

Theory and Research in Education

<http://tre.sagepub.com/>

Funds of knowledge for the poor and forms of capital for the rich? A capital approach to examining funds of knowledge

Cecilia Rios-Aguilar, Judy Marquez Kiyama, Michael Gravitt and Luis C. Moll

Theory and Research in Education 2011 9: 163

DOI: 10.1177/1477878511409776

The online version of this article can be found at:

<http://tre.sagepub.com/content/9/2/163>

Published by:



<http://www.sagepublications.com>

Additional services and information for *Theory and Research in Education* can be found at:

Email Alerts: <http://tre.sagepub.com/cgi/alerts>

Subscriptions: <http://tre.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations: <http://tre.sagepub.com/content/9/2/163.refs.html>

>> [Version of Record](#) - Jul 11, 2011

[What is This?](#)

Funds of knowledge for the poor and forms of capital for the rich? A capital approach to examining funds of knowledge

Theory and Research in Education
9(2) 163–184
© The Author(s) 2011
Reprints and permission: sagepub.co.uk/journalsPermissions.nav
DOI: 10.1177/1477878511409776
tre.sagepub.com


Cecilia Rios-Aguilar

University of Arizona, USA

Judy Marquez Kiyama

University of Rochester, USA

Michael Gravitt

University of Arizona, USA

Luis C. Moll

University of Arizona, USA

Abstract

Educational researchers have assumed that the concept of funds of knowledge is related to specific forms of capital. However, scholars have not examined *if* and *how* these theoretical frameworks can complement each other when attempting to understand educational opportunity for under-represented students. In this article, we argue that a funds of knowledge approach should also be studied from a *capital* perspective. We claim that bridging funds of knowledge and capital has the potential to advance theory and to yield new insights and understandings of students' educational opportunities and experiences. Finally, we provide a discussion of key processes – (mis)recognition, transmission, conversion, and activation/mobilization – to which educational researchers need to pay closer attention when attempting to understand the attainment of goals in under-represented students' lives.

Corresponding author:

Cecilia Rios-Aguilar, Center for the Study of Higher Education, College of Education, 1430 East Second Street, University of Arizona, Tucson, Arizona 85721, USA
Email: ceciliar@email.arizona.edu

Keywords

cultural capital, funds of knowledge, social capital

Introduction

During the early 1990s, the concept of funds of knowledge emerged in the literature in relation to scholarship documenting the wherewithal and resources of working-class Latina/o families, thus countering deficit perspectives common in depictions of these and other low-income families. Moll et al. (1992) presented an approach, rooted in anthropological studies of working-class Latina/o households, that documented and highlighted the varied bodies of knowledge that underlie families' productive activities. Central to this approach were household visits to document ethnographically the families' social and labor history, household practices, division of labor, ideas about childrearing, and values about education that captured what was broadly referred to as their funds of knowledge. The term 'funds', adapted from the work of Wolf (1966), referred to how this knowledge was often bartered through social networks with other households, in essence becoming the currency for these exchanges, thus an important aspect of the household economy.

Since then, the theoretical framework¹ of funds of knowledge has been used by educational researchers to document the competence and knowledge embedded in the life experiences of under-represented² students and their families. Several current studies (Andrews and Yee, 2006; Ares and Buendía, 2007) have built on this theoretical approach to argue that when funds of knowledge are incorporated into curriculum and instruction, it facilitates teachers' recognition and use of family and community resources for pedagogical purposes. Most recently, the idea of funds of knowledge has been used to provide an alternative explanation for the variation in Latina/o students' academic and non-academic outcomes (Rios-Aguilar, 2010), and to understand under-represented students' transitions to college (Bensimon, 2007; Kiyama, 2010; Rios-Aguilar and Kiyama, forthcoming).

