


# Rethinking the Connections Between Campus Courses and Field Experiences in College- and University-Based Teacher Education

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Ken Zeichner<sup>1</sup>

## Abstract

This article examines a variety of work currently going on across the country in newly created hybrid spaces to more closely connect campus courses and field experiences in university-based preservice teacher education. It is argued that the old paradigm of university-based teacher education where academic knowledge is viewed as the authoritative source of knowledge about teaching needs to change to one where there is a nonhierarchical interplay between academic, practitioner, and community expertise. It is argued that this new epistemology for teacher education will create expanded learning opportunities for prospective teachers that will better prepare them to be successful in enacting complex teaching practices.

## Keywords

field experiences, partnerships, student teaching, program coherence

Staffed with graduate students, temporary and part-time faculty and with few resources to develop field placements, U.S. teacher certification programs are the Cinderellas of the American university. Ideas and money are rarely spent on coordinating what is learned on campus with what goes on in schools.

Featherstone (2007, p. 210)

Often, the clinical side of teacher education has been fairly haphazard, depending on the idiosyncrasies of loosely selected placements with little guidance about what happens in them and little connection to university work.

Darling-Hammond (2009, p. 11)

In this article, I will discuss one of the central problems that has plagued college- and university-based preservice teacher education for many years: the disconnect between the campus and school-based components of programs. First, I will draw on my own experiences as a teacher educator and administrator over the past 30-plus years at the University of Wisconsin–Madison and the literature to lay out various dimensions of this issue. Then, utilizing the concept of hybridity and “third space,” I will discuss a variety of current work in programs across the United States that offers much promise in deepening the quality of teacher learning in

college- and university-based teacher education programs and the ability of teacher education graduates to enact desired teaching practices in complex school settings. This work in creating hybrid spaces in teacher education where academic and practitioner knowledge and knowledge that exists in communities come together in new less hierarchical ways in the service of teacher learning represents a paradigm shift in the epistemology of teacher education programs. I argue that this shift toward more democratic and inclusive ways of working with schools and communities is necessary for colleges and universities to fulfill their mission in the education of teachers.

To enable me to focus on campus-field connections in this article, I am using the term *academic knowledge* to represent the diverse forms of knowledge and expertise that exist among college and university faculty and staff. In doing so, I recognize that this is an oversimplification and that within colleges and universities there are various cultures that are often in tension with each other within and outside of the schools, colleges, and departments of education (Bullough, Hobbs, Kauchak, Crow, & Stokes, 1997; Goodlad, 1990; Labaree, 2004). My use of the term *academic knowledge*

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<sup>1</sup>University of Washington, Seattle

## Corresponding Author:

Ken Zeichner, 211L Miller Hall Box 353600 Seattle, WA 98195  
Email: [kenzeich@uw.edu](mailto:kenzeich@uw.edu)



includes both the knowledge acquired in arts and science and education courses. An examination of the internal tensions within teacher education institutions is beyond the scope of this article.

For most of my career as a university-based teacher educator, I have been responsible for organizing and supporting field-based experiences in schools and communities for prospective teachers and in doing research on the processes of student teacher learning in preservice teacher education programs. One of the most difficult challenges for me over the years has been to mobilize intellectual energy in my department around strengthening the connections between what our student teachers do in their school and community placements and the rest of their teacher education program. For the most part, the supervision of student teacher work in schools and the teaching of campus courses have been done at UW–Madison by doctoral students, and this work serves as their main source of financial support during their graduate studies (Zeichner, 2005).

While most of these graduate students are interested in doing an outstanding job in teaching and/or supervising preservice students, many of them are not interested in teacher education as a field of study and do not participate in any of the graduate courses that are available to them that address the literature on teacher education and learning to teach. Although they may be experts in the teaching of reading or mathematics and have a number of years of successful P-12 teaching experience, they are often not aware of what is known from research about how to support teacher learning and its transfer to the early years of teaching in the context of a university-based teacher education program (e.g., Cochran-Smith & Zeichner, 2005; Darling-Hammond, 2006; Smagorinsky, Cook, & Johnson, 2003), and they do not necessarily think of themselves as teacher educators.

Even when graduate students have the knowledge and expertise related to supporting student teacher learning and do a good job in their work, their time in the program is limited and each fall a new cohort of graduate students enters the department with little knowledge of the specifics of the work that has gone on before, and the process of inducting them into an ongoing process of program renewal begins anew. Because graduate student supervisors often come to Madison from around the world to complete their studies, they are often not familiar with the local schools, and the manner in which their roles are often structured has them working in several different schools at any moment and in somewhat different schools each semester. Also, with the exception of the two elementary education professional development school cohorts where students stay with the same university supervisor and the same two schools over four semesters, each semester a supervisor is responsible for working with a different group of practicum students or student teachers, a situation that makes it more difficult to go into depth in the supervision process (Zeichner & Miller, 1997).

Even in UW–Madison programs and in other institutions where permanent faculty and/or staff participate in a significant way in teaching campus courses in teacher education

programs and in supervising students in their field placements, the disconnection between campus and field-based teacher education has been a perennial problem (Vick, 2006). It has been clearly documented for many years (e.g., Clifford & Guthrie, 1988; Goodlad, 1990; Labaree, 2004) that there are few incentives for tenure-track faculty to invest time in coordinating campus and field-based teacher education components and closely mentoring and monitoring the work of field-based supervisors. Sometimes institutions have turned to using a corps of clinical faculty (e.g., recently retired teachers) to do the work of supervising students in their school placements, but often these very dedicated and competent individuals lack the authority to participate in decisions about the teacher education programs and are not in close touch with the campus-based portions of the programs (Bullough, Draper, Smith, & Burrell, 2004; Bullough et al. 1997; Cornbleth & Ellsworth, 1994; Zeichner, 2002).

Often the placement process in college and universities is “outsourced” to a central administrative placement office rather than being based in departments, and cooperating teacher availability and administrative considerations rather than what is best for the learning of the novice teachers often determines where prospective teachers are placed for their school experiences (Zeichner, 1996).

