

Trends and Challenges in Teacher Education: National and International Perspectives

Keynote delivered by Marilyn Cochran-Smith, Boston College, USA

As we all know, teacher education is a major concern globally. Although my focus today is on the U.S. context, many of the challenges that face teacher education in the U.S. are also challenges in other nations. So I include some international comparisons, which audience members will interpret in light of their own knowledge and experience with the Norwegian and other contexts. I want to talk about six major trends and challenges in teacher education: (1) Unprecedented attention to teacher quality, (2) Shifting notions of accountability, (3) Meeting the needs of increasingly diverse school populations, (4) The mounting question about who should teach, Who should teach teachers? Where and how? (5) Emphasis on practice and clinical settings, and (6) Research as a priority in teacher education.

Key words: Challenges Facing Teacher Education, Quality, Accountability, Practice, Research

Trend I: Unprecedented attention to teacher quality

In many places around the world, there is unprecedented attention to teacher quality, primarily defined in terms of student achievement. Politicians, policymakers and researchers of all stripes now assume that teachers are a critical influence, if not the most important influence, on what, how, and how much students learn. As a result there are now extremely high expectations for teacher performance. Questions about how the nation's teachers are recruited, prepared and evaluated are now among the hottest

topics in educational policy and practice. In one sense, of course, this is good. It is high time that the value of teachers' work was acknowledged. However, when it is assumed that teacher quality determines school effectiveness, then teacher education becomes a policy problem to be solved by high level leaders in the business and policy worlds with the assumption that getting the right policies in place will drastically improve teacher quality and students' achievement.

The down side here is that treating teacher education as what I call "a policy problem" (Cochran-Smith & Fries, 2005) assumes that there is a more or less linear relationship from policy to teacher quality to students' achievement. The assumption is that these will automatically be improved when policymakers correctly manipulate the broad policy parameters governing teaching and teacher preparation. In the U.S., this means policies regulating coursework and licensing requirements for teachers, required college majors, teacher tests, and pathways into teaching. In Norway, this would include things like the lowest grade point average allowable for those who want to enter into teaching or the number of European transfer credits required for teacher candidates, and the required number of days of field practice, as well as qualifications for mentors.

These approaches are important. However, large-scale policies regarding teacher education generally do not account well for the contexts and cultures of schools, which vary widely, nor for how these cultures support or constrain teachers' ability to use the knowledge and resources they have. The policy approach also neglects teacher education understood as what I call "a learning problem, which has to do with local emphasis on teachers' knowledge, their thinking and interpretations, how they make decisions and develop as professions. From the learning perspective, the idea is that good teaching depends primarily on teachers' learning over time and on teachers' knowledge, skills, beliefs, attitudes and values. The current tendency in many places is to foreground policy regarding the preparation of teachers and to push to the background larger issues related to teachers' learning. I believe that the challenge in many places (Norway included, with its disappointing PISA results and the low number of teacher education applicants) is to find ways to address and to balance the policy issues while maintaining a focus on teachers' learning. This is a very difficult thing to do.

The second tension involved with unprecedented attention to teacher quality is a paradox that has been noted many times before. With many of today's policy discussions focused almost entirely on school issues, the assumption is that teachers are both saviors and culprits. Here's what I mean. The assumption is that teachers are the most intractable problem

educational policy makers must solve because, it is alleged, it is teachers' meagre knowledge and skills that are the cause of the failure of the schools in the first place. At the same time, however, it is also argued that teachers are the best solution to that problem because, it is assumed, improved teacher quality is the cure for all that ails the schools.

A recent U.S. report by a group called The Teaching Commission was chaired by the former chair of IBM. That report said:

Bolstering teacher quality is, of course, not the only challenge we face as we seek to strengthen public education... But the Teaching Commission believes that quality teachers are *the* [emphasis added] critical factor in helping young people overcome the damaging effects of poverty, lack of parental guidance, and other challenges... In other words, the effectiveness of any broader education reform... is ultimately dependent on the quality of teachers in classrooms. (2004, p. 14)

You may also be familiar with the 2005 OECD report titled "Teachers matter" which had a very similar theme in its discussion of teacher education in most European countries. Let me be clear here. As I already said, of course teachers matter. But here is my concern. Teachers and teacher education programs alone can't fix the worst schools and improve the life chances of the most disadvantaged students in any nation without simultaneous investment in resources, capacity building and enhancing teachers' professional growth, not to mention the need for changes in student's and families' access to housing, health and jobs. Acknowledging that the problem of a nation's schools include, but go far beyond teachers, and that the problems of a nation include, but go far beyond schools accepts the goals of equal and high quality education for all students, but rejects the idea that holding teachers and teacher educators accountable for everything will fix everything, without attention to other much larger problems.

