they seek to design education policies, scholars have argued for many years that policymakers often have used research politically, selectively drawing on evidence to support already held views (e.g., Henig, 2008; Weiss, 1979). Scholars have also argued that as a result of this selective use of research in the policymaking process there has often been a tenuous link between research evidence and policymaking in education (e.g., Malin & Lubienski, 2015). In this paper, we focus on teacher education as a specific example of the tenuous link between research evidence and policy in education.

In particular, we focus on several cases of the misrepresentation of research to support political ends: (1) the misuse of Levine’s (2006) study of teacher education as a means to denigrate schools of education; (2) the NCTQ’s misrepresentation of research to position university teacher education as “an industry of mediocrity” and to elevate its role as a judge of

the quality of teacher preparation programs; (3) the false assertion of a research warrant coupled with a media branding campaign to promote the Relay Graduate School of Education; and (4) the selective interpretation of research on the effects of different pathways into teaching generally, and particularly of an American Educational Research Association-commissioned research synthesis on U.S. teacher education (Zeichner & Conklin, 2005).

To frame our discussion, we find the concepts of knowledge ventriloquism and echo chambers relevant. Robertson (2012) has coined the term “knowledge ventriloquism” to describe situations where a very narrow menu of studies, either those commissioned by a program or by its own small circle of like-minded supporters, are counted as evidence for policy. Robertson explains, “By limiting as what might count as evidence for policy, it in turn limits potential challenges to this evidence” (p.201). The notion of an echo chamber in journalism and media studies is when ideas are amplified and reinforced by repetition inside an enclosed system where different or competing views are censored or disallowed. This term has also been used in the study of education policy making to document how “a small or unrepresentative sample of studies is repeatedly cited to create momentum around a policy proposal” (Goldie, et al., 2014). With regard to teacher education, we argue that a network of publicly subsidized and interrelated think tanks, advocacy groups, and philanthropists (Katz, 2013; Sawchuck, 2012; and Welner, 2013) have used the practices of knowledge ventriloquism and echo chambers to gain enormous influence in shaping teacher education policies. By using research in tactical and symbolic ways (Tseng, 2012), this network has shaped the current U.S. teacher education policy environment in ways that have undermined equity in our public education system and democracy in the making of education policy.⁴

Following our discussion of how research has been misrepresented through knowledge ventriloquism and echo chambers to support a particular policy direction, we will offer suggestions to reframe the debates about the future of U.S. teacher education.

Manufacturing a Narrative of Failure

By almost any standard, many, if not most, of the nation's 1450 schools, colleges, and departments of education are doing a mediocre job of preparing teachers (Duncan, 2009).

In order to justify deregulating and supporting greater market competition in U.S. teacher education, the U.S. Department of Education, politicians, think tank pundits, and venture philanthropists have made consistent efforts to establish the belief among the public that the dominant system of college and university teacher education has failed and that we need to replace many existing programs with new, allegedly more innovative ones. The print news media, in turn, has circulated this same belief. In the section below, we examine the efforts to brand existing teacher education programs as failures. We also discuss some of the strategies that deregulation advocates have used in an attempt to convince the public and policymakers that the new, largely early-entry⁵ programs that philanthropists, venture capitalists, and the U.S. Department of Education are promoting are innovative and desirable.

The Levine and American Federation of Teachers

Studies of Teacher Education in the U.S.

One of the most prevalent ways in which critics have sought to establish the failure of university teacher education is the citation of a report by Levine (2006) that included a survey of teacher education program graduates in which they reflected back on the value of their teacher education programs. This report was one of three issued by Levine and his privately funded "Education Schools Project."⁶ In the teacher education report, in addition to case studies of

several schools and departments of education, surveys of principals and Deans, and case studies of several exemplary programs, Levine surveyed a sample of 15,468 Education school alumni who received degrees ranging from the baccalaureate to the doctorate in 1995 and 2000 from a sample of 28 schools and departments of education chosen “to reflect the diversity of the nation’s education schools by region, control, religion, racial composition, gender, and Carnegie Foundation institutional classifications” (pp.5-6). Notably, only 34 percent of this sample responded to the survey. No information has been made available publicly or to us personally when we requested it in December 2014, about the representativeness of those who responded to the survey. According to Levine (2006), sixty-six percent of those who responded agreed with the statement “schools of education do not prepare graduates to cope with classroom reality” (p. 32). The fact that some alumni in the sample received doctoral degrees in the two years sampled adds some confusion to the meaning of these findings since no program in the nation offers a doctoral degree with certification for teaching.

This lone finding in Levine’s (2006) study has been cited repeatedly as “evidence” that university teacher education graduates feel unprepared to teach. For example, Schorr (2012)⁷ noted “In a seminal 2006 study by Arthur Levine, more than three in five teachers said their training left them unprepared for the classroom and principals agreed” (p. 3).

U.S. Secretary of Education Arne Duncan (2009) also referred to Levine’s (2006) surveys in his address on teacher education at Teachers College, Columbia University:

As you know, the most recent comprehensive study of teacher education was carried out by Arthur Levine, President of Teachers College... More than 3 in 5 Ed school alums surveyed for the Levine report said that their training did not prepare them adequately for their work in the classroom. (p. 3)

Finally, when the GREAT Act—a bill that has been incorporated into the 2014 and 2015 ESEA reauthorization process that would promote the development of “charter” teacher education programs that would be exempt from many of the regulations that other programs would need to meet—was reintroduced to the Senate and House of Representatives on May 23, 2013, both Senator Michael Bennett (CO-D) in the Senate and Tom Petri (WI-R) in the House referred to the Levine (2006) study to help make their case for the bill. Despite the extensive body of research literature on teacher education programs, no other study or report was referred to in either presentation. For example:

According to a leading study 61 percent of Ed school alumni reported that schools of education at four-year colleges did not adequately prepare their graduates for the classroom.⁸

Although the surveys in Levine’s (2006) study identified some of the persistent problems long-noted in the teacher education research literature (Wilson, 2014), it is not the only survey that has been conducted on teachers’ assessments of their preparation programs. While some more recent surveys also show that teachers have concerns with aspects of their preparation, these surveys also present a more positive and complicated picture than Levine’s survey. For example, a survey commissioned by the American Federation of Teachers (2012)—an organization that has been critical of the status quo in teacher education (American Federation of Teachers, 2012)—of 500 of its U.S. members in their first three years of teaching found that “two-thirds (66 percent) of new teachers felt completely (19 percent) or mostly (47 percent) prepared when they first started teaching while 34 percent said they felt just somewhat prepared or not prepared at all” (p. 21).⁹

In the proposed federal rules for teacher education accountability released in December 2014 by the U.S. Department of Education, the text of the rules and the supporting materials once again cite the 66 percent figure from Levine’s study¹⁰ and also cite selected findings from the American Federation of Teachers study.