On the school side, the classroom teachers who are asked to mentor teacher candidates who are placed in their classrooms for varying periods of time during practicum, student teaching, and internship experiences are asked to do the work of teacher education in addition to fully carrying out the responsibilities of classroom teaching, and if they are compensated for this work at all, they usually receive what would amount to a below minimum wage salary if it were calculated per hour. Under the traditional view of field experience that has been dominant for many years, these school-based teacher educators are expected mainly to provide a place for student teachers to practice teaching, and they are usually not provided with the kind of preparation and support they would need (Valencia, Martin, Place, & Grossman, 2009) to implement a more active and educative conception of mentoring (Carroll, 2007; Margolis, 2007). As Gorodetsky, Barak, and Hadari (2007) pointed out, even in the current wave of school-university partnerships in teacher education, colleges and universities continue to maintain hegemony over the construction and dissemination of knowledge, and schools remain in the position of “practice fields” (Barab & Duffy, 2000) where student teachers are to try out the practices provided by the university.

## **The Traditional Divide Between Campus and Field-Based Teacher Education**

In the historically dominant “application of theory” model of preservice teacher education in the United States, prospective teachers are supposed to learn theories at the university and then go to schools to practice or apply what they learned



on campus (Korthagen & Kessels, 1999; Tom, 1997). Alternatively, in some of the early entry models of teacher preparation where there is very little preservice preparation before candidates assume full responsibility for a classroom, it is assumed that most of what novice teachers need to learn about teaching can be learned on the job in the midst of practice and that the role of the university in the process can be minimized without serious loss (Grossman & Loeb, 2008).

Although there is a growing consensus that much of what teachers need to learn must be learned in and from practice rather than in preparing for practice (Ball & Cohen, 1999; Hammerness, Darling-Hammond, & Bransford, 2005), there is much disagreement about the conditions for teacher learning that must exist for this learning in and from practice to be educative and enduring. For example, the point at which a teacher should become the teacher of record is an issue about which there has been much disagreement (Stoddart & Floden, 1996). Advocates of "early entry" programs have argued that with careful selection and a minimum of preservice training, individuals can become teachers of record fairly quickly and learn what they need to learn about teaching with the support of a good mentor (Grossman & Loeb, 2008). Others advocate for a more gradual entry to teaching, with the assumption of full responsibility for a classroom coming after or in conjunction with a substantive coursework component and an extended internship or residency under the careful guidance of a mentor teacher who is responsible for the classroom. The teacher residency models that are the focus of a \$100 million of federal stimulus money in the first year of the Obama administration are an example of programs that represent the latter position (Berry, Montgomery, & Snyder, 2008).

A perennial problem in traditional college- and university-sponsored teacher education programs has been the lack of connection between campus-based, university-based teacher education courses and field experiences. Although most university-based teacher education programs now include multiple field experiences over the length of the program and often situate field experiences in some type of school-university partnership (e.g., professional development schools, partner schools), the disconnect between what students are taught in campus courses and their opportunities for learning to enact these practices in their school placements is often very great even within professional development and partner schools (Bullough et al., 1997, 1999; Zeichner, 2007).

For example, it is very common for cooperating teachers with whom students work during their field placements to know very little about the specifics of the methods and foundations courses that their student teachers have completed on campus, and the people teaching the campus courses often know very little about the specific practices used in the P-12 classrooms where their students are placed. Student teachers frequently do not have opportunities to observe, try out, and receive focused feedback about their teaching of methods learned about in their campus courses. Even if the practices

advocated in campus courses exist in the classrooms where student teachers teach, they do not necessarily get access to the thinking and decision-making processes of their experienced mentors (Hammerness et al., 2005; Zeichner, 1996) who are usually vastly undercompensated for the complex and difficult work they are expected to do to mentor prospective teachers. Darling-Hammond (2009) referred to the lack of connection between campus courses and field experiences as the Achilles heel of teacher education.

Although many programs include field experiences throughout the curriculum, the time that teaching candidates spend in schools is often not carefully planned like campus-based courses with a "clinical curriculum" (Turney, Eltis, Towler, & Wright, 1985). With the exception of a few assignments in methods courses that students are asked to complete in their field placements, student teachers or interns and their cooperating teachers are often left to work out the daily business of student teaching by themselves with little guidance and connection to campus courses, and it is often assumed that good teaching practices are caught rather than taught (Darling-Hammond, 2009; Valencia et al., 2009).

Research has clearly shown that field experiences are important occasions for teacher learning rather than merely times for teacher candidates to demonstrate or apply things previously learned (Zeichner, 1996). Rosaen and Florio-Ruane (2008) discussed how taken-for-granted assumptions about the purposes of field experience in teacher education limit their value as teacher learning experiences and offer ideas for rethinking field experiences as more productive learning environments. Cochran-Smith and Lytle's (2009) ideas about using teaching practice as a site for inquiry are another example of changing the paradigm for thinking about the role of field experiences in educating teachers. Two of the most in-depth national studies of teacher education in the United States have shown that carefully constructed field experiences that are coordinated with campus courses are more influential and effective in supporting student teacher learning than the unguided and disconnected field experiences that have historically been dominant in American teacher education (Darling-Hammond, 2006; Tatto, 1996). Numerous studies have demonstrated for many years the obstacles to student teacher learning that are associated with the traditional loosely planned and monitored model of field experiences (e.g., Feiman-Nemser & Buchmann, 1985; Griffin, 1983; Stones & Morris, 1977; Zeichner, 1996).

Over the years teacher educators have tried a variety of approaches to strengthen the connections between campus and field-based teacher education and some have even argued that clinical experiences should be the central focus of preservice teacher education from which everything else in a program emanates (Ball & Forzani, 2009; Turney et al., 1985). These strategies have included creating campus-based laboratory schools on college and university campuses where particular teaching approaches can be demonstrated



and practiced under the guidance of university faculty and staff (Fraser, 2007). Short of opening whole schools on campuses, teacher educators have also created smaller clinical laboratories on campuses where specific teaching skills and practices are taught (Berliner, 1985; Grossman, 2005; Metcalf & Kahlich, 1996); have sought to model in campus courses the practices that they hope their students will use in P-12 classrooms; created simulations of classroom situations or assembling records of classroom practice using tools such as hypermedia, written, and multimedia cases; and have created assignments that students are expected to implement and analyze in their school placements. In addition, in some programs, the same individuals serve as the methods instructors and field supervisors (e.g., Cohn, 1981).