The third challenge here has to do with the larger goals and purposes of education and whether the bottom line is the economy or our democracy. Nearly worldwide, and I think it is fair to say that this is true in Norway, it's now taken for granted that the health and robustness of the economy are tied to the quality of teachers and to the ways they are prepared and educated. This idea, informed by human capital theory, is that teachers are responsible for producing a labor force with the array of knowledge and skills needed to thrive in the new knowledge society, thus enabling the nation to compete in the global economy. A recent speech by President Obama (2009) illustrates this:

America will not remain true to its highest ideals – and America’s place as a global economic leader will be put at risk – unless we do a far better job than we’ve been doing of educating our sons and daughters; unless we give them the knowledge and skills they need in this new and changing world. For we know that economic progress and educational achievement have always gone hand in hand in America.

The point behind this kind of discourse is the economic need for an educated, and thus competitive work force, rather than the larger social need for everybody to have access to teacher quality as a fundamental human right in a democratic society.

The challenge for teacher education then, in many places, is to make sense of and respond to what often appear to be two competing agendas. To educate teachers who can teach all students to participate in a democratic society, on one hand, or to educate teachers who can teach all students to compete in a global economy, which may primarily benefit the elite. It’s not clear whether these can be thought of as complementary rather than competing agendas. This is a major challenge we face in teacher education.

Trend 2: Shifting notions of accountability

The second major challenge facing teacher education emerges from shifting notions of accountability with a focus on outcomes and quantification. In teacher education, changing notions of accountability have been referred to as a shift from inputs to outcomes in the U.S. Prior in the mid 1990s the emphasis in teacher education was not on outcomes. It was primarily on process – how prospective teachers learned to teach, how their beliefs, attitudes and identities as teachers changed over time, what contexts supported their learning, and what kinds of content, pedagogical and other knowledge they needed. The assessment of teacher education focused on what is now retrospectively referred to as inputs – institutional commitment, qualifications of the faculty, the contents and structures of courses and fieldwork experiences, and the alignment of all of these with professional knowledge and standards. The shift in teacher education from inputs to outcomes was part of a larger set of changes in how we think about educational accountability. Some people ask, so what’s the problem with accountability? My answer is simple – nothing and everything.

The problem is not accountability itself, but the fact that increasingly we are dealing with reductionist views of teaching and learning. The account-

ability bottom line – higher scores on literacy and numeracy tests – is increasingly the singular focus of too many discussions about the impact and improvement of teacher education. Increasingly, teacher quality and students' learning are equated with high stakes test scores. It is this simplistic equating that is problematic, rather than a larger notion of accountability itself.

Anne Lamott's (1994), *Bird By Bird*, a book about writing and life is helpful here. In one chapter, Lamott advises writers to avoid simple oppositions in the development of plot and characters. She says:

I used to think that paired opposites were a given, that love was the opposite of hate, right the opposite of wrong, but now I think we sometimes buy into these concepts because it is so much easier to embrace absolutes than to suffer reality. Now I don't think anything is the opposite of love. Reality is unforgivingly complex.

Lamott tells writers to embrace the complexity of real life and write about its biggest questions. I think this message aligns to our work in teacher education. *Teaching is unforgivingly complex*. It's not simply good or bad, right or wrong, working or failing, well or poorly planned. Dichotomies like these are popular in the headlines but limited in their usefulness. A major challenge for teacher education reform in many places, including Norway, is to embrace the complexity of teaching and learning even in the age of accountability and standardization.

My last point here in relation to shifting notions of accountability is that the heavy emphasis on outcomes has brought with it increasing monitoring of students' progress and increased evaluation of teachers performance. In some countries, like Norway, this is playing out in form of frequent reports and whitepapers about the state of teacher education and very close attention to PISA and other international test scores.

In the U.S., this is playing out in the form of value-added assessments of teacher preparation programs and pathways. Value-added assessments evaluate teacher education programs in terms of how much value they add to the achievement growth of the students of the teachers prepared in those programs. As is well known, value-added assessments are statistical procedures for estimating school and teacher effectiveness using student level test score records from year to year. Teachers are usually divided into quartiles from top to bottom in terms of how much value they add to their students' test scores. For example, in August, 2010 the Los Angeles Times newspaper commissioned a study using data from the Los Angeles unified school district to calculate value added estimates for nearly 6000 elementary

school teachers. The results of the LA study were debuted with this headline: Grading the teachers. Who's teaching LA's kids? A Times analysis using data largely ignored by Los Angeles Unified School District, looks at which educators help students learn, and which hold them back."