However, rather than reporting one of the major findings that two-thirds of those surveyed in the AFT survey felt completely or mostly prepared when they started teaching, three pieces of data are selected and cited in the proposed teacher education accountability rules:

- 82 percent of the 500 beginning teachers surveyed suggest better coordination between teacher preparation programs and school districts.
- 77 percent of teachers suggest better aligning curricula with field experiences.¹¹
- 50 percent of teachers “indicated that their teacher preparation program did not adequately prepare them for the challenges of teaching in the real world.” (Department of Education, 2014, p. 71838).¹²

Although all of this information is accurate, stating these three findings without including the main survey findings that 66 percent of teachers felt completely or mostly prepared when they began teaching, and that by their third year of teaching, teachers looked back on their first year and 74 percent felt completely or mostly prepared is an example of cherry picking evidence to support a narrative of failure. This is especially the case given the finding that third year teachers “who completed an alternative training or certification program recalled feeling less prepared (only 42 percent felt completely or mostly prepared) than teachers who followed the traditional path (72 percent) (p. 22).

The AFT report of the results of their teacher survey is filled with contradictory findings about how teachers viewed their preparation programs. To select out a few statements that

support a particular narrative while ignoring other significant data that do not is an ethically questionable practice. For the U.S. Department of Education to reiterate these selective ideas in an official policy document is deeply troubling and undermines the integrity of the process.

Several other surveys completed after 2006 that asked teachers to evaluate the quality of their preparation programs show a more positive portrait of university teacher education programs than Levine's surveys, including: (a) Eduventures' (2009) study of 1,504 teachers with 5 years or less in the field, which indicated that 78% of teachers felt well prepared when they entered the field; (b) the National Comprehensive Center for Teacher Quality and Public Agenda surveys of 641 first-year teachers conducted in the spring of 2007 which indicated that 80% of teachers felt very or somewhat prepared for teaching in their first year (Public Agenda, 2008); and (c) a 2011 survey of 2,500 randomly selected K–12 public school teachers, which found that 65% of teachers rated their preparation program as excellent or very good, and another 24% rated it as good (Feistrizzer, Griffin, & Linnajarvi, 2011).

All these surveys reveal some teacher dissatisfaction with the quality of their preparation for teaching, and none of them was independently peer reviewed. The question that should be asked, however, is why critics of university education schools and advocates for deregulation and markets continue to cite only Levine's (2006) study and additionally only report the negative aspects of Levine's findings while ignoring the positive findings about university teacher preparation in his study and similar ones.

Despite Levine's negative assertions about the satisfaction of teacher education program graduates with the quality of their preparation programs, there are a number of places in the report where he noted excellence in university teacher education and noted the limited amount of

responsibility that can reasonably be placed on education schools alone for the problems in public education. For example, he explained:

It is critical to recognize that weaknesses in teacher education are not the primary reason we do not have more and better teaching. Schools and government bear a larger responsibility for low salaries . . . for an absence of teacher induction programs, low hiring standards, and poor working conditions which cause high teacher turnover. (p. 21)

Despite these instances of more nuanced analysis, the overwhelming focus in public accounts of the report is on what are seen as problematic aspects of teacher education. This negativity was picked up by the media reports of the study soon after its release, as evidenced in headlines such as, “Study Says Teacher Training is Chaotic” (Feller, 2006), “Prominent Teacher Educator Assails Field” (Honawar, 2006), and “Report Critical of Training of Teachers” (Finder, 2006).

The National Council on Teacher Quality and the Equity Standard

Advocacy groups put considerable effort into strategies that advance their agendas, often by assuming the mantle of expertise and projecting that assumed status into the media and policy debates (Malin & Lubienski, 2015, p.3).

Another case of misrepresentation of research in teacher education is the rationale that the National Council on Teacher Quality (NCTQ) uses for their equity standard in their national rankings of teacher education programs. The NCTQ was founded in 2000 by the Thomas B. Fordham Foundation, one of the leading national advocates for deregulation in teacher education (Finn & Kanstroom, 1999). Kate Walsh, who had established herself nationally as a critic of the value of teacher education (Walsh, 2001), was appointed the president of the organization. In 2001, then Secretary of Education Rod Paige, gave NCTQ five million dollars from his

discretionary fund to start a new national certification organization, The American Board for the Certification of Teacher Excellence, which was conceived as a competitor to the National Board for Professional Teaching Standards. This organization offers online teacher certification programs in several states that do not require the completion of a teacher education program.¹³

Beginning in 2006, NCTQ began issuing a series of uniformly critical reports on the quality of teacher education programs across the nation. Unlike the widely vetted standards of the teacher education accrediting agency the Council for the Accreditation of Educator Preparation (CAEP), and the Council of Chief State School Officers (CSSO) (CSSO, 2011), the NCTQ reports are based on a set of standards developed by its own advisory group—a group that includes many advocates of deregulation and market competition. Beginning with reports on the preparation of elementary teachers to teach reading (2006), and math (2008), NCTQ followed in 2009 and 2010 with reports on what it termed “the essentials of teacher preparation” in several states (IL, TX, CO, NM, UT, WY, IN), and then with reports on specific areas of teacher education in programs nationally: student teaching (2011), assessment (2012), classroom management (2013), and academic rigor (2014).

Additionally, NCTQ formed a partnership with U.S. News and World Report and published two sets of evaluations of teacher education programs nationally based on its own revised set of standards. These reports have been heavily criticized by both professional societies (International Reading Association, 2013) and by education scholars (Darling-Hammond, 2013; Fuller, 2014) for their faulty methodology and partisan nature, and more than 50 percent of teacher education institutions boycotted the first national evaluation in 2013.

One of the NCTQ standards—a standard that focuses on equity—illustrates the problematic nature of the NCTQ evaluations and the way in which NCTQ misrepresents

research. In this standard, the NCTQ dismisses the entire field of research on multicultural teacher education as anecdotal. Specifically, NCTQ's equity standard states:

As there are no findings from solid, large-scale and non-anecdotal research that coursework dedicated to eliminating gender and racial biases has any impact, (27) we concluded that the best way for teacher candidates to internalize appropriate values is to spend time in high-poverty schools that are at least relatively high-performing (p. 47).

Dismissing more than 40 years of research on the development of cultural competence and culturally responsive teaching in teacher education as offering nothing of value suggests a lack of understanding of or unwillingness to examine the available research. Although most of the major independent peer-reviewed syntheses of this body of research have acknowledged the limitations of the studies, all of these research syntheses identify specific effects of particular teacher education strategies that have enhanced the cultural competence of teacher candidates. For example, in a review conducted under the sponsorship of the National Academy of Education and another in the 5th Edition of the *Handbook of Research on Teaching*, a publication of the American Educational Research Association (AERA), community-based learning, under particular conditions, has been found to enhance the cultural competence of teacher candidates (e.g., Darling-Hammond & Bransford, 2005; Cochran-Smith & Villegas, in press). Additionally, in the report of the AERA-supported effort to synthesize research on teacher education in the U.S., Hollins & Guzman (2005) identify clear trends in the research with regard to a variety of teacher education practices that are associated with enhancing aspects of teachers' cultural competence, including prejudice reduction.