Since the early 1970s, John Goodlad has advocated for the creation of Centers of Pedagogy on college and university campuses as a structure within which teacher education should be located. According to Goodlad (2004), this structure "is a setting that brings together and blends harmoniously and coherently the 3 essential ingredients of a teacher's education: general, liberal education, the study of educational practice and the guided exercise of the art, science and skill of teaching" (pp. 2-3).

Currently, a number of institutions within the National Network for Educational Renewal (<http://www.nnerpartnerships.org/>) have implemented the concept of a Center of Pedagogy, such as Montclair State University and Brigham Young University (Patterson, Michelli, & Pacheco, 1999). Although in some respects these structures have created a more neutral space where the constituents of teacher education (except for the broader community) can come together in a relationship of mutual benefit and mutual respect, it appears to me as an observer from the outside that the universities and schools in these partnerships have maintained their separate cultures and unique forms of discourse and that the institutional aspect of the renewal process has been limited. The kinds of collaborations that will be discussed in this article focus more on creating new kinds of roles for teacher educators and ways of bringing academic, practitioner, and community-based knowledge together in the teacher education process rather than on structural change in teacher education institutions.

In this article, I will use the concept of *third space* as a lens to discuss various kinds of boundary crossings between campus and schools that are currently being enacted in teacher education programs across the United States. With the emergence of school-focused teacher preparation in the teacher residency models that are being promoted in the current federal administration in the United States (Berry, Montgomery, Curtis, et al., 2008), clinical experiences and the teaching of practice in university-based preservice teacher education are receiving a significant amount of attention, and traditional ways of organizing both campus and field-based teacher education are being rethought.

## Creating New Hybrid Spaces Linking Practitioner and Academic Knowledge

The idea of a third space comes from hybridity theory and recognizes that individuals draw on multiple discourses to make sense of the world (Bhabha, 1990). Third spaces involve a rejection of binaries such as practitioner and academic knowledge and theory and practice and involve the integration of what are often seen as competing discourses in new ways—an either/or perspective is transformed into a both/also point of view. The concept of third space has been used in fields such as geography, the arts, postcolonial studies, feminist studies, and most recently in education (e.g., Gutiérrez, 2008; Moje et al., 2004; Soja, 1996), including teacher education (Cochran-Smith & Lytle, 1999).<sup>1,2</sup>

My use of third space in this article is concerned with the creation of hybrid spaces in preservice teacher education programs that bring together school and university-based teacher educators and practitioner and academic knowledge in new ways to enhance the learning of prospective teachers. Contrary to the traditional disconnection of campus and schools and to the valorization of academic knowledge as the authoritative source of knowledge for learning about teaching in traditional college and university models of teacher education (Smagorinsky et al., 2003), third spaces bring practitioner and academic knowledge together in less hierarchical ways to create new learning opportunities for prospective teachers. Gutiérrez (2008) argued that a third space is "a transformative space where the potential for an expanded form of learning and the development of new knowledge are heightened" (p. 152). Gorodetsky and Barak's (2008) discussion of "edge communities," which are a kind of third space in school-university partnerships in teacher education, claims that these hybrid spaces encourage a more egalitarian status for their participants than conventional school-university partnerships.

From the college and university perspective, the solution to the disconnect between the campus and schools in teacher education and continuing professional development for P-12 teachers has often been seen as figuring out better ways to bring the expertise of college and university academics to P-12 educators. This has been an outside-inside model where expertise is seen to lie primarily among academics and not among P-12 educators (Zeichner, 1995). Creating third spaces in teacher education involves an equal and more dialectical relationship between academic and practitioner knowledge in support of student teacher learning.

## Boundary Crossings and the Creation of Third Spaces in Teacher Education

I will now describe several different kinds of boundary crossings that have been occurring in some college- and university-based teacher education programs in recent years in an effort to bring academic and practitioner knowledge together



in a more synergistic way in support of student teacher learning. Although these experiments in shifting the epistemology of preservice teacher preparation from a place where academic knowledge in the university is seen as the primary source of knowledge about teaching to a situation where academic knowledge and the knowledge of expert P-12 teachers are treated with the equal respect, this is not a comprehensive listing of all of the institutions where this kind of work is going on. My goal is to illustrate different types of hybrid spaces that are being created in teacher education by citing just a few examples of each with which I am familiar.

### **Bringing P-12 Teachers and their Knowledge Into Campus Courses and Field Experiences**

For many years, it has been common for colleges and universities to hire P-12 educators on an adjunct basis to teach sections or portions of required courses in preservice teacher education programs. Beyond these short-term appointments, a number of programs have secured teachers for longer periods of time to be involved in teaching and coteaching, supervising students, and participating in ongoing program renewal and evaluation. The faculty associate positions at Simon Fraser University in British Columbia and Brigham Young University (Beynon, Grout, & Wideen, 2004; Bullough et al., 2004) and the teacher-in-residence position at the University of Wisconsin–Milwaukee (Post, Pugach, Harris, & Hughes, 2006) are examples of this approach.

For example, at the University of Wisconsin–Milwaukee, the teachers-in-residence program seeks to create a stronger link between academic teacher preparation and the expertise of experienced urban teachers. Teachers with evidence of a high level of competence in the classroom spend 2 years working in all aspects of the preservice teacher education program, including student recruitment, general education and liberal arts courses, the professional education sequence, ongoing program evaluation and renewal efforts, and in supporting graduates in their early years of teaching. During their 2-year residency, these teachers participate in ongoing seminars intended to develop teacher leadership skills and then after their residency they go back to Milwaukee public schools. I had the opportunity to interview several university faculty and teacher residents during the 2 years that I recently spent as the external evaluator for the UW–Milwaukee Teachers for a New Era Project, and several of the faculty whom I interviewed spoke very positively about the significant impact of the teacher residents on their courses.

### **Incorporating Representations of Teachers' Practices in Campus Courses**

An alternative to bringing teachers into campus-based teacher education activities directly is to create opportunities

for representations of teachers' practices to be brought into courses. One example of this strategy has been to incorporate the writing and research of P-12 teachers (e.g., Gallas, 2004; Goldstone, 2003; Hanson, 2008) into the campus-based curriculum so that students examine both academic- and practitioner-generated knowledge related to particular aspects of teaching. In addition to providing teacher candidates with insights into the complexities of particular teaching practices, this strategy also provides novices with models of teachers who are able to learn in and from their practice over time.