A picture of a teacher and his students had this caption: : "Over seven years John Smith's fifth graders have started out slightly ahead of those just down the hall but by year's end have been far behind". As you can imagine, this story prompted a huge variety of responses all over the country, both enormously negative and enormously positive, including some talk of a boycott of the LA Times by the Teachers Union (which did not occur). A group of key American education scholars (Baker, Barton et. al., 2010) issued a report about the uses of value added assessment, published by the Economic Policy Institute. Their report said there was broad agreement among researchers and economists that student test scores alone were not sufficiently reliable indicators of teacher effectiveness to be used in high stakes personnel decisions, even when sophisticated statistical applications such as value added modeling were applied.

In September, 2011, the U.S. Department of Education (2011) announced the Obama administration's plan for the reform and improvement of teacher education. The report concluded that too many teacher preparation programs are not up to the job of preparing teachers. The report said that teacher education's major problem was a lack of data that would tell programs how effective their graduates are after they leave their programs. The Obama plan calls for states to report on the aggregated learning outcomes of K-12 students taught by graduates of each preparation program, and there is now federal funding for states to develop these tracking systems.

Trend 3: Meeting the needs of the increasingly diverse student population

The third trend takes us in a different direction – preparing teachers to meet the needs of the increasingly diverse school population, which in many nations involves growing disparities in the school opportunities and outcomes of minority and majority groups. This challenge is complex and far-reaching, although I have time here to take up only a few of the important issues involved.

In many nations there is increasing diversity in the school population due to changing demographic patterns and increasing recognition of the chal-

allenges post by diversity. This is not true in every country, but in many. For example, although the situation has changed in some countries since the global economic recession that began in 2008, many nations have experienced major changes in migration flow over the last two decades, with the result that in a number of countries the total number of people entering the country far exceeds the number leaving. Countries in this category include, but are not limited to, the United States, Canada, England, Scotland, Ireland (prior to 2008), most of the countries in western and northern Europe, Australia, New Zealand, and Singapore. In addition, in countries like Norway, Finland and Sweden, the number entering also exceeds the number leaving the country, although in not as great numbers as some other countries.

U.S.

In the U.S., the racial and ethnic characteristics of the school population have changed dramatically over the last several decades from 78% white and 22% students of color in 1972 to 58% white and 42% student of color in 2004. Here, “white” means primarily Americans whose ancestry is European, while “students of color” includes African Americans, Asians, Hispanics, and indigenous Native Americans. Demographers predict that by 2035, the majority of school students in the U.S. will be from these minority groups. In addition, in U.S. schools, the number of English language learners increased from one and a half million to 5.3 million in just a 20 year period, with Asians and Hispanics today’s fastest growing immigrant groups (and these number growing rapidly). Further, the number of students with disabilities who receive special education services in schools has also increased (National Center for Education Statistics, 2003, 2009, 2010a,b).

Interestingly even in countries that were long considered homogeneous in language, ethnicity and culture, the situation has changed in many places. For example when I gave a talk in Japan recently, I was very interested to learn that there is an increasing number of students in the schools, especially the primary schools, with limited Japanese language skill. In Ireland 10% of primary and 12% of post primary students now come from an immigrant background, and the number is increasing dramatically over the last decade. Seventy to seventy-five % of these students don’t speak English as a first language, but English is the language of instruction.

In Norway, as you all know better than I, the population increased by 1.3% in 2011, its highest annual population growth ever and the third

highest overall growth percentage in Europe, with many newcomers from Poland, Lithuania, and other European countries. Globally these new population patterns have heightened awareness of the challenges posed by diversity and, in many cases, the inequities in achievement and other school related outcomes that persist between minority and majority groups.

I want to make it clear here that the challenge for teacher education is not diversity itself but how to focus on diversity by emphasizing assets, not deficits, or, as Gloria Ladson-Billings (2006) once put it, focusing on diversity, not perversity. In the U.S., while the student population has become increasingly diverse, the teacher population has continued to be primarily white European American. In the U.S., we know from years of research that unless they have powerful teacher education experiences that help them do otherwise and unless they have ongoing support, many white middle class teachers understand diversity as a deficit and tend to have lower expectations for minority students. Teacher educators in many countries are working to prepare teachers to help close gaps in achievement and address disparities in other outcomes.