In this article, we elaborate the concept of funds of knowledge by relating it to two distinct forms of capital: social and cultural.³ Our intent is not to conceptualize funds of knowledge, as this has already been done. The significance of this discussion is that we aim to understand funds of knowledge within the context of capital; by doing so we provide a more nuanced understanding of the processes of converting funds of knowledge into different forms of capital, and of issues of power within educational settings. Specifically, we explore how power dynamics within educational settings influence the conversion or transformation process. In fact, other researchers have started to make connections between forms of capital and funds of knowledge. Lubienski (2003) warned that researchers, in an attempt to celebrate diversity, are fusing the terms cultural capital and funds of knowledge, thus implying that everyone has cultural capital, avoiding addressing 'education-related inequities and economic injustices' (p. 30). Yosso (2005), on the other hand, proposed the concept of *community cultural wealth*,⁴ which included funds of knowledge, to criticize and re-articulate Bourdieu's notion of cultural capital in ways that are more inclusive of the cultural experiences of 'communities of color'. Similarly, Stanton-Salazar and Dornbusch (1995) suggested that both funds of

knowledge and social capital are key to minority students' educational success. These efforts, then, seem to suggest the need to explore how adding a capital perspective to existing scholarship on funds of knowledge can inform research that will provide a better understanding of the educational experiences of under-represented students.

We begin our discussion with a brief overview of the concept of funds of knowledge, highlighting current uses and shortcomings. We then present a conceptual outline of social and cultural capital, underscoring strengths and limitations. Next, we examine in more depth how funds of knowledge and the forms of capital can be complemented to better understand educational opportunity. We rely on existing literature to substantiate our claims, and to provide examples of how this can be accomplished. Finally, we provide a framework, comprised of key processes – (mis)recognition, transmission, conversion, and activation or mobilization – to which educational researchers need to pay closer attention when attempting to understand the attainment of important goals in under-represented students' lives, including educational and labor market outcomes.

Funds of knowledge: origins, definition and overview of existing literature

The concept of funds of knowledge was first introduced by anthropologists Vélez-Ibañez and Greenberg (1992) as part of their household analysis of working-class Mexican families in the US southwest. In particular, they studied how working-class and economically marginalized families used their social networks, and the social and economic exchange relations that such networks facilitate, to mediate the uncertainty of their socioeconomic disadvantage. Their work underscored the significance of the clustering of households as a central characteristic of this population in the US borderlands, in which the exchange of different resources and funds of knowledge occurs (Vélez-Ibañez, 1988). Funds of knowledge, then, was described in this work as an array of knowledge and skills that are of strategic importance to working-class households living in the US–Mexico border region (Vélez-Ibañez and Greenberg, 1992). For example, many Mexican households have accumulated a wide breadth of knowledge in areas such as mining and metallurgy, ranching, and transborder transactions related to their sector of the economy in their particular region of the country (Moll et al., 1992; Vélez-Ibañez, 1988). Other types of such funds include information concerning access to institutional assistance, school programs, legal help, occupational opportunities, and the most inexpensive places to procure needed goods and services (Vélez-Ibañez, 1988). These funds are not only the repertoire of information and knowledge found among clusters of households, but the 'currency of exchange' among such household arrangements (Vélez-Ibañez, 1996).

This initial work was subsequently extended and combined with insights from Vygotsky's (1978) cultural-historical psychology, especially his concept of 'cultural mediation', as part of a series of studies addressing the educational implications of research on funds of knowledge (Moll and Greenberg, 1990; Moll, 2005). Moll and González (1994) used the approach to study the literacy practices of working-class Latina/o children. They offered the following definition of funds of knowledge:

Those historically accumulated and culturally developed bodies of knowledge and skills essential for household or individual functioning and well-being. As households interact within circles of kinship and friendship, children are 'participant-observers' of the exchange of goods, services, and symbolic capital which are part of each household's functioning. (Moll and González, 1994: 443)