While rejecting the value of an entire field of teacher education research, NCTQ instead justifies its equity standard based on one study conducted by Ronfeldt (2012) that was conducted

in one labor market in New York City. In this study, Ronfeldt found that “learning to teach in easier-to-staff field placement schools has positive effects on teacher retention and student achievement gains, even for those teachers who end up working in the “hardest-to-staff schools” (p.3). These findings are based on a measure for each field placement school’s “stay-ratio” – a measure of teacher turnover. Ronfeldt (2012) finds evidence that a school’s stay-ratio can be used as a proxy for school working conditions and climate; it is not used as a measure for a school poverty or performance as NCTQ seems to infer. In fact, Ronfeldt includes separate measures for school performance and poverty that are mostly unrelated to teachers’ retention and achievement gains.

The NCTQ’s reliance on one study as the sole basis for the equity standard is especially puzzling because Ronfeldt is quite clear in his analysis about the tentative nature of his findings:

Although this study’s results are suggestive of a causal relationship between field placement stay-ratio and teacher retention and effectiveness, the evidence is by no means definitive. More studies are needed to reproduce these findings. Given the unique student demographics and labor market of NYC, these should include studies in different kinds of districts and states to see if the effects of field placement still hold. Moreover, well designed experimental studies with random assignment of teachers to easy-to-staff and difficult-to-staff field placements would be useful in bolstering or countering the case for a causal relationship... This study has provided a blunt signal for identifying quality placements, and more research is needed to understand the specific features that give rise to these average effects (p.22).

An additional problem with the basis for NCTQ’s equity standard is the assertion that merely spending time as a student teacher in a high poverty school that is at least relatively high-

performing will result in teacher candidates learning what they need to learn to be successful. In addition to not directly addressing the “stay-ratio ”that is the basis for Ronfeldt’s findings, this learning by mere immersion theory of teacher learning is at odds with research about teacher learning (Grossman, Ronfeldt, & Cohen, 2015; Hammerness, et al. 2005) which indicates that immersion without carefully designed preparation, mediation, and ongoing support can undermine teacher learning, and in some cases, strengthens and reinforces deficit stereotypes about students (Banks, et al., 2005).

The misuse of research in this equity standard is representative of the ways in which NCTQ has manipulated research findings in its teacher education studies in an effort to legitimate itself as an arbitrator of the quality of teacher education programs and to support its claims that university teacher education is broken. Fuller (2014) examined the ways in which research was used in developing several other standards used in the NCTQ program ratings and reached similar conclusions about the misrepresentation of research.

Despite the shaky grounds on which this and many of the other NCTQ standards rest, the various reports that NCTQ has issued on the quality of particular teacher education programs in the U.S. have received prominent coverage in the national and local media (e.g., Banchemo, 2013; Berrett, 2013; Sanchez, 2013; Sawchuck, 2013). Although Kate Walsh has gone on record in the U.S. Congress as advocating for the federal government to remove barriers to non-university teacher education programs¹⁴, the NCTQ reports do not explicitly advocate for further deregulation and privatization of teacher education. The sound bites in Walsh’s speeches and in the NCTQ reports like “an industry of mediocrity” and “teacher education is broken” are repeated in major national media outlets (Berrett, 2013; Keller, 2013) and by those who advocate for promoting greater market competition in U.S. teacher education such as Norm Atkins and

David Levin.¹⁵ Further, while most of these news reports mention some of the critiques of the motivations and methods of NCTQ's evaluations¹⁶, the cumulative effect of the media reports has been to legitimize the credibility of NCTQ and its methods and standards. For example, in the text of the proposed teacher education accountability rules distributed by the U.S.

Department of Education as a part of the 2014 reauthorization of the Higher Education Act, NCTQ is referred to as one of two "major national teacher education organizations" focused on teacher preparation. The other organization mentioned is the Council for the Accreditation of Educator Preparation, the major national accreditation body of teacher education.

To place NCTQ with its highly partisan mission and history on the same plane as the official national accreditation body of the field is not warranted given the questionable quality of their reports and a president (Kate Walsh) who makes statements about teacher education that create inaccurate caricatures of Education Schools. For example, at a 2013 session at the Foundation for Excellence in Education that she chaired, when introducing the session Kate Walsh said the following about Education schools:

Their faculty is answerable to no one, not even the Dean when it comes to deciding what the content of a class ought to be.¹⁷

Similarly, in the 2014 NCTQ rankings of teacher education programs, it is asserted:

Because there is now a widespread assumption that the general incompetence of first-year teachers is unavoidable, teacher educators are given license (particularly by state departments of education) to prepare teachers any way they please regardless of the effectiveness or lack thereof (p. 14).

These statements do not reflect the reality of state regulations that require teacher education programs to constantly gather, analyze, and report on the alignment of their curriculum

with state requirements and the performance of their teacher candidates on state and/or national teaching standards, nor do they reflect the influence of the voluntary national accreditation system which results in detailed requirements related to program inputs and outcomes. While it is legitimate to argue whether these state and national regulations and standards have made a difference in the quality of teacher education programs, and while faculty members have some flexibility in how they address state regulations, it is not reasonable to assert that these constraints on teacher education programs do not exist.

Further, none of NCTQ's reports have been independently peer-reviewed as is the case for most of the major evaluations of research and practice in teacher preparation in the U.S (Cochran-Smith & Zeichner, 2005; Wilson, Floden, & Ferini-Mundy, 2001; National Research Council, 2010). Additionally, there has been no credible empirical research that has been presented showing whether graduates from NCTQ-endorsed prep programs are, in fact, doing better than graduates from other programs. In fact, a recent study of the predictive validity of the NCTQ program ratings in relation to the students test scores and principal evaluations of graduates from different programs in North Carolina (Henry & Bastian, 2015) has shown that "in our analysis there is not a strong relationship between NCTQ ratings and meeting their standards and the performance of TPP graduates" (p.7).

In the 2014 NCTQ Report on teacher education programs, the authors compare their report to the infamous Flexner Study of medical education over a hundred years ago (Flexner 1910) that transformed the field of medical education, a fundamentally problematic comparison given the scholarly nature of Flexner's study. Given the absence of independent peer review in their reports, the lack of attention to the realities of program approval and accreditation in the regular statements of the NCTQ president, along with the fatally flawed methodology of the

NCTQ ranking exercise that does not consider “the actual quality of instruction that programs offer, what students learn, and whether graduates can actually teach” (Darling-Hammond, 2013), the NCTQ and its reports do not warrant the kind of media coverage that they have garnered.

The Echo Chamber Surrounding Relay Graduate School of Education

In an effort to break the dominance of colleges and universities in teacher education, critics of Education schools have made many claims about the superiority of programs funded by philanthropy and the U.S. Department of Education. These claims are based on critics’ assertions that these new programs have proven their success at producing graduates who have demonstrated the ability to raise the standardized test scores of their pupils. Advocates of these new programs also sometimes point to alleged evidence that more students than before have gone to college in the charter schools where teachers prepared by the entrepreneurial programs have taught. Similarly, in the literature on educational entrepreneurship, the educational entrepreneurs who are brought in by venture philanthropists to develop and run start-up teacher education programs are referred to in glowing terms. For example, Hess (2006) referred to them as “pioneers,” “visionary thinkers,” “the engines of progress,” “imaginative, creative and talented.” Assertions like these are taken at face value in calls to deregulate and create a market economy in U.S. teacher education.