For more than 10 years, the Carnegie Foundation for the Advancement of Teaching worked with K-12 teachers across the country to create multimedia, Web-based representations of their teaching practice (Pointer-Mace, 2009). Following this, a group of teacher educators across the country with support from the Carnegie Foundation used the K-12 teacher Web sites in their campus-based courses and created their own multimedia Web sites of their use of the K-12 teacher sites with their preservice students.<sup>3</sup> For example, Pam Grossman, a teacher educator at Stanford, created a site where she documented how she incorporated the Web site of an experienced Los Angeles high school English teacher (Yvonne Divans Hutchinson) in her English methods course at Stanford. One aspect of this work focused on the task of engaging students in text-based discussions of literature. In addition to reading academic literature on this topic, students utilized Hutchinson's Web site, which includes images of her leading discussions around text in which students were very engaged, interviews with Hutchinson, and statements by her students as well as examples of student work and methods and materials that Hutchinson used to prepare her students for the discussions.

An alternative to university-based teacher educators using representations of P-12 teacher practice is for them to create representations of their own teaching of elementary or secondary students and to utilize these representations in their campus-based courses. For example, at the University of Wisconsin–Madison, Flessner (2008) constructed representations of his teaching math to elementary children and then used these representations (video clips, examples of student work) in his campus math methods course. Lampert and Ball's (1998) strategic documentation of their teaching of elementary math using hypermedia is another example.

### ***Mediated Instruction and Field Experiences***

For a number of years, it has been common for university-based instructors to hold a portion or all of a campus methods course in an elementary or secondary school. Holding a course in a school in and of itself does not mean, however, that the course will be any different from a campus-based version. Some teacher educators, though, have taken advantage of the school location and have strategically connected their school-based methods course to the practices and expertise of teachers in those schools. One example of this is



the work during the past few years at the University of Washington, Seattle, where methods instructors in elementary and secondary teacher education have held a portion of their courses in a K-12 partner school. Motivated by their own research that showed that their students were not taking up the ideas and practices that were advocated in their campus courses, the elementary and secondary teacher education faculty who teach methods courses all committed to mediate the gaps between their campus courses and the students' school experiences. For example, with regard to the secondary mathematics program: "Interns did not have a vision or concrete model of what a classroom would look like where the promoted practices were used to teach math for understanding" (Campbell, 2008, p. 9).

One out of two meetings per week of the math methods course in secondary teacher education was held at a local high school where teachers were using practices similar to those being promoted in the methods course. The class and instructor observed the same ninth-grade class each week with debriefings with the teacher following the observed lesson.

The work in Seattle is similar to work done at Michigan State University (MSU) in the 1990s where efforts were made to redefine the role of cooperating teachers in selected professional development schools so that they would play a more active role in demonstrating and helping interns and pre-interns analyze specific teaching practices. In one example of this work documented by Michigan State researchers, a group of math methods students in elementary education spent a week in Kathy Beasley's elementary classroom observing her teach math. Prior to and subsequent to each math period, the group of methods students met with Kathy and her MSU intern to analyze the practices that were observed (Feiman-Nemser & Beasley, 2007).

A third example of mediated instruction and field experiences is the work over the past decade at the University of Wisconsin-Madison where a literacy methods course has been held in a professional development school associated with the university. Here, the internal PDS coordinator works with the methods instructor, who is usually a doctoral student, to go over the syllabus and connect the concepts and practices taught in the course to expertise that exists within the school staff. As the methods students are studying about particular approaches to literacy instruction such as balanced literacy, they have a chance to observe and interact with teachers who are experts in these practices. Sometimes the class goes out on "grand rounds" (Troen, Kamii, & Boles, 1997) into a classroom to watch a teacher engaged in a particular practice and then meet with that teacher following the observation. At other times, a teacher will come into the methods class and discuss his or her work, often bringing artifacts of practice such as pupil work. In both cases, there is a deliberate effort to connect academic and practitioner knowledge in support of student teachers' learning how to enact specific teaching practices advocated in methods courses.

### *Hybrid Teacher Educators*

Some teacher education institutions have established clinical faculty positions where the work of teacher educators takes place both in elementary and secondary schools and on a college and university campus. I began my career as a university teacher educator in such a boundary-spanning position in the mid-1970s (Howey & Zimpher, 2006) as a team leader in the National Teacher Corps project in Syracuse, New York. My role as a team leader was to supervise the work of a team of interns who were engaged in a 2-year school-based teacher education program in an urban elementary school. As a team leader, I needed to be intimately familiar with the coursework and community work of the interns as I supervised their field experiences over a 2-year period and I had to function both as a staff member in the public school in which I had taught and on the university campus.

A variety of different types of hybrid teacher educator positions exist today across the nation. These include positions where clinical faculty (often not on the tenure track) work to build partnerships with local schools that focus on preservice teacher education and sometimes also on continuing teacher professional development (Boyle-Baise & McIntyre, 2008) and positions where clinical faculty are based primarily in an elementary or secondary school and where they make placements for teacher candidates at the school level and supervise their school experiences.

For a 3-year period in the 1990s, I served as the faculty liaison to two elementary professional development schools that were two of the four schools that were affiliated with UW-Madison's experimental "Teach for Diversity" program (Ladson-Billings, 2001). During this period, I received credit for one course a year for my work in coteaching a weekly seminar for Teach for Diversity interns with a school-based university supervisor from each school in which we helped the interns analyze their work in schools in relation to a variety of concepts and perspectives that were introduced to them in their campus courses. I also worked with school staff to organize and sometimes participate in teaching in professional development activities that were designed with and for school staff, student teachers, and sometimes parents. While serving as a university faculty member in elementary education and in the Department of Curriculum & Instruction, I also had a desk in the schools and periodically attended staff meetings. These boundary-spanning positions increased greatly across the country along with the growth of the professional development school movement since the mid-1980s (Zeichner, 2007).