It is important to highlight a critical component embedded in the definitions provided by Vélez-Ibañez and Greenberg (1992) and Moll and González (1994): The notion of funds of knowledge appears to share some commonalities with other types of capital, including human, social, cultural, linguistic and symbolic capital.⁵ For example, similar to Bourdieu's (1986) definition of social capital, the concept of funds of knowledge contemplates the fact that belonging to a cluster of households can translate into benefits for its members (Velez-Ibañez and Greenberg, 1992). Furthermore, there seems to be a link between the notion of *practices*, embedded in the concept of funds of knowledge, and Bourdieu's (1977) notion of *habitus*, defined as a set of dispositions through which the world is perceived, understood, and evaluated. The connection between these two concepts stems from a common understanding of culture, not as a static and normative notion, but as something dynamic that is experienced in everyday life. We elaborate on these connections later in this article.

Funds of knowledge and educational research

The theoretical framework of funds of knowledge has primarily been used by researchers to document the wealth of knowledge existing in low-income Mexican households, to help teachers link school curriculum to students' lives (Basu and Calabrese Barton, 2007; Mercado, 2005), and to challenge the deficit model that has characterized much educational theorizing about low-income children and families (Olmedo, 1997). Research on funds of knowledge has influenced the study of different groups of under-represented students, including Mexican-Americans (Ayers et al., 2001), Puerto Ricans (Olmedo, 1997; Rios-Aguilar, 2010), Haitians (Conant et al., 2001), and African Americans (Foster and Peele, 2001). Furthermore, examples illustrate how a funds of knowledge approach can be used to study under-represented students' and families' knowledge in other countries, including England (Williams, 2005) and Australia (Andrews and Yee, 2006; Zipin, 2009).

Although research on funds of knowledge has been extensive, this approach has several limitations: (1) an overemphasis on the 'recognition' of funds of knowledge, (2) use of a single methodological approach, and (3) dependence on adult household practices as the primary unit of analysis. The emphasis on the recognition of funds of knowledge has generally *not* addressed power relations in educational institutions (including classrooms, schools, and colleges/universities). Indeed, Moll (2005) regrets that in conducting research on funds of knowledge with teachers as collaborators, they did not jointly develop a more sophisticated understanding of social class, particularly as it influences household and classroom dynamics, the production of knowledge, and the relationships between these settings. As Moll (2005) points out, the recognition of households' resources and school practices are always intricately related to broader issues of social class, ideology, and power that must situate the understanding of funds of knowledge.

Also, existing research on funds of knowledge relies on qualitative methods to describe the skills and resources embedded in the everyday lives of working-class students and their families, but has failed to examine how these multiple assets are related to a variety of student outcomes (e.g. academic achievement, occupational attainment, and civic participation). An exception to this critique is Rios-Aguilar's (2010) study that employs quantitative methods to examine the relationship between households' funds of knowledge and Latina/o students' reading achievement and literacy outcomes. The use of quantitative methodologies can also help researchers examine the variation in households' funds of knowledge, which is critical to the advancement of this conceptual framework.

Another limitation of the existing research on funds of knowledge relies in the choice of the unit of analysis. As acknowledged by Moll (2005), the existing research on funds of knowledge has informed educators and researchers primarily about adult practices and social worlds. However, children, too, create their own social worlds and funds of knowledge, which may be independent from the adult's social life.

As such, we propose the need to study the existing funds of knowledge of students and families and how these may influence students' outcomes, including educational and occupational outcomes. However, we also need to understand why such assets have or have *not* translated into better educational opportunities and outcomes for under-represented students. We argue that a funds of knowledge approach should also be studied from a *capital* perspective. This would include the examination of processes that convert or transform various funds of knowledge into other more tangible kinds of capital (e.g. better grades, higher college enrollment rates, higher civic participation). It would also include an examination of how existing power dynamics influence the conversion or transformation process. The study of funds of knowledge from a capital viewpoint promises to provide a better analysis of educational opportunity that may lead to a more nuanced understanding of certain aspects of education of under-represented students, including instruction, family-school and family-college/university relations, and the design of programs and policies aimed at improving the educational and occupational attainment of students.