However, the dearth of research demonstrating the superiority of entrepreneurial programs like Relay Graduate School of Education, the Academy for Urban School Leadership (AUSL), Match Teacher Residency, and the Urban Teaching Center in the preparation of teachers, even by the entrepreneurs’ own standard of quality based in student standardized test scores, raises serious questions about the warrant for these claims. Repeatedly declaring that these programs are innovative, groundbreaking, and bold does not make it true in the absence of

solid research evidence. Even in some cases in which it can be shown that students in charter schools staffed by graduates of these entrepreneurial programs have improved test score results and graduation rates, it has not been demonstrated that the nature and quality of the teacher education programs have been responsible for these gains (see Zeichner & Conklin, 2005; Cochran Smith & Villegas, in press, for a discussion of this issue). Although research evidence shows that *some* charters have outperformed public schools in raising standardized test scores, most of them have not done so (CREDO, 2009, 2013; Henig, 2008).

Examining the evidence regarding the effectiveness of one of these entrepreneurial programs, the Relay Graduate School of Education, provides one informative case. Teacher U, the predecessor to Relay Graduate School of Education, was founded in 2007 by representatives of three charter school networks (Achievement First, KIPP, and Uncommon Schools) primarily at first to prepare teachers for the three founding charter networks. For three years, Teacher U operated within Hunter College, a campus in the City University of New York System. Norm Atkins was named the president of Teacher U, and the program was funded initially by a \$10 million dollar gift from a hedge fund operator, Larry Robbins, followed by a \$30 million dollar gift from the Robin Hood Foundation where Norm Atkins had served as co-executive director from 1989-94. Teacher U became an independent graduate school authorized to grant master's degrees in teaching in New York state and changed its name to Relay in 2011 and has also attracted substantial funding from major philanthropists including the New Schools Venture Fund, and the Carnegie, Dell, Fisher, Gates, Schusterman and Walton foundations.

The teacher education programs that Relay offers are two-year, part-time programs available to full-time teachers teaching with provisional certification. About 40 percent of the program is delivered through online instruction. Relay currently operates teacher education

programs in New York City, Newark, Chicago, New Orleans, Philadelphia, Camden, Memphis, and Houston. Caperton & Whitmire (2012) say “the vision is to keep expanding so that in a decade from now, 10,000 teachers in cities around the country are enrolled in an umbrella of Relays” (p.80).

Teacher U and Relay have been proclaimed as innovative, path breaking and bold largely based on their requirement that teachers must show that they can raise student achievement at least one year in the second year of the program in order to successfully graduate from the program. Arthur Levine, a member of the Relay board stated, “Relay is the model...It’s the future” (cited in Kronholz, 2012) while Caperton & Whitmire (2012) in their College Board published report assert that “Relay is a leader in the burgeoning movement to overhaul the way America trains its teachers for work in the highest-need schools” (p.76). Several articles have appeared praising Relay in the national press (e.g., Carey, 2009; Lemov, 2012; Otterman, 2011), in publications aimed at entrepreneurs and philanthropists (e.g., Barbic, 2013; Schorr, 2013), and in educational journals (Kronholz, 2012). Relay was also featured as a model in an episode on American Radio Works¹⁸ and in the University of Michigan’s “Teaching Works” seminar series.¹⁹

Further, both the White House and U.S. Department of Education featured Relay as one of a handful of innovative programs in press releases connected to the issuing of new federal rules regulating the quality of teacher education programs (U.S. Department of Education, 2014b; White House, 2014). For example, in a press release, the U.S. Department of Education noted that Relay:

Holds itself accountable for both program and employer satisfaction as well as requiring that teachers meet high goals for students’ learning growth before they can complete their

degrees. Students of Relay's teachers grew 1.3 years in reading proficiency in 1 year (U.S. Department of Education, 2014b).

Given all of this media attention and press for Relay, it is reasonable to ask what evidence exists to support the repeated assertion that this program is a model for the future of teacher education. There are several types of warrants that have been offered in support of the success of Relay. First, there are testimonials of individuals who have been enrolled in the program. For example, Kronholz (2012) reports the following statements that were made to him by Relay teachers:

Many also told me that Relay's lessons have changed their classroom culture. "The culture went from being compliant to being invested," said Max Silverstein, a Penn State business major now teaching in an early childhood classroom at Newark Legacy charter school. I heard the same thing from Alonte Johnson, a Moorehouse College English major who is teaching middle school English at King's Collegiate Center school in Brooklyn. A few days earlier his students designed a seating chart that paired the better and slower readers. "The environment is more interdependent instead of everyone working for me," he said (p. 6).

The second type of warrant that has been offered to support claims about the success of Relay are internal analyses of Relay teacher candidates' master's projects that present data on the ability of its teacher candidates to raise students' achievement including standardized test scores. Until recently, there was nothing at all on Relay's website or in the literature that attempted to document the claims about the effectiveness of its teacher candidates. In late fall 2014, Relay redesigned its website and now presents "key data that indicate graduate student success in our educator preparation programs." The website explains that as a part of the master's defense that

is required for successfully completing the program, graduate students should “meet and exceed an achievement floor”- a baseline for their students’ performance. Examples that the website provides include having teacher candidates’ students: (1) achieve a year’s worth of growth as measured by the STEP literacy assessment; (2) achieve 70 percent mastery of the fifth grade state science standards; and (3) grow at least one level on average writing rubric scores as measured by a five point six-traits rubric.²⁰ The program also encourages its teacher candidates to achieve more ambitious goals in each of these areas.

Relay reports on its website that 94 percent of its class of 2013 met their achievement floor and approximately half of the class met their ambitious goals in at least one subject. The website also states “on average, the K-12 students taught by Relay GSE’s class of 2013 grew 1.3 years in reading performance in one year’s time.” Additionally the Relay website references “regular institutional surveys” of graduates and polls of graduates’ employers that attest to the effectiveness of Relay prepared teachers.

Another type of evidence that is put forth about the success of Relay is the assertion that it is based on practices that have been proven effective by research. For example, Gastic (2014), the Research Director at Relay, asserted with regard to teacher prep 2.0 programs including Relay:

These programs are deliberately anchored in best practices and insights drawn from classroom and school experience and educational research (p.96).

Relay has proudly proclaimed that faculty member Doug Lemov’s classroom management strategies are the central core of its curriculum (e.g., Otterman, 2011). Lemov’s (2010) strategies are based on his own observations and conversations with teachers and administrators in various charter schools that he claims are high performing. However, these strategies do not possess the

kind of rigorous scientific warrant that is being called for in teacher education programs (Pianta, 2011).

Given the extensive media coverage of Relay and the U.S. Department of Education's and White House's statements of support, it is surprising that there is not a single independently conducted study (peer reviewed or not) that shows the effectiveness of Relay graduates even according to the very narrow criterion of raising test scores. Any teacher education program can produce internal evaluation results, testimonials from graduates, and surveys that show that employers like to hire the graduates. Given Relay's branding as an exemplar for U.S. teacher education, it seems reasonable to require that the program be able to produce independently conducted and preferably peer-reviewed research to substantiate its claims about success in achieving its goals.