### **Incorporating Knowledge From Communities Into Preservice Teacher Education**

For many years, teacher educators have advocated broadening the site for preservice teacher education from the campus



and schools to the broader communities in which schools are situated (e.g., Cuban, 1969; Flowers, Patterson, Stratemeyer, & Lindsey, 1948). Although some community-based field experiences in teacher education have focused on service learning and on tutoring pupils and do not give student teachers contact with adults in the broader community, other lines of work in community-based teacher education have focused on strategically utilizing the expertise that exists in the broader community to educate prospective teachers about how to be successful teachers in their communities (e.g., Boyle-Baise & McIntyre, 2008; Mahan, 1982; Sleeter, 2008b; Zeichner & Melnick, 1996). Seidel and Friend's (2002) work over a decade in Columbus, Ohio, is an example of the latter approach to community-based learning. In this work, prospective teachers in elementary education at Ohio State University were paired up with equal status adults in an African American Baptist church educational program and the researchers were able to document the impact of these equal status relationships with adults on the development of cultural competence in prospective teachers. Finally, the work of teacher educators at the University of Massachusetts–Boston illustrates yet another approach to utilizing community expertise in teacher education. In this case, community members were used as resources for educating the faculty about the communities for which they were preparing teachers to teach (Koerner & Abdul-Tawwab, 2006).

## Conclusion

Since the early days of teacher education programs in colleges and universities in the United States, scholars have argued against unguided school experience and for carefully planned and purposeful school experiences based on the quality of teacher learning that is associated with each (e.g., Dewey, 1904/1965). In this article, I have discussed a number of contemporary efforts in the United States to bridge the gaps between campus and school-based teacher education and the gaps between both of these and the broader communities in which schools and colleges and universities exist.

These efforts involve a shift in the epistemology of teacher education from a situation where academic knowledge is seen as *the* authoritative source of knowledge about teaching to one where different aspects of expertise that exist in schools and communities are brought into teacher education and coexist on a more equal plane with academic knowledge. This broader view about the kinds of expertise that are needed to educate teachers expands opportunities for teacher learning, as new synergies are created through the interplay of knowledge from different sources. Recent research using activity theory on school-to-work transitions and the interaction of different activity systems supports this assertion (e.g., Tuomi-Grohn, 2007). While the creation of these kinds of hybrid spaces in teacher education does not directly address the institutional and cultural problems that

have persistently undermined the quality of teacher education in colleges and universities and schools (e.g., its low status, the lack of rewards for good work in teacher education, the lack of adequate funding), it does create spaces for student teacher learning that take advantage of multiple sources of expertise that can support high-quality teaching.

Although high-quality research on the impact of various forms of coursework and school and community field experiences on prospective teachers' perspectives and practices is fairly limited (e.g., Clift & Brady, 2005; Floden, 2005), some research has begun to document the impact of certain kinds of teacher education experiences and programs on influencing prospective teacher learning in desired directions. For example, Darling-Hammond, Hammerness, Grossman, Rust, and Shulman (2005) and Zeichner and Conklin (2005) concluded that the extant research on exemplary teacher education programs shows that where field experiences are carefully coordinated with coursework and carefully mentored, teacher educators are better able to accomplish their goals in preparing teachers to successfully enact complex teaching practices. In another example, Campbell (2008) reported that at the University of Washington, Seattle, where interns participated in mediated instruction in their math certification program, they developed a deeper understanding of the promoted teaching practices and were more successful in enacting the practices in diverse urban secondary schools.

The growing contemporary focus on rethinking and redesigning the connection of college and university coursework in preservice teacher education to the schools and communities for which teachers are being prepared to work is a hopeful sign that the traditional distanced and disconnected model of university-based preservice teacher education is on its way out. It is necessary though that colleges and universities and P-12 schools begin to better recognize and reward those faculty and staff who do exemplary work within the hybrid spaces that are created or the impact of this work on the field as a whole will be minimal.

The continued lack of reward and recognition available to faculty in research-oriented universities for doing good work in teacher education has resulted in an increased reliance on clinical faculty and graduate students to staff teacher education programs and the abandonment of this work by many tenure-track faculty (Bullough et al., 1997; Goodlad, 1994). Although these graduate students and clinical faculty have brought many positive things to college- and university-based teacher education programs from their recent experiences in schools, the kind of transformation in the epistemology of teacher education that has been discussed in this article cannot be realized in research-oriented universities without the direct engagement of tenure-track faculty. In order for these faculty to be involved, senior tenured faculty and administrators must assume leadership in creating the conditions where faculty will be rewarded for their engagement and for creating and sustaining exemplary teacher education programs.



It is also important in the current fiscal climate of consistently diminishing budgets in colleges and universities (Lyll & Sell, 2006) that teacher education receive its fair share of institutional resources to provide high-quality teacher preparation programs with rigorous and carefully planned clinical components. The kind of work that has been described in this article cannot be done well on a large scale with the kind of underfunding that teacher education has often experienced on college and university campuses.

Many of the examples of boundary crossing that I have mentioned in this article are located at research universities and/or were supported with some external funding. It is important to figure out how to enact these kinds of hybrid practices in all kinds of teacher education programs, including early entry programs, in different kinds of teacher education institutions, and with regular ongoing funding.

Currently, there are a lot of resources that are being devoted to meeting elaborate accountability mechanisms to monitor the compliance of teacher education institutions to state requirements. It is clear that much of this monitoring activity does not address or contribute to improving the quality of teacher education programs (Johnson, Johnson, Farenga, & Ness, 2005; Sleeter, 2008a; Zeichner, 2008) and that a more significant impact on enhancing program quality and student teacher learning can be achieved by developing more streamlined and relevant accountability systems and reallocating much of the money now being spent on the bureaucratic and hyper-rationalized monitoring of programs<sup>4</sup> to support the kind of school-university and community connections that have been described in this article. There is some empirical evidence that the human effort and financial resources that teacher education institutions have had to devote to producing detailed and extensive reports to states and accreditation agencies on their programs have diverted the attention of teacher educators away from creating the kind of innovative practices that have been discussed in this article (Kornfeld, Grady, Marker, & Ruddell, 2007; Rennett-Ariev, 2008). Providing competitive funding for developing high-quality school-university-community collaborations in teacher education, like the examples discussed in this article, would be a far better use of money than what is currently taking place.<sup>5</sup>

Another way to support the development and continual improvement of these practices in a variety of institutions and programs is to support the networking of institutions focused on the creation of these kinds of boundary-spanning and hybrid practices. The National Network for Educational Renewal (NNER) created by John Goodlad and his colleagues in 1986 is an example of such a network. Networks like the NNER can provide opportunities for teacher educators to learn from one another about how to create successful examples of hybrid practices in a variety of contexts, provide technical assistance in doing so, and help provide opportunities for the funding of some of these initiatives. Currently, the NNER is launching a project that is focused on preparing new teacher educators to engage in the kinds of hybrid practices discussed in this article.