Again, in the U.S. for example white and Asian American students score significantly higher than their Black and Hispanic counterparts on standardized reading and math tests. At the same time there are significantly larger percentages of Black, Hispanic and Native American students who drop out of school than White or Asian students. And there are similar patterns elsewhere. In Japan, there are now achievement gaps between inherited social class groups. In New Zealand the schools don't produce comparable achievement results for their Maori students in comparison with students of European descent. In Ireland students from immigrant groups, from socially disadvantage backgrounds, or from the Traveler community are most likely to fail.

In teacher education in many nations then, we are faced with the challenge of preparing teachers to help close achievement gaps and other disparities in opportunities and outcomes through coursework, community experiences and clinical experiences. The intention is that these will help teacher candidates develop cultural competence, establish caring relationships with students, and work respectfully with families and communities. Teacher candidates also need to learn how to work with language learners and students with special needs. Along these lines, some teacher education programs, including some here in Norway, now require field experiences in diverse or international settings to emphasize diversity and global citizenship.

Trend 4: Questions about who should teach, who should teach teachers, where and how

The fourth big issue facing teacher education has to do with mounting questions about who should teach, who should teach teachers, where and how. In many places these questions are part of challenges to the role of colleges and universities as the primary provider of teacher preparation. In the U.S., these questions are very visible in debates about so-called “alternate routes” into teacher education and in the proliferation of new teacher education providers that target different populations. The language of “alternate” and “traditional” pathways into teaching is used very inconsistently. However, much of the time, the language of “alternate” routes is used to refer to entry pathways into teaching that are greatly streamlined, including some that bypass colleges and universities altogether. In the U.S. alternate routes exist in nearly every state now and produce roughly 30% of the nation’s teachers, although this number varies depending on whose figures are used. “Alternate” route programs differ dramatically from one another and from college and university programs in terms of quality, format, and whom they target as prospective teachers. For example, Teach for America (TFA), the best known of the “alternate” certification programs, recruits recent college graduates from top institutions who complete a six week training session prior to their placement in high needs schools and then participate in professional development throughout their two year commitment. In Urban Teacher Residency programs, many of which are school-district rather than college or university initiated, the target is finding teachers in shortage areas, such as science, math, special education, and/or working with English language learners. Candidates complete a master’s degree through the auspices of a partner university while working for a full year in classrooms alongside teacher-mentors. In the US and some other places, there are also for-profits, like the University of Phoenix, and completely on-line teacher programs, like the American Board for the Certification of Teachers (ABCTE), which is a test-only on-line program. Now approved as a route to teacher certification in ten states, the test targets career changers who want a fast “cost effective” certification route.

New providers of teacher education are not unique to the U.S. Teach first, which is modelled after TFA and supported by the business in corporate worlds is a thriving program in England. In 2007 TFA and Teach First launched teach for all to support entrepreneurs who are building local TFA type programs in Germany, Estonia, Israel, China, New Zealand and other places. Teach First Norway, supported by Statoil, prepares science and math

teachers for selected secondary schools in Oslo beginning with two weeks of intense training in the UK. There are lots of issues here. They are applied differently to different places and I want to mention just one of these.

Behind some of the questions about who should teach teachers – particularly in school-based programs – is the intention to tighten the alignment between teacher preparation and school standards, curriculum, procedures, and assessments. Even though teacher education certainly needs to be closely linked and attentive to what is going on in schools, there are issues here. For example, tight alignment of teacher preparation with school procedures and testing programs undermines the historical and essential role of the university to critique the current system. It has long been part of the university's responsibility in democratic societies to raise questions about school practices and labels and to challenge aspects of curriculum and teaching that reinforce inequities.

Trend 5: Growing emphasis on practice and clinical settings

The fifth trend in teacher education is growing emphasis on practice and clinical settings. This has to do with competing conceptions of professionalism and competing ideas about what it means and what it takes to be a good teacher. First, we all know that many new teachers struggle during their first year, or even first years of teaching. In fact most new teachers struggle according to many research studies and many experienced teachers look back on their first year as far from ideal. New teachers struggle with the practicalities of managing a classroom, with competing demands, multiple tests, and often with their realization that their own expectations for teaching don't match the reality of the work. Clearly this raises a lot of questions. How do we understand the struggle of most new teachers? If we did a better job, integrating and connecting coursework with field praxis would it be less struggle and more affecting teaching. Is the answer better alignment, with school curricula and assessments, as I was just suggesting? Is the answer better prepared mentors and better mentoring during the teacher education and the first years of teaching? Or is the answer not asking brand new teachers to take on full responsibility for students the minute they begin to job.