Further, Relay's singular focus on the raising of student achievement scores is a cause for concern. Researchers have argued for decades that in order to fairly evaluate the quality of a teacher education program, we need to examine a broad range of costs and benefits associated with particular programs (Levin, 1980) rather than only focusing on a narrow set of alleged benefits. There is clear evidence of the negative effects of the narrowing of the curriculum that have been shown to be associated with an exclusive focus on raising test scores (e.g., Berliner, 2011). Researchers have also documented that control oriented classroom management practices like those of Lemov (2010) that are the core of Relay's curriculum sometimes have negative psychological effects on students who are subjected to them (e.g., Gatti & Catalano, 2015; Goodman, 2013). Finally, as Mike Rose (2013) has pointed out, a singular focus on raising test scores can reinforce persistent inequities in U.S. public education. As Rose explains:

You can prep kids for a standardized test, get a bump in test scores, yet not be providing a very good education. The end result is the replication of a troubling pattern in American schooling: poor kids get an education of skills and routine, a lower-tier education, while students in more affluent districts get a robust course of study (p.13).

Knowledge Ventriloquism and Research on the Impact of Different Pathways into Teaching

The body of research leads one to expect students in the classrooms of corps members-recruited, trained, and supported by Teach for America- to learn as much or more than they would if assigned a more experienced teacher in the same school (Teach for America, 2014).²¹

There has been a great deal of controversy in recent years about the research on the effects of different pathways into teaching, and the impact of these pathways on teacher and student learning. Research on the differences across pathways has been misrepresented in a number of ways to support an anti-university teacher education policy agenda. Here we examine a single example: the take-up of a research synthesis we wrote that was published in the AERA-commissioned volume, *Studying teacher education: The report of the AERA panel on research and teacher education* (Cochran-Smith and Zeichner, 2005). In this chapter, we analyzed 37 peer-reviewed research studies that examined the effectiveness of different kinds of teacher education programs in the U.S. conducted between 1985 and 2004 (Zeichner & Conklin, 2005). The research we reviewed used a variety of teacher and student outcome measures to assess the

effectiveness of different kinds of teacher education programs on a variety of outcomes including teacher efficacy, evaluations of teachers' practices, teacher retention and student learning.

Drawing on the categories of comparison made by researchers, we structured our analysis by examining research on four-year programs vs. five-year programs, state sponsored alternative programs vs. traditional programs, university-sponsored alternative programs vs. traditional programs, school district sponsored alternative programs vs. traditional programs, studies involving "Teach for America," and comparisons of multiple alternative and traditional programs. Although there have been many differing definitions of an "alternative" program, in this chapter we defined an alternative program as any program other than a four or five year undergraduate program at a college or university.²² In the chapter we acknowledged the problematic nature of this definition, given the tremendous variation that exists within each of these categories.

Given the fierce public policy debates about how to best prepare teachers, in the conclusion of our review, we were careful to be clear about what we could and could not conclude based on the set of research studies we analyzed. For example, after reviewing four studies that examined the relative effectiveness of the Teach for America (TFA) program, we concluded that the research:

...presented mixed evidence. TFA teachers in New York City felt less prepared and less successful than did other new teachers, although actual teacher performance and student learning were not assessed. The studies in Houston and Arizona and the national study presented conflicting results about how much students achieved in reading and mathematics when taught by TFA versus those taught by other new teachers. In the case of Arizona, TFA teachers were shown to be less effective. In Houston, the students of

TFA teachers had better achievement test results in some instances. In the national study, the students taught by TFA teachers experienced greater growth in mathematics achievement, but not in reading... These four studies comparing TFA with other programs clearly do not settle the issue of the efficacy of the TFA program in comparison with that of other programs. (p. 684)

Throughout our analysis, we pointed out various limitations in the design of much of this research as well as the need for future research to examine the character and quality of the actual preparation received by teachers in these comparisons in order to illuminate the impact of different program characteristics.

At the conclusion of our chapter, we cautioned:

...there is a danger that in the currently highly charged ideological debates about teacher quality in the current political context of the United States that supporters of specific positions will go into this review and pull out selected findings that support their particular point of view, ignoring other findings. For example, those who want to argue that there is no difference in terms of teacher quality between an alternative program sponsored by a school district or other non-university agency and traditional university-based programs can find examples in this review that taken out of context could wind up being used as “evidence” that non-university-sponsored alternative certification is justified. ...

This selective use of evidence from particular studies to support a particular policy direction without regard to the complexities of the analysis of the studies would be a distortion of what the research as a whole shows. This review does not support an uncritical adoption of either alternative or traditional programs or resolve the issue of

whether particular programs like TFA are more effective than particular alternatives. The weight of the evidence of peer-reviewed research on teacher education programs in the United States suggests certain characteristics of programs that may be important in terms of teacher quality and student learning. It remains for future research, however, to establish an evidentiary warrant for the validity of these claims about program excellence. (p. 704)

The Misuse of this Chapter

Despite our efforts to guard against the misuse of our research review, recent policy events have illustrated that politically motivated groups have done exactly what we warned about: pulling out findings to support their own views and, in some cases, blatantly misrepresenting the conclusions in our chapter. For example, in a letter to Congress dated July 16, 2012, a group of organizations—including 45 branches of Teach for America, the New Schools Venture Fund, the National Council for Teacher Quality, the Thomas B. Fordham Institute, the National Alliance for Public Charter Schools, the Relay Graduate School of Education, and Students First—requested that a definition of highly qualified teacher be incorporated into upcoming legislation (<http://www.scribd.com/doc/100453326/TFA-Letter-to-House-and-Senate>) that allowed less than fully certified teachers to be called “highly qualified” under NCLB.²³ The second paragraph of the letter states:

Rigorous studies have consistently shown that alternatively certified teachers, as a whole, are as effective, if not more effective, than traditionally certified teachers. For example, a 2009 national randomized study commissioned by the U.S. Department of Education found that there is no statistically significant difference in performance between students taught by teachers certified through alternative as opposed to traditional routes. Similarly,

a comprehensive study of teacher education research published by the American Educational Research Association found *there were no differences in teacher efficacy or teaching competence, as measured by classroom observations, between alternatively and traditionally certified teachers.* (emphasis added)

The next paragraph goes on to state, “The most rigorous independent studies have demonstrated that Teach for America corps members outperform non-Teach For America teachers (including veteran teachers) in multiple subjects and grade levels.” The authors of this letter use “these facts” to argue that “participating in an alternative route to certification does not preclude a teacher from being highly effective, and thus should never prevent that teacher from being considered ‘highly qualified.’” While this letter does not name (or cite) our chapter specifically, the statement italicized above comes from our review.

This statement comes from p. 663 of our chapter, a section in which we reviewed four studies that compared graduates from state-sponsored alternative programs and university-based programs, and is followed by this text:

Principal and supervisor ratings of teacher competence were mixed, favoring alternative certification in one case and traditional certification in the other. The value of these observations and ratings are extremely limited however, due to the lack of specificity with regard to the evaluation criteria and the schools in which the graduates taught. In all four cases, although some details were provided about the alternative programs, traditional programs from an unknown number of different institutions were lumped together into a single category ignoring any differences in the programs. Because of the lack of information about the preparation received by the comparison group and the characteristics that they brought to this preparation, it was not possible to disentangle the

influence of teacher characteristics from those of their preparation programs. Even if we assume the preparation made the difference in the reported outcomes, it was impossible to determine which characteristics of the teacher education programs might have accounted for these differences. (Zeichner&Conklin, 2005, p. 663).