The forms of capital

A theory of capital

We begin by providing a traditional notion of capital, so that the forms of capital can be appropriately understood and located. Capital, according to Marx (1933), comprises two elements: surplus value and investment. Capital is thought of as *surplus value* or profit generated by capitalists when resources (typically money) are applied to a productive effort (Lin, 1999). In addition, capital is conceived as an *investment* on the part of capitalists with expected profit in a market (Lin, 1999). This 'classical theory of capital' (Lin, 1999: 29) argues that the dominant class – the capitalists – makes the investments *and* receives the profits of the investments. Subsequent developments of the theory of capital (e.g. social and cultural capital theories [Bourdieu, 1984, 1986; Bourdieu and Passeron, 1977; Coleman, 1988]) have also argued that capital is both an investment and the profit

of the investment. For example, social capital theory recognizes capital as an investment (e.g. relationships with professionals) associated with expected profits (e.g. better jobs). However, as argued by Lin (1999), these 'neo-capitalist theories' (Lin, 1999: 29) deviate from the classical theory of capital because they argue that *all* individuals – capitalists, workers, laborers or masses – can *invest* in the acquisition of capital and *receive* the profits of such investments.

We believe the discussion of classical and neo-classical capital theories is important in educational research to understand who invests in the acquisition of capital and who receives the profit. Most importantly, it is indispensable to examine the processes in which *all* types of resources are converted or transformed into capital to create profit, particularly in schools and in the labor market. In other words, we need to investigate: (1) how students' and families' funds of knowledge are transmitted and converted into various forms of social and cultural capital and, (2) when students' and families' capitals are activated and/or mobilized to secure the profits of the investments. The next section of this article presents a brief conceptual overview of social and cultural capital.

Social and cultural capital

The concepts of social and cultural capital have captured the attention of educational researchers and policymakers aiming to improve education in the US. There is indeed a voluminous body of literature on these frameworks. In an attempt to summarize this broad literature, we developed Figure 1, which illustrates the origins, theoretical premise, and applications of these constructs in educational, sociological, and economics research. Our intention is not to provide an exhaustive review of the literature, but to highlight key aspects in the development of this literature and how it has impacted educational research.

First, most educational researchers have followed Coleman's definition of social capital (Dika and Singh, 2002). As a result, many researchers have automatically equated the notion of social capital with parental involvement (Lee and Croninger, 2001; Perna and Titus, 2005), as did Coleman (1987) in his research. When researchers use Bourdieu's theoretical guidelines, the most common application is on social networks, emphasizing the role of creating and sustaining relationships with institutional agents – teachers, counselors, and school staff – to improve educational outcomes (Stanton-Salazar and Dornbusch, 1995). Nevertheless, as argued by Allard (2005), the Bourdiean perspective in educational research, with few exceptions (Pérez and McDonough, 2008; Rios-Aguilar and Deil-Amen, 2011), has failed to examine how the characteristics of under-represented working-class students' and families' social networks (e.g. reciprocity and strength) influence the attainment of certain academic and professional goals.

Second, researchers in education have, for the most part, neglected the cultural component of social capital, that is, the multiple cultural practices that may constitute social capital relations (Cammarota et al, 2009). Zhou and Bankston (1998) studied how a relatively high level of educational achievement among Vietnamese immigrant students has been maintained in recent years by cultural values – respect for elders, cooperation, and acceptance of authority – that are conducive to achievement. These meaningful practices are the basis for the development of productive relationships, and