Unfortunately, some approaches, like the Obama administration plan for improving teacher education, mentioned a moment ago, identifies the problem of a gap between teacher education and the real world of the classroom not as part of the reality of learning to teach but as evidence that

teacher education is not up to the task because it does not produce immediately classroom-ready teachers. In response to this concern in the U.S. one increasingly popular conception of the successful teacher is the person who implements a number of specific teaching techniques such as the 49 techniques in the very popular bestselling program called *Teach Like a Champion*. This program has gained attention because of its single-minded focus on the practical aspects of teaching and on techniques and tips. Along other related but also different lines, in some quarters, there is a growing belief that the way to improve teacher education is by making practice the center of professional preparation and moving away from colleges and universities. There have been direct questions about the value of university-based teacher education where the focus is perceived to be theoretical. U.S. Secretary of Education, Arne Duncan (2009), for example has said many times that education schools are “heavy on educational theory and light on developing core area knowledge and clinical training.”

A key challenge for teacher education is to make clear why and how attention to values and beliefs and theories are important and to debunk the now age-old but wrong-headed dichotomy between theory and practice. I think that we as teacher educators need to make it clear that the concept of practice includes what teachers do, and when, how and under what circumstances, but it also includes why and how teachers think about what they're doing, how they invent and reinvent frameworks for understanding their work, and how they co-construct curriculum with students. In teacher education, then, a central challenge is to help outsiders understand that practitioners theorize all the time, negotiating between the immediacy of daily decisions and particular events and much larger questions.

Trend 6: The emergence of research as a priority

The sixth and final trend in teacher education is the emergence of research as a priority. Given the limited time here – and the graduate student seminar on research in TE that I'm leading tomorrow – I'll just quickly mention a few key issues here. Research in and on teacher education is certainly not new. But new and continuing research agendas in teacher education are getting major attention these days internationally. There is a new priority on teacher education research. I think, this isn't surprising given the emphasis on teacher quality that I talked about at the beginning of this presentation along with interest at the highest levels of policy and practice in how a nation's teachers are prepared. For example, I am currently working with

my colleague, Ana Maria Villegas, on a chapter for the Fifth Handbook of Research on Teaching that deals with teacher preparation research. What we are finding is that there are many major topics of research that reflect the policy, political, and demographic trends I have been describing so far. We have currently identified more than 2000 empirical studies on pre-professional teacher education published between 2000 and 2011 in English language journals. We are now in the process of categorizing and critiquing these.

A second major aspect of the research trend in teacher education is the emphasis on teacher educators as researchers. In the U.S. and some other nations, teacher educators at colleges and universities are increasingly expected to be both skillful and wise practitioners and at the same time competent researchers who develop original research agendas that contribute to the larger field. This has created a world of new possibilities but also some conflicts. For example, in some US institutions (particularly research institutions), this has contributed to a situation where there are really two teacher education faculties – one, full-time tenure-track faculty, who teach courses and engage in research, often classroom-based, and then another clinical faculty, often part-time, adjunct, or doctoral students, who also teach courses, but primarily work with student teachers in the field, mentoring, supervising, and evaluating practice. In New Zealand, all of the teachers colleges, where the faculty were highly experienced teachers with master's degrees but not PhD holders, have amalgamated with university education departments over the last 6 years. Many teacher educators there have now earned PhDs, but there has also been a two faculties problem – a first and a second tier group – and the struggle of highly experienced and older new PhDs to demonstrate an acceptable level of research productivity. In Ireland, where teacher education will become a 4 year, rather than 3 year bachelor's program starting next year, there is mounting pressure for teacher educators, many of whom are highly experienced teachers without PhDs to complete the terminal degree. Here in Norway, there are also issues along these lines with the Ministry's 2009 White Paper on teacher education stipulating that teacher educators must be researchers or must be in close contact with researchers who conduct relevant research for teacher education.

This brings me to a third point. The push for teacher education to be research and evidence based. This is clearly an international trend, which is reflected here in Norway in the establishment of NAFOL National Research School in Teacher Education, whose agenda is to develop a national research and evidence-based body of knowledge in teacher education.