To cite the sentence that is used for these highly political purposes without explaining its full context and complexity is a gross misrepresentation of what we actually said in our chapter.

Records of a Congressional hearing on July 24, 2012, before the House Subcommittee on Early Childhood, Elementary and Secondary Education Committee on Education and the Workforce Titled “Education Reforms: Discussing the value of alternative teacher certification programs” make similar reference to our chapter. Chairman Hunter went on to echo the same claim written in the letter noted above, including the statement that, “an American Educational Research Association report determined there were no differences in teacher efficacy or teaching competence, between alternatively and traditionally certified teachers” (p. 2). Further he noted that “While Republicans know there is no one-size-fits-all federal solution to help put more effective teachers in the classroom, supporting the availability and acceptance of alternative certification programs is one way the public and private sectors can join together to ensure more students have access to a quality education from an extraordinary educator.” (p.3)

Part of this same congressional hearing included testimony from Cynthia Brown, Vice President for Education Policy at the Center for American Progress.²⁴ In her statement, she noted that “Research shows that graduates of alternative certification programs, on average, perform at the same level as traditionally prepared teachers who work in similar schools” and included a footnote to the AERA volume of which our chapter is part (Cochran-Smith and Zeichner, 2005).

As a follow up to the hearing, Chairman Hunter wrote on August 14, 2012, to one of the people who testified, Ms. Jennifer Mulhern, Vice President of The New Teacher Project, with a request for whether there is “any evidence that teachers who have gone through traditional certification routes are more effective educators?” As part of her response, Ms. Mulhern again cited our study as follows:

A 2005 comprehensive study on teacher education research published by the American Educational Research Association found that, “there were no differences between alternatively and traditionally certified teachers in terms of teacher efficacy or in teaching competence as measured by classroom observations” (Cochran-Smith and Zeichner, 2005).

These examples illustrate how research like ours has been repeatedly misused for high stakes political gain while simultaneously perpetuating the problematic framing of the debate. Although we and others (cf., Cochran-Smith et al., 2012; Grossman & Loeb, 2008) have recommended a more productive path forward that involves focusing on the impact of specific teacher education program features, opponents of university-based teacher education like those cited above have continued to reinforce the notion in the public and political spheres of a dichotomy between “alternative” and “traditional” pathways into teaching. By cherry-picking evidence that supports the arguments they want to make, supporters of these “alternative” routes are misleading politicians and the public—people who may not have access to this research or know how to use and interpret it.

Research Since Our 2005 Review

It is important for the educational research community, policymakers, and the public alike to have an understanding not only of the ways in which previous research is being misused,

but also of more recent research that provides further insight into these ongoing debates. Research published since our 2005 chapter has continued to paint a complex and inconclusive portrait of the teacher education program terrain—but has begun to identify more productive ways to focus research and policy on teacher preparation. For example, a group of researchers who studied pathways into teaching in New York City have provided a more focused distinction in the types of teacher preparation pathways and how distinctions among pathways shape outcomes. In their analysis of 31 elementary teacher preparation pathways in New York City—including university-based teacher education programs, Teach for America, and the New York City Teaching Fellows program—these researchers found that preparation coursework across pathways is more similar than different, that many so-called “alternative” programs usually include coursework at a university, and that the more important distinguishing feature among programs is in the timing of course work: whether teachers complete the majority of their course work prior to becoming full time teachers of record, or whether most of this course work occurs once they have become classroom teachers (Boyd et al., 2008). Thus, they adopt the distinguishing terminology of “early entry” and “college recommending” programs to highlight the nature of teachers’ preparation before they begin full-time teaching.

Two other analyses from the same New York City teaching pathways research further illustrate that understanding the effectiveness of differing preparation pathways requires both nuanced research designs and precise interpretation of results. In an early analysis, this research team compared student achievement in grades 3-8 of teachers who completed university-based teacher education programs with those teachers who had reduced coursework prior to becoming first-year teachers (Boyd et al., 2006). Based on this comparison, the researchers found that the “early entry” teachers often produced smaller initial gains as measured by standardized test

scores in math and reading, yet these differences mostly disappeared as the cohorts gained teaching experience. Further, based on this particular analysis, the variation in teacher effectiveness was far greater within pathways than between. Yet in a more recent analysis, the researchers examined the distinctions among pathways in far greater detail, analyzing data on the specific features of 31 elementary teacher education programs in New York City—26 of which involved teachers completing coursework prior to becoming a teacher of record and five of which involved teachers completing coursework while teaching full-time (Boyd et al., 2009). The researchers examined the relationship between these features of teacher preparation and elementary students' math and reading achievement. Through this more fine-grained analysis, Boyd et al. (2009) found that some programs produced teachers with a significantly greater effect on student achievement than others. And, while the researchers were very careful to note that their research was a first step in discerning these complex relationships, they also found that features of teacher preparation that are focused on the practice of teaching relate to student achievement gains in teachers' first year of teaching.

These analyses from the New York City pathways study as well as other recent analyses point to the importance of focusing on particular features of teacher education programs.

Another more recent study that examined numerous preparation pathways to teaching in North Carolina using a value-added analysis of teacher entry portals on student achievement further illuminated the complexity of examining teacher effectiveness from these different pathways (Henry et al., 2014). Like other studies comparing different preparation pathways, this research highlighted how teacher effectiveness within common entry portals varies depending on subject matter and grade level, revealing, for example that TFA corps members were more effective than

in-state public undergraduates in seven different grade level/subject comparisons (ie., elementary grades math), but were no different in three other grade level comparisons (Henry et al. 2014).

Finally the most recent comprehensive vetted review of the peer-reviewed studies on the effects of different pathways into teaching published in the American Educational Research Association's *Handbook of Research on Teaching* concludes:

Not surprisingly, studies in this line of research, which compared the impact on students' achievement of teachers with alternative certification and/or from "alternative" pathways or compared the impact of teachers from a particular "alternative" program with those from other sources of new teachers, are inconsistent and ultimately inconclusive at a broad level in terms of what they tell us about the effects of particular programs... Some studies found small or no differences in the achievement of students taught by teachers from different pathways, some found university-recommended teachers were more effective in some areas and some levels, and some found that teachers from alternative routes or from a particular alternative pathway, such as TFA or the Boston Teacher Residency program, were more or less effective in some areas and at some levels than non-alternative pathway teachers (Cochran-Smith & Villegas, in press, p. 33).

Similarly, the most recent National Research Council study of teacher education (National Academies, 2010) concluded:

Though there is ample room for debate on how much and what kind of education is best for preparing effective teachers, inferring that one type of preparation does or does not yield better outcomes for students is not warranted by the evidence (pp. 41-42).

The National Research Council report (2010) further adds that this conclusion about the lack of clear findings "does not mean that the characteristics of pathways do not matter. Rather it

suggests research on the sources of variation in preparation such as selectivity, timing, and specific components and characteristics is needed.” (p.2).