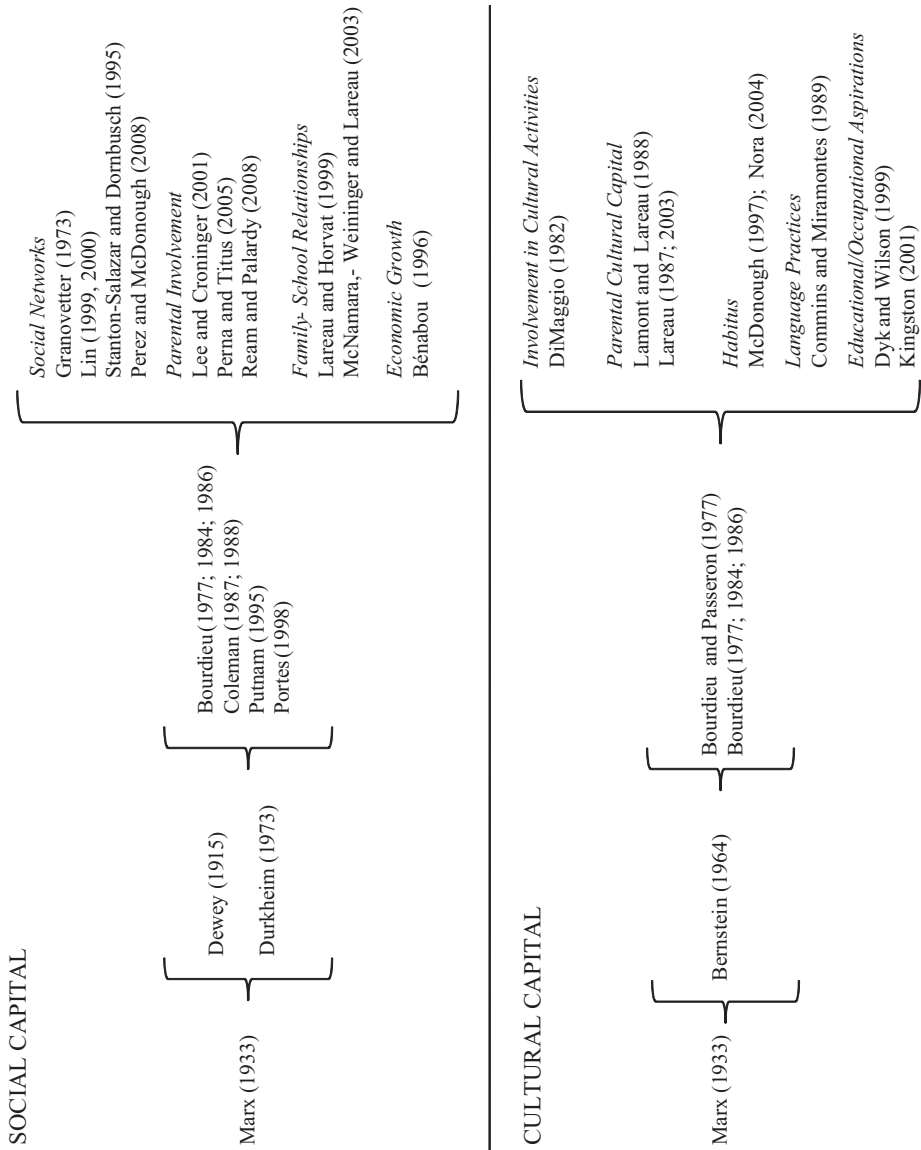


Figure 1. Social and cultural capital: origins, contemporary theoretical guidelines and applications

thus for the formation of social capital useful for educational achievement. Bankston (2004) argues that for the investment of social relations that yield profit there must be an interaction between those social relations and a set of cultural values particular to certain ethnic groups. As suggested by Bankston (2004), future social capital research needs to investigate how culture, social structures, and the socioeconomic position of different student ethnic groups combine in complex ways to produce outcomes that are often unexpected and even paradoxical.