There are many issues related to the idea of teacher education as research-based, and people often mean different things when they use this phrase. Sometimes, and this applies in particular to ministries and departments of education, the demand is for teacher education to be research-based in the sense of teaching prospective teachers research-proven instructional techniques and strategies or for teacher education to show, using research evidence, that it prepares teacher candidates who have a demonstrable impact on the achievement of their eventual students. In contrast, some people use the term “research-based” to refer to teacher education’s knowledge base in the key domains that are relevant to learning to teach – domains such as how people learn, content-specific pedagogies, assessment strategies. From this perspective, being research-based means ensuring that teacher candidates have an opportunity to learn in all of these domains. In further contrast, some people talk about teacher education (and teaching) as activities that inherently involve research processes. They talk about research as a stance on teaching and teacher education wherein teachers continuously pose questions, collect the data of practice, and interpret these data in order to improve their own practice and share their knowledge in local and broader communities. Part of what’s involved with this last point, then, is figuring out what people are talking about when they use the terms “research-based” and “evidence-based” since many debates along these lines work at cross-purposes.

Conclusion

I have now come full circle. Teacher education is demanding work. We face many challenges, including these six that I’ve talked about today. Teacher education is demanding work. It demands that we are both excellent practitioners and excellent theorizers and researchers. It demands that we make local policy that accounts for local needs and issues, but it also demands that we are informed by deep understandings of larger – even global – political, economic and social issues. In conclusion, I want to emphasize the connection of the global to the local, as I tried to do with some of my examples.

Globally I believe that teacher education – particularly university teacher education – is at a cross roads. In the U.S., I think the crossroads is about whether university-based teacher education will even continue to exist as we know it in the next couple of decades. In Norway there are many rapid changes, either already underway or on the table for teacher education. There is mounting pressure for students to perform at higher levels on inter-

national assessments, and there is a shortage of academically-able people who are interested in teaching. I think then, that here in Norway, there is perhaps a different kind of crossroads and a different kind of opportunity to rethink teacher education over the lifespan and to re-conceptualize the role of teachers and teacher educators in the future of democratic societies in this global era.

References

- Baker, E., Barton, P., Darling-Hammond, L., Haertel, E., Ladd, H., Linn, R., & Shepard, L. (2010). *Problems with the use of student test scores to evaluate teachers*. Washington, DC: Economic Policy Institute.
- Cochran-Smith, M. & Fries, K. (2005). Researching teacher education in changing times: Paradigms and politics. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA panel on research and teacher education*. Mahwah, N.J.: Lawrence Erlbaum Associate.
- Duncan, A. (2009). *Teacher preparation: Reforming the uncertain profession*. Speech delivered at Teachers College, Columbia University on 22 October, 2009. Retrieved October 25, 2012, from <http://www.ed.gov/news/speeches/teacher-preparation-reforming-uncertain-profession>
- Ladson-Billings, G. J. (2006). From the achievement gap to the education debt: Understanding achievement in US schools. *Education Researcher*, 35(7), 3-12.
- Lamott, A. (1994). *Bird by Bird, Some Instructions on Writing and Life*. New York: Anchor Books.
- National Center for Education Statistics. (2003). Status and trends in the education of Hispanics (Publication No: NCES 2003-008). Retrieved October 25, 2012, from <http://nces.ed.gov/pubs2003/2003008.pdf>
- National Center for Education Statistics. (2009). Number and percentage distribution of 3- to 21- year olds served under the Individuals with Disabilities Education Act (IDEA), Part B, and number served as a percentage of total public school enrollment, by type of disability: Selected school years, 1976–77 through 2007–08.
- National Center for Education Statistics. (2010a). Racial/ethnic enrollment in public schools: Indicator 4.
- National Center for Education Statistics. (2010b). The condition of education 2010. (Publication No: NCES 2010-028). Retrieved October 25, 2012, from <http://nces.ed.gov/fastfacts/display.asp?id=96>.
- Obama, B. (2009, March 10). Taking on education. Speech presented at the US Hispanic Chamber of Commerce, Washington, DC.

Organisation for Economic Co-operation and Development, OECD (2005).

Teachers matter: Attracting, developing and retaining effective teachers. Paris:

Author.

The Teaching Commission (2004). *Teaching at risk: A call to action.* New York:

Author.

US Department of Education. (2011, September). *Our future, our teachers: The*

Obama Administration's plan for teacher education reform and improvement.

Retrieved March 3, 2012, from <https://www.ed.gov/teaching/our-future-our-teachers>