Looking to the Future

We have argued in this paper that advocates of teacher prep 2.0 programs and the deregulation of teacher education have not presented persuasive evidence for their claims either of the failures of university teacher education or the successes of non-university programs. We have asserted that a combination of entrepreneurial branding and marketing, along with distortion of the findings of education research, have been used to make a case for “disruptive innovation” (Liu, 2013) in teacher education. We have illustrated several specific cases of this misrepresentation in this paper.

Through the examples that we have presented in this paper of the misrepresentation of research to support a political agenda of deregulation in teacher education, we have not intended to suggest that status-quo university sponsored teacher education is acceptable. On the contrary, we believe that university sponsored teacher education programs need to change in significant ways and that philanthropists, states, and the federal government need to make investments in supporting high quality teacher education for the teachers of everyone’s children.

In fact, there is clear evidence of a number of shifts that are now underway within traditional models of college and university programs—those programs that continue to prepare the majority of U.S. teachers. These efforts include: a greater focus on connecting coursework (e.g., methods and foundations courses) to the complexities of schools for which teachers are being prepared; a greater emphasis on teaching teachers to enact rather than just learn about research-based teaching practices; new efforts to prepare teachers to work in respectful and responsive ways with students’ families and communities and to build in positive ways on the

cultural resources that students bring to school with them; and the development of new ways to share responsibility for teacher education across institutional boundaries such as in urban teacher residencies (Cochran-Smith & Villegas, in press; Zeichner & Bier, 2015; Zeichner, Payne, & Brayko, 2015).

We are also not opposed to providers of teacher education other than universities and to the idea of multiple pathways into teaching, as long as all of the different programs are held to the same high standards of quality and the research and evidence that support all programs' practices is represented accurately and fairly.

In order to hold all programs to common standards of quality and evidence, there are several things we believe need to be done to minimize the kind of misuse of educational research that we have attempted to illustrate in this paper. First, all researchers who conduct studies that purport to offer information on the efficacy of different program models, and those who produce syntheses of studies done by others, should reveal their sources of funding, their direct and indirect links to the programs, and subject their work to independent and blind peer review. Although independent peer review does not guarantee the lack of a conflict of interest or high quality, it is widely considered to be a critical part of the functioning of scientific communities and of quality control (American Educational Research Association, 2008; National Research Council 2002).

Second, given that much academic research on education is inaccessible to policymakers, practitioners and the general public (Lubienski, Scott, & DeBray, 2014), researchers should take more responsibility for communicating their findings in clear ways to various stakeholders and participate in discussions about the meaning of their research in different contexts (Zeichner, 1995). They should also speak out publicly when they know that their research is being

misrepresented in efforts to reform policies and practices. Such work may require institutions to invest in training and supporting educational researchers in learning how to convey research findings to both academic and more general audiences.

Third, the media should cover claims about issues in teacher education in proportion to the strength of the evidence that stands behind them. In this paper, we have illustrated how both claims that Education schools have failed and that new teacher prep 2.0 programs are superior are based on either the absence of credible research or misrepresentations of research.

Specifically, we have shown that the media's attention to Levine's (2006) study of Education schools, to Relay Graduate School of Education, and to the reports of the National Council on Teacher Quality are out of proportion to the attention that these groups deserve given the lack of scientifically vetted evidence supporting their claims. While many of the media reports of these groups have included some mention of the critiques of their work, the amount of attention the media has given to groups like the NCTQ has served to legitimize their work. While we recognize the cuts in resources that media outlets have experienced and their need to compete with new non-traditional forms of media communication, we believe they have a responsibility in a democratic society to critically scrutinize the reports and studies that are brought to them by advocates of all kinds of alleged innovations in teacher education.

Fourth, we should assess the quality of programs based on an analysis of a variety of costs and benefits associated with particular programs, and not just look at whose graduates can raise test scores the most. In the 1970s, when arguments for competency-based teacher education were focused almost exclusively on which teacher behaviors could most effectively raise students' standardized test scores, Kliebard (1973) called for reformulating the questions that were asked to assess the quality of teaching and teacher education programs. Specifically,

Kliebard called for an abandonment of exclusive attention to one-dimensional questions of effectiveness based on test scores (what he referred to as “raw empiricism”) and called for an approach that looked more broadly and deeply at teaching. Kliebard said:

The typical research on teaching is essentially a horse race. Sometimes one horse wins, sometimes the other; often it is a tie. In any case the outcome of the question adds nothing to our understanding of the complex processes that are involved in teaching (p.21).

Several years later Levin (1980) argued for a cost-utility approach that evaluates the perceived costs and benefits of various alternatives in evaluating particular policy choices about teacher education. While we support the shift to attention to the outcomes of teacher education, we believe that in evaluating the quality of teacher education programs, we need to heed both Kliebard’s (1973) and Levin’s (1980) advice to assess a broader range of program outcomes. This includes examining program graduates’ abilities to promote students’ socio-emotional development, civic development, creativity, problem solving and critical thinking abilities and so on. We also need to examine the retention data on graduates from different programs, and whether there has been a narrowing of the curriculum in schools in which the graduates from different programs teach. As we noted earlier, there is substantial evidence that in many schools serving students living in poverty students are denied access to a rich and broad curriculum and opportunities to interact with knowledge in authentic ways. Further, there is significant inequity in the distribution of fully prepared and experienced teachers to schools serving students from different social class backgrounds (Peske & Haycock, 2006). We know from research that teacher turnover is costly to districts and that it interferes with student learning (Ronfeldt, Loeb, & Wycoff, 2013). Thus, as part of the array of outcomes we should examine when making

judgments about the quality of teacher education programs, we should consider the impact of hiring teachers from different programs on communities' access to fully prepared and experienced teachers.

Assessing a broader range of program outcomes would mean that even if proponents of new non-university sponsored programs like Relay are able to consistently produce peer-reviewed research that shows that graduates of their programs increase students' test scores more than the graduates from other programs, this would not be sufficient evidence to support the claim that these programs are superior. In fact, the research literature suggests that an expansion of an emphasis only on raising test scores will deepen and increase the extent of education inequities and continue to create a second-class system of schooling for students living in poverty.

The selective and biased use of findings from studies, the consultation of limited and select research (knowledge ventriloquism), and the repeated assertion that teacher prep 2.0 programs are superior and that university teacher education is broken (echo chambers)—assertions spread by mostly uncritical media coverage—have set us on a course to destroy the university-based teacher education system that has dominated the preparation of teachers in the U.S. since the 1960s. Gastic's (2014) forecast for the future of teacher education capitalizes on these strategies, warning teacher education programs:

The next decade will see the proliferation of teacher prep 2.0 models as the benefits of their collective approach to teacher education become better known and more widely recognized...(p. 105).

Those programs that fail to join this learning community will soon reveal their obsolescence and find themselves struggling to justify their existence. Demand will shift to more relevant, affordable and flexible programs where teachers are held to high professional standards of knowledge and skill under advisement of strong instructors and coaches who are committed to improving a teacher's effectiveness (pp. 109).

The stripping of substantial state resources from the public universities that continue to prepare most of the nation's teachers together with the massive amounts of federal and philanthropic funds that continue to pour into expanding the proliferation of teacher prep 2.0 programs, have significantly hindered the ability of Education schools to transform their programs. We believe that it is a mistake to continue to dismantle the college and university system of teacher education and to attempt to remake it in the image of 2.0 programs like Relay.