Third, studies of social and cultural capital (Nora, 2004; Perna and Titus, 2005) have claimed that deficiencies in access to mainstream ties and institutions explain the persistent low educational attainment among working-class students. However, researchers have *not* problematized the extent to which access leads to activation or mobilization of cultural resources. Moreover, little attention has been paid to the social context within which social and cultural capital activation or mobilization occurs. These processes are important, because as Smith (2005) suggests, having access to social capital (and we argue to cultural capital) does not automatically translate into activation or mobilization.

Finally, too often, when social and, we claim, cultural capital are operationalized, scholars rely on standard measures that are *fixed* across contexts and *static* through time (Cammarota et al., 2009; Goldthorpe, 2007). As a result, the study of the forms of capital becomes stagnant and retrospective: stagnant in that it cannot change form from one individual to another or across groups; and retrospective in that it promotes a specific 'representation' of low-income students and families. That is, educationally thriving groups are assumed to possess (adequate quantities and types of) social and cultural capital, by virtue of their success; those groups not as triumphant are assumed to lack forms of capital, and would do better if they acquired more of them (Cammarota et al., 2009).

Funds of knowledge and the forms of capital: strengths and challenges

We focus this section on examining the strengths and weaknesses of the theoretical concepts of interest. Our main goal is to discuss how these frameworks can complement each other to examine educational opportunity. We concentrate our attention on highlighting nuances of these concepts, as well as key mechanisms in these theoretical frameworks, and the implications of this for advancing theory and research.

Funds of knowledge

Perhaps one of the greatest strengths of the framework of funds of knowledge is that it highlights and values the resources embedded in students, families, and communities, thus countering deficit perspectives. As Valencia (2010) points out, the '*deficit thinking paradigm*'⁶ overwhelmingly locates the basis of educational (and we would add of social and economic) failure in students, their families, and their cultures. Most of the empirical literature on funds of knowledge (Marshall and Toohey, 2010; Riojas-Cortez and Bustos Flores, 2009) has devoted considerable attention to moving away from the pathologization of under-represented students (their families and communities). Instead, the

scholarship on funds of knowledge has provided researchers *and* practitioners with findings that highlight the importance of tapping into understanding the resources that students bring to the classrooms and that challenge dominant schooling practices.

Another important strength of the funds of knowledge approach is the emphasis on the implications of utilizing the skills and resources embedded in working-class families for pedagogical action. González et al. (2005) argue that the funds of knowledge approach to understanding families and their cultural resources also includes the possibilities for changes in classroom practice. This specifically means that household practices are strategically related to classroom practices. From a funds of knowledge perspective, working with teachers is essential and requires a concerted effort to eliminate existing *deficit mentalities*. Teachers need opportunities for more meaningful experiences with students and their families. Additionally, teachers need to engage in critical thinking and participate in a constructive dialogue that challenges their misperceptions. Engaging teachers in working with families will certainly extend their understandings and will provide them with the tools to become effective teachers (Riojas-Cortez and Bustos Flores, 2009). Most recent research on funds of knowledge (Kiyama, 2010) extends this approach to other school personnel and to college faculty and staff.

While the pedagogical possibilities of funds of knowledge are evident in most of the empirical literature, very few studies have problematized the fact that some teachers are more restricted in the way they incorporate household knowledge in the classroom or in programmatic efforts. In other words, current theoretical and empirical scholarship on funds of knowledge has *not* explicitly or thoughtfully addressed issues of power, social class, ideology, and racism. Most of these articles have examined micro-level interactions without paying attention to patterns in larger structures. The reality is that underrepresented students are being educated in complex and dynamic educational contexts that also exert an influence on their educational opportunities. As Valencia (2010) points out, a series of factors play a significant role in shaping and reproducing academic failure: school (and neighborhood) segregation; language and cultural exclusion, school financing (and the financial aid system in higher education), school policies, teacher/faculty–student interactions, teacher certification, curriculum differentiation, and restrictive immigration policies.