There is a great deal of impatience with colleges and universities across the country for what is perceived to be our unwillingness to change and work with schools and communities in closer and more respectful ways across teachers' careers (e.g., Hartocollis, 2005). Despite the complexity of bringing this new epistemology of teacher education into the mainstream, unless we are able to do so relatively soon, college- and university-based teacher education may be replaced as the main source of teachers for the nation's public schools. Fast-track programs that minimize the role of colleges and university faculty and staff (Holland, 2004) will become the norm. This will be to the detriment of both teacher and pupil learning because the expanded learning opportunities that are created through the interplay of different sources of knowledge will not be realized.

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### Notes

1. This includes attention to how practice is taught in other professional preparation programs (Grossman et al., 2009).
2. Cochran-Smith and Lytle use the term *third culture* rather than third space.
3. Both the K-12 teacher sites and the teacher educator sites can be accessed at [www.insideteaching.org](http://www.insideteaching.org).
4. By hyper-rationality, I mean extreme pressure on teacher education institutions to rationalize their programs and student assessment systems to a point where the demands for accountability and compliance begin to interfere with and undermine the accomplishment of the goal of educating teachers (see Wise, 1979, for a discussion of this term with regard to K-12 education). See Zeichner (2008) for a discussion of more reasonable and cost-effective accountability measures for teacher education.
5. It should be noted that NCATE is currently engaged in a major effort to address widespread concerns about hyper-rationalization in their accreditation process (Sawchuck, 2009).

### References

- Ball, D., & Cohen, D. (1999). Developing practice, developing practitioners: Toward a practice-based theory of professional education. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession* (pp. 3-32). San Francisco: Jossey-Bass.
- Ball, D., & Forzani, F. (2009). The work of teaching and the challenge for teacher education. *Journal of Teacher Education*, 60(5), 497-511.
- Barab, S. A., & Duffy, T. (2000). From practice fields to communities of practice. In D. Jonassen & S. Land (Eds.), *Theoretical foundations of learning environments* (pp. 25-56). New York: Routledge.
- Berliner, D. (1985). Laboratory settings and the study of teacher education. *Journal of Teacher Education*, 36, 2-8.



- Berry, B., Montgomery, D., Curtis, R., Hernandez, M., Wurtzel, J., & Snyder, J. (2008). *Creating and sustaining urban teacher residencies*. Hillsborough, NC: Center for Teaching Quality and the Aspen Institute.
- Berry, B., Montgomery, D., & Snyder, J. (2008). *Urban teacher residency models and institutes of higher education: Implications for teacher preparation*. Washington, DC: NCATE.
- Beynon, J., Grout, J., & Wideen, M. (2004). *From teacher to teacher educator*. Vancouver, CA: Pacific Education Press.
- Bhabha, H. (1990). The third space. In J. Rutherford (Ed.), *Identity, community, culture and difference* (pp. 207-221). London: Lawrence and Wishart.
- Boyle-Baise, M., & McIntyre, D. J. (2008). What kind of experience? Preparing teachers in PDS or community settings. In M. Cochran-Smith, S. Feiman-Nemser, & D. J. McIntyre (Eds.), *Handbook of research on teacher education* (3rd ed., pp. 307-330). New York: Routledge.
- Bullough, R., Burrell, J., Young, J., Clark, D., Erickson, L., Earle, R., et al. (1999). Paradise unrealized: Teacher education and the costs and benefits of school-university partnerships. *Journal of Teacher Education*, 50, 381-390.
- Bullough, R. V., Draper, M. J., Smith, L., & Burrell, J. (2004). Moving beyond collusion: Clinical faculty and university/public school partnership. *Teaching and Teacher Education*, 20, 505-521.
- Bullough, R., Hobbs, S., Kauchak, D., Crow, N., & Stokes, D. (1997). Long-term PDS development in research universities and the clinicalization of teacher education. *Journal of Teacher Education*, 48, 85-93.
- Campbell, S. S. (2008, March). *Mediated field experiences in learning progressive teaching: A design experiment in teacher education*. Paper presented at the annual meeting of the American Educational Research Association, New York City.
- Carroll, D. (2007). Helping teachers become teacher educators. In D. Carroll, H. Featherstone, J. Featherstone, S. Feiman-Nemser, & D. Roosevelt (Eds.), *Transforming teacher education: Reflections from the field* (pp. 181-202). Cambridge, MA: Harvard Education Press.
- Clifford, G. J., & Guthrie, J. W. (1988). *Ed school: A brief for professional education*. Chicago: University of Chicago Press.
- Clift, R., & Brady, P. (2005). Research on methods courses and field experiences. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education* (pp. 309-424). New York: Routledge.
- Cochran-Smith, M., & Lytle, S. (1999). Relationships of knowledge and practice: Teacher learning in communities. *Review of Research in Education*, 24, 249-306.
- Cochran-Smith, M., & Lytle, S. (2009). *Inquiry as a stance: Practitioner research in the next generation*. New York: Teachers College Press.
- Cochran-Smith, M., & Zeichner, K. (Eds.). (2005). *Studying teacher education*. New York: Routledge.
- Cohn, M. (1981). A new supervision model for linking theory to practice. *Journal of Teacher Education*, 32(3), 26-30.
- Combleth, C., & Ellsworth, J. (1994). Teachers in teacher education: Clinical faculty roles and relationships. *American Educational Research Journal*, 31, 49-70.
- Cuban, L. (1969). The teacher and community. *Harvard Educational Review*, 39, 253-272.
- Darling-Hammond, L. (2006). *Powerful teacher education*. San Francisco: Jossey-Bass.
- Darling-Hammond, L. (2009, February). *Teacher education and the American future*. Charles W. Hunt Lecture. Presented at the annual meeting of the American Association of Colleges for Teacher Education, Chicago.
- Darling-Hammond, L., Hammerness, K., Grossman, P., Rust, F., & Shulman, L. (2005). The design of teacher education programs. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world* (pp. 390-441). San Francisco: Jossey Bass.
- Dewey, J. (1965). The relation of theory to practice in education. In M. Borrowman (Ed.), *Teacher education in America: A documentary history* (pp. 140-171). New York: Teachers College Press. (Original work published in 1904)
- Featherstone, J. (2007). Values and the big university education school. In D. Carroll, H. Featherstone, J. Featherstone, S. Feiman-Nemser, & D. Roosevelt (Eds.), *Transforming teacher education: Reflections from the field* (pp. 203-220). Cambridge, MA: Harvard Education Press.
- Feiman-Nemser, S., & Beasley, K. (2007). Discovering and sharing knowledge: Inventing a new role for cooperating teachers. In D. Carroll, H. Featherstone, J. Featherstone, S. Feiman-Nemser, & D. Roosevelt (Eds.), *Transforming teacher education: Reflections from the field* (pp. 139-160). Cambridge, MA: Harvard Education Press.
- Feiman-Nemser, S., & Buchmann, M. (1985). Pitfalls of experience in teacher education. *Teachers College Record*, 87, 49-65.
- Flessner, R. (2008). *Living in multiple worlds: Utilizing third space theory to re-envision pedagogy in the field of teacher education*. Unpublished doctoral dissertation, University of Wisconsin-Madison.
- Floden, R. (2005). Research on the effects of coursework in the arts and sciences and in the foundations of education. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education* (pp. 261-308). New York: Routledge.
- Flowers, J. G., Patterson, A., Stratemeyer, F., & Lindsey, M. (1948). *School and community laboratory experiences in teacher education*. Oneata, NY: American Association of Teachers Colleges.
- Fraser, J. W. (2007). *Preparing America's teachers: A history*. New York: Teachers College Press.
- Gallas, K. (2004) Look, Karen, I'm running like jello: Imagination as a question, a topic, a tool for literacy research and learning. In C. Ballanger (Ed.), *Regarding children's words: Teacher research on language and literacy* (pp. 119-148). New York: Teachers College Press.
- Goldstone, L. (2003). The mother tongue: The role of parent-teacher communication in helping students reach new standards. In F. E. Meyers & F. Rust (Eds.), *Taking action with teacher research* (pp. 63-78). Portsmouth, NH: Heinemann.
- Goodlad, J. (1990). *Teachers for our nation's schools*. San Francisco: Jossey Bass.
- Goodlad, J. (1994). *Educational renewal: Better teachers, better schools*. San Francisco: Jossey-Bass.