Further, given the clear evidence that exists showing that poverty and inequality are strong correlates of variations in student achievement (Duncan & Murnane, 2011), the implication by some teacher prep 2.0 advocates that university-based teacher preparation programs have failed in their efforts to address inequities in education and that teacher prep 2.0 programs alone will address the problems is not warranted. In fact, there is very little discussion in the literature on teacher prep 2.0 programs about the close connection between poverty and its associated "rotten outcomes" (Schorr & Schorr, 1988) and student learning in school. A recent study of federal data by the Southern Education Foundation²⁵ has reported that the majority (51 percent) of students in U.S. public schools qualify for free and reduced lunches (up from 38 percent in 2000), and that a majority of these children live in poverty in 21 states. It seems clear that while what happens in classrooms and schools can help make a difference in addressing inequities in opportunities and outcomes, we must deal nonetheless with poverty if we expect to

achieve our goals (Berliner, 2014b). Additionally, there are no examples in the world of education systems that have consistently performed well on international comparisons on achievement, including equity in achievement, that have done so using the market-based approach that has been advocated by advocates of deregulation and greater market-based competition (e.g., Darling-Hammond & Lieberman, 2012).

To move forward more productively to improve teacher education will require transparent dialogue about the outcomes that all children deserve. Further, the improvement of teacher education will require a willingness from all those engaged in the enterprise to examine the strengths and limitations of all current and proposed approaches and to learn from the available research and evidence about the specific types of knowledge, preparation, and experiences needed for teachers to be able to successfully educate all students to the same high standard of quality.

The recommendations that we have offered in this paper for raising the quality of the debate about the future for teacher education in the U.S. are not aimed at the unattainable and undesirable goal of removing politics from research production, and utilization related to teacher education. Politics and vigorous debate are fundamental to the functioning of a genuinely democratic society. Rather, we are calling for greater transparency in this process, for a vetting of the research evidence that informs the debate, and for a genuine examination of different policy options.

As we write this paper, the GREAT Act, a bill that would greatly accelerate the disruptive process described in this paper sits in Congress as a part of the reauthorization of the Elementary and Secondary Education Act.²⁶ Passage of the GREAT Act without a rigorous and honest examination of the full range of available research and evidence supporting the claims

that have been made about both university and 2.0 programs subverts the process of democracy in policymaking and will, in our view, significantly weaken the value of resulting policies and the practices and structures that result from them. We need to carefully evaluate the multiple policy options available for improving the quality of teacher education in the U.S. and all of us need to be willing to recognize that the status quo is not acceptable. In our view, continuing down the current path of destroying and replacing the college and university system of teacher education in the U.S. will serve to widen, not narrow, the inequities in opportunities and outcomes that currently exist.

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Endnotes

¹ For example, since 2000, the U.S. Education Department has given over \$200 million to support Teach for America (usaspending.gov). The U.S. DoE's Race to the Top competitions for funds have encouraged and in some cases required states to allow non-university providers of teacher education to operate and have resulted in many states changing their policies to do so (Crowe, 2011). Also, private foundations have invested increasing amounts of their resources in promoting alternatives to college and university sponsored teacher education programs (Zeichner & Pena-Sandoval, 2015).

² The term 2.0 has been used by Gastic (2014) and by Teach for America's Co-CEO Matt Kramer (Rich, 2015) in connection with these non-university teacher education programs and university programs that try to become like them.

³ In addition to the Relay and Sposato schools of education mentioned above, other teacher education programs like the Aspire, Capital, Chicago, and the High Tech High teacher residencies have been initiated to prepare teachers for particular charter schools or others like them.

⁴ Tseng (2012) describes the tactical or symbolic use of research as when "research is used to justify a position already taken, In this case policymakers or practitioners know whether they support or oppose a particular piece of legislation or reform effort and they marshal research to back their position" (p.7).

⁵ In early-entry programs like Teach for America and The New Teacher Project, individuals enter schools as teachers of record after a brief summer pre-service program and complete most of their requirements for a teaching license while they are legally responsible for a classroom.

⁶ <http://www.edschools.org/about.htm> The other two reports focused on the preparation of educational leaders and on education research.

⁷ Schorr is currently the Acting Assistant Secretary for the Office of Communications and Outreach of the U.S. Department of Education.

⁸ See <http://petri.house.gov/press-release/petri-polis-introduce-bipartisan-bill-improve-teacher-and-principal-preparation>

⁹ No information is provided in the report about how this sample of 500 teachers was selected beyond the criteria noted above.

¹⁰ A White House press release dated 4/24/14 previewing the release of the rules also cited the Levine education school alumni survey finding that “almost two-thirds report that their teacher preparation program left them unprepared for the realities of the classroom.” <http://www.whitehouse.gov/the-press-office/2014/04/25/fact-sheet-taking-action-improve-teacher-preparation>

¹¹ See slide number 14 in the presentation slide deck on “Improving Teacher Preparation.” <http://www.ed.gov/teacherprep>

¹² This data was a result of teachers responding to a question about what the top problem they experienced in their teacher preparation programs was.

¹³ At the time of this writing, 11 states allowed ABCTE to operate within their borders. NCTQ no longer has ties to ABCTE.

¹⁴ http://edworkforce.house.gov/uploadedfiles/07.27.11_walsh.pdf

¹⁵ See comments by Norm Atkins and Dave Levin at https://www.youtube.com/watch?v=uSQNIUj_EJY and <http://www.relay.edu/blog-entry/freakonomics-features-relay-latest-podcast>

¹⁶ For example, see <http://aacte.org/resources/nctq-usnwr-review>

¹⁷ <http://excelined.org/policy-library/videos/> Strategy Session 5- Transforming Colleges of Education (2013).

¹⁸ (<https://soundcloud.com/americanradioworks/american-radioworks-new-grad>

¹⁹ <http://www.teachingworks.org/training/seminar-series/event/detail/relay-graduate-school-of-education>

²⁰ See <http://www.relay.edu/about/results>

²¹ <https://www.teachforamerica.org/sites/default/files/what-the-research-says.pdf>

²² Not all of the researchers used the same definitions of alternative and traditional programs and this definition which was originally proposed by Adelman (1986) and has been more recently used by others enabled us to make the most use of the data in the 37 studies.

²³ See <http://www.washingtonpost.com/blogs/answer-sheet/wp/2013/08/27/how-the-public-is-deceived-about-highly-qualified-teachers/> for background information on the controversy about the definition of highly qualified teachers.

²⁴ No scholars who conducted any of the major syntheses of this body of research were invited to be on this “expert” panel.

²⁵ <http://www.southerneducation.org/Our-Strategies/Research-and-Publications/New-Majority-Diverse-Majority-Report-Series/A-New-Majority-2015-Update-Low-Income-Students-Now>

²⁶ See Zeichner & Pena-Sandoval, 2015 for a discussion of the role of the New School Venture Fund (a major investor in teacher prep 2.0 programs) in developing and promoting the GREAT Act.

²⁷ This was the title of the article when it was published. Since then, the title has been altered on the online version. Corps of temporary teachers has been removed and Teach for America has been inserted instead.