We argue, then, that the social and cultural capital frameworks can be helpful in enriching research on funds of knowledge. Specifically, a capital perspective can help link broader contextual issues such as power with classroom, social class, and household dynamics. We turn to a few examples of how the funds of knowledge perspective can be complemented when combined with a capital perspective. Suad Nasir et al. (2008) claimed that all types of knowledge (derived from school and out-of-school settings) are not neutral with respect to power. Some types of knowledge (e.g. mathematical knowledge) are more aligned with communities of practice that hold more power. Suad Nasir et al. provide examples of programs that have altered the power relations between students, families, teachers, and schools. Their article moves research in the direction that we are arguing for. The authors rely on multiple frameworks, including cultural capital and educational anthropology, to understand power dynamics inside mathematics classrooms. Nevertheless, this study does not take into consideration key processes – conversion and

activation of funds of knowledge and the forms of capital – that are necessary for helping under-represented students to achieve their academic and life goals. Specifically, the authors fail to study the mechanisms that can help educators prepare under-represented students to simultaneously challenge existing power structures in their classrooms and be competitive in a system that relies on such power structures.

Zipin (2009) engages in a discussion about issues of power when studying funds of knowledge and cultural capital. The author affirms what other researchers have noted in calling for redistribution of elite knowledge and using the ‘lifeworld’ knowledge of ‘less powerful others’ (p. 319). However, Zipin furthers the discussion by summarizing the assumption in research that funds of knowledge are understood as a ‘subversion of’, while theoretically commensurate with, cultural capital (p. 319). Like Lubienski (2003) before him, Zipin suggests that such comparisons are inaccurate. Zipin further suggests that funds of knowledge lose their ‘lifeworld use’ when they become part of a cultural exchange used for capital accumulation. Thus, Zipin argues that when funds of knowledge are attempted for use of power accumulation and cultural profit, their use values are diminished with respect to exchange value. At the same time, Zipin suggests that when funds of knowledge are successfully incorporated into classrooms, this interrupts the traditional exchange-value process, thus shifting what type of knowledge has value. However, Zipin acknowledges that while classroom learning may be altered by the incorporation of funds of knowledge, institutional processes work to maintain traditional cultural capital exchanges. Taken together, Zipin presents a discussion about funds of knowledge, capital and power that cuts across many levels – accumulation and recognized value, classroom dynamics, and institutional processes. While the funds of knowledge framework has many strengths, particularly combating deficit ideologies, it is clear that the current framework could be strengthened by more in-depth explorations around issues of power and social class. We turn next to the challenges of social capital.

Social capital

The theoretical use of social capital has been criticized by researchers (Portes, 1998) who question the novelty and heuristic power of the concept. Sandefur and Laumann (1998) claim that in most empirical analyses that examine the effects of social capital on outcomes of interest, the concept has been modeled as either present or absent. The dichotomization of social capital (and presumably of cultural capital as well) promotes deficit thinking (Rios-Aguilar and Deil-Amen, 2011). Overlooking social relationships as a tool for empowering under-represented students can be seen as being rooted in a deficit model (Villalpando and Solorzano, 2005), wherein under-represented students’ families are presumed and represented as ‘lacking’ in social capital, which disadvantages their children. These ways of approaching social capital ignore the on-going dynamics and complexities embedded in the social networks of under-represented students and their families (Rios-Aguilar and Deil-Amen, 2011).

If social capital is to continue to endure as a useful sociological concept, researchers must pay closer attention not just to existing social networks in which students (and their families) are involved, but also to the social structures that constitute

social capital – the location and patterning of their social networks in a larger social space (Granovetter, 1973; Rios-Aguilar and Deil-Amen, 2011). There are very few examples in the literature that study social networks and the social capital embedded in these networks among under-represented students. For instance, instead of utilizing traditional conceptions of social capital, Rios-Aguilar and Deil-Amen (2011) rely on a network approach to social capital to better understand the role of social networks in shaping the decision-making processes and educational trajectories of a group of under-represented students through and beyond college. Such an approach captures the intersection of dynamics between individuals and the larger social and institutional structures within which they are embedded.