- Goodlad, J. (2004). The National Network for Educational renewal. *Phi Delta Kappan*, 75(8), 32-38.
- Gorodetsky, M., & Barak, J. (2008). The educational-cultural edge: A participative learning environment for co-emergence of personal and institutional growth. *Teaching and Teacher Education*, 24, 1907-1918.
- Gorodetsky, M., Barak, J., & Hadari, H. (2007). A cultural-ecological edge: A model for a collaborative community of practice. In M. Zeller Mayer & E. Munthe (Eds.), *Teachers learning in communities: International perspectives* (pp. 99-112). Rotterdam: Sense Publishers.
- Griffin, G. (1983). *Clinical preservice teacher education: Final report*. Austin, TX: Research and Development Center for Teacher Education, University of Texas-Austin.
- Grossman, P. (2005). Pedagogical approaches in teacher education. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education* (pp. 425-476). New York: Routledge.
- Grossman, P., Compton, C., Igra, D., Ronfeldt, M., Shahan, E., & Williamson, P. (2009). Teaching practice: A cross-professional perspective. *Teachers College Record*, 111(9). Retrieved July 1, 2009, from <http://www.tcrecord.org/Content.asp?ContentID=15018>
- Grossman, P., & Loeb, S. (2008). (Eds.). *Taking stock: An examination of alternative certification*. Cambridge, MA: Harvard Education Press.
- Gutiérrez, K. (2008). Developing sociocultural literacy in the third space. *Reading Research Quarterly*, 43, 148-164.
- Hammerness, K., Darling-Hammond, L., & Bransford, J. (2005). How teachers learn and develop. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world* (pp. 358-389). San Francisco: Jossey-Bass.
- Hanson, D. (2008). Crossing the bridges of culture, color and language. In C. Caro-Bruce, M. Klehr, & K. Zeichner (Eds.), *Using action research to create equitable classrooms* (pp. 254-276). Thousand Oaks, CA: Corwin Press.
- Hartocollis, A. (2005, July 31). Who needs education schools? *The New York Times*, pp. 24-28.
- Holland, R. G. (2004). *To build a better teacher: The emergence of a competitive education industry*. Westport, CT: Praeger.
- Howey, K., & Zimpher, N. (2006). (Eds.). *Boundary spanners*. Washington, DC: American Association of State Colleges and Universities.
- Johnson, D., Johnson, B., Farenga, S., & Ness, D. (2005). *Trivializing teacher education: The accreditation squeeze*. Lanham, MD: Rowman & Littlefield.
- Koerner, M. E., & Abdul-Tawwab, N. (2006). Using community as a resource for teacher education: A case study. *Equity and Excellence in Education*, 39(1), 37-46.
- Kornfeld, J., Grady, K., Marker, P., & Ruddell, M. (2007). Caught in the current: A self-study of state-mandated compliance in a teacher education program. *Teachers College Record*, 109, 1902-1930.
- Korthagen, F., & Kessels, J. (1999). Linking theory and practice: Changing the pedagogy of teacher education. *Educational Researcher*, 28(3), 4-17.
- Labaree, D. (2004). *The trouble with ed schools*. New Haven, CT: Yale University Press.
- Ladson-Billings, G. (2001). *Crossing over to Canaan: The journey of new teachers in diverse classrooms*. San Francisco: Jossey-Bass.
- Lampert, M., & Ball, M. (1998). *Mathematics teaching and multimedia: Investigations of real practice*. New York: Teachers College Press.
- Lyall, K., & Sell, K. (2006). *The true genius of America at risk: Are we losing our public universities to de facto privatization?* Westport, CT: Praeger.
- Mahan, J. (1982). Native Americans as teacher trainers: Anatomy and outcomes of a cultural immersion project. *Journal of Equity and Leadership*, 2, 100-109.
- Margolis, J. (2007). Improving relationships between mentor teachers and student teachers: Engaging in a pedagogy of explicitness. *The New Educator*, 3, 75-94.
- Metcalf, K., & Kahlich, P. (1996). Laboratory experiences and transition from campus to field. In D. J. McIntyre & D. M. Byrd (Eds.), *Preparing tomorrow's teachers: The field experience* (pp. 97-114). Thousand Oaks, CA: Corwin Press.
- Moje, E., Ciechanowski, K., Kramer, K., Ellis, L., Carrillo, R., & Collazo, T. (2004). Working toward third space in content area literacy: An examination of everyday funds of knowledge and discourse. *Reading Research Quarterly*, 39(1), 38-70.
- Patterson, R. S., Michelli, N. M., & Pacheco, A. (1999). *Centers of pedagogy*. San Francisco: Jossey-Bass.
- Pointer-Mace, D. (2009). *Teacher practice online: Sharing wisdom, opening doors*. New York: Teachers College Press.
- Post, L., Pugach, M., Harris, S., & Hughes, M. (2006). The Teachers-In-Residence Program: Veteran urban teachers as teacher leaders in boundary-spanning roles. In K. Howey & N. Zimpher (Eds.), *Boundary spanners: A key to success in urban P-16 university-school partnerships* (pp. 211-236). Washington, DC: American Association of State Colleges and Universities and Land Grant Colleges.
- Rennert-Ariev, P. (2008). The hidden curriculum of performance-based teacher education. *Teachers College Record*, 110, 105-138.
- Rosaen, C., & Florio-Ruane, S. (2008). The metaphors by which we teach: Experience, metaphor and culture in teacher education. In M. Cochran-Smith, S. Nemser, & D. J. McIntyre (Eds.), *Handbook of research on teacher education* (3rd ed., pp. 706-731). New York: Routledge.
- Sawchuck, S. (2009, July, 15). NCATE offers multiple reaccreditation paths. *Education Week*, 28(36), p.11.
- Seidel, B., & Friend, G. (2002). Leaving authority at the door: Equal status, community-based experiences and the preparation of teachers for diverse classrooms. *Teaching and Teacher Education*, 18, 421-433.
- Sleeter, C. (2008a). Equity, democracy, and neo-liberal assaults on teacher education. *Teaching and Teacher Education*, 24, 1947-1957.
- Sleeter, C. (2008b). Preparing White teachers for diverse students. In M. Cochran-Smith, S. Feiman-Nemser, & D. J. McIntyre (Eds.), *Handbook of research on teacher education* (3rd ed., pp. 559-582). New York: Routledge.



- Smagorinsky, P., Cook, L. S., & Johnson, T. S. (2003). The twisting path of concept development in learning to teach. *Teachers College Record*, 105, 1399-1436.
- Soja, E. (1996). *Thirdspace*. Malden, MA: Blackwell.
- Stoddart, T., & Floden, R. (1996). Traditional and alternative routes to teacher certification: Issues, assumptions and misconceptions. In K. Zeichner, S. Melnick, & M. L. Gomez (Eds.), *Currents of reform in preservice teacher education* (pp. 80-108). New York: Teachers College Press.
- Stones, E., & Morris, S. (1977). *Teaching practice: Problems and perspectives*. London: Methuen.
- Tatto, T. (1996). Examining the values and beliefs about teaching diverse students: Understanding the challenges for teacher education. *Educational Evaluation and Policy Analysis*, 18, 155-180.
- Tom, A. (1997). *Redesigning teacher education*. Albany, SUNY Press.
- Troen, V., Kamii, M., & Boles, K. (1997, April). *From carriers of culture to agents of change: Teacher-initiated professional development in the learning/teaching collaborative inquiry seminars*. Paper presented at the annual meeting of the American Educational Research Association, Chicago.
- Tuomi-Grohn, T. (2007). Developmental transfer as a goal of internship in practical nursing. In T. Tuomi-Grohn & Y. Engestrom (Eds.), *Between school and work: New perspectives on transfer and boundary-crossing* (pp. 199-232). Greenwich, CT: JAI.
- Turney, C., Eltis, K., Towler, J., & Wright, R. (1985). *A new basis for teacher education: The practicum curriculum*. Sydney: University of Sydney Press.
- Valencia, S., Martin, S., Place, N., & Grossman, P. (2009). Complex interactions in student teaching: Lost opportunities for learning. *Journal of Teacher Education*, 60(3), 304-322.
- Vick, M. (2006). It's a difficult matter: Historical perspectives on the enduring problem of the practicum in teacher preparation. *Asia-Pacific Journal of Teacher Education*, 34, 181-198.
- Wise, A. (1979). *Legislated learning: The bureaucratization of the American classroom*. Berkeley: University of California Press.
- Zeichner, K. (1995). Beyond the divide of teacher research and academic research. *Teachers & Teaching*, 1, 153-172.
- Zeichner, K. (1996). Designing educative practicum experiences for prospective teachers. In K. Zeichner, S. Melnick, & M. L. Gomez (Eds.), *Currents of reform in preservice teacher education* (pp. 215-234). New York: Teachers College Press.
- Zeichner, K. (2002). Beyond traditional structures of student teaching. *Teacher Education Quarterly*, 29, 59-64.
- Zeichner, K. (2005). Becoming a teacher educator. *Teaching and Teacher Education*, 21, 117-124.
- Zeichner, K. (2007). Professional development schools in a culture of evidence and accountability. *School-University Partnerships*, 1(1), 9-17.
- Zeichner, K. (2008, October). *Neo-liberal ideas and the transformation of teacher education in the U.S.* Keynote address presented at the International Conference, Justice, Equality and Efficiency: Educational Policy Under the Situation of Multiple Societies. East China Normal University, Shanghai, China.
- Zeichner, K., & Conklin, H. (2005). Teacher education programs. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education* (pp. 645-735). New York: Routledge.
- Zeichner, K., & Melnick, S. (1996). The role of community field experiences in preparing teachers for cultural diversity. In K. Zeichner, S. Melnick, & M. L. Gomez (Eds.), *Currents of reform in preservice teacher education* (pp. 176-198). New York: Teachers College Press.
- Zeichner, K., & Miller, M. (1997). Learning to teach in professional development schools. In M. Levine & R. Trachtman (Eds.), *Making professional development schools work: Politics, practice and policy* (pp. 15-32). New York: Teachers College Press.

### About the Author

**Ken Zeichner** is currently the Boeing Professor of Teacher Education at the University of Washington, Seattle.