Akom (2006) offers another critique of social capital and argues that it recodes structural notions of racial inequality as various forms of capital processes and interactions. Akom suggests that issues of racism and discrimination operate just below the surface and allow for racialized social practices and policy to remain unchanged. Existing research on social capital places the burdens of social change on the individual or on communities of color, continuing to perpetuate White privilege (Akom, 2006). In sum, Akom (2006) argues that traditional definitions of social capital fail to incorporate the ways in which under-represented students' identities influence the accumulation of social capital and potential for mobility.

In spite of the aforementioned limitations, the attractiveness of social capital lies in the fact that it is a construct that can be used to examine multiple processes (e.g. conversion and accumulation) that are key to understanding students' educational trajectories by either facilitating or preventing the exchange of educationally relevant resources (Ream and Palardy, 2008). Researchers (Lareau, 2000, 2003; Ream and Palardy, 2008) have considered both Coleman's *functional* (i.e. educationally useful) and Bourdieu's *reproductive* properties of various forms of social capital through the lens of social class. These studies utilize distinct methodologies, including quantitative analyses and school ethnographies, to examine the educational usefulness of parental social capital. Findings from these studies indicate that social capital functions differently across different socioeconomic groups and reveal 'how social interaction and meaning making between individuals and within groups facilitate for some students, even while inhibiting for others, the accumulation and exchange of various kinds of educationally useful resources' (Ream and Palardy, 2008: 240). In other words, these studies found that the *convertibility* of various kinds of social capital depends on embedded social processes that have traditionally been ignored from educational research. Furthermore, these studies reveal that availability of social capital is a necessary, but not a sufficient condition to help students succeed academically. There is need to activate the existent forms of social capital.

Interestingly, Ream and Palardy (2008) and Lareau (2000, 2003) cite the work on funds of knowledge to highlight the existence of class differences in parent-child interactions. Ream and Palardy (2008) state that 'there are many impoverished and working-class parents who use their funds of knowledge . . . to engage in creative and interpretive interactions with their children, even as there are middle- and upper-class parents who do not – such patterns do exist and can be linked to class-based variation in students' performance in school . . .' (p.244). However, the way in which funds of

knowledge are understood in this context is not as resources that can have educational utility. To summarize, none of these studies have examined *if* and *how* household's (not only parents') funds of knowledge can be converted into concrete forms of capital that can be educationally significant for under-represented students' academic pursuits. Furthermore these studies fail to link their conceptualizations and findings with pedagogical practice. That is, they leave teachers and other practitioners as spectators of the educational process, when in fact, they can also be considered as a type of *functional* social capital that is critical for under-represented students' academic success.

Cultural capital

Cultural capital theory asserts that schools do not enhance students' productive capacities, but that more academically successful students possess an array of social and interpersonal dispositions that educational institutions value. In other words, cultural capital theory claims that the culture of certain individuals and households has not been valued because what prevails as valid is what the 'dominant' culture dictates as 'valuable' or 'worthy' (Bourdieu and Passeron, 1977). One of the most important features of cultural capital is that it has contributed to a better understanding of how the reproduction of inequality occurs in educational institutions, arguing that important class differences in parents' and students' attitudes or behaviors towards schools affect children's educational progress in schools (Lareau, 2003). Most of the empirical work on cultural capital has suggested that racial, ethnic, or linguistic minority students and their families may lack cultural capital or knowledge of how certain educational processes occur (Lareau, 2000; Kilgore, 1991). Clearly, this line of work assumes a deficit approach to understanding educational attainment of under-represented students.

Recent work on cultural capital (Lareau, 2000, 2003) has moved away from this deficit perspective and has found that students' social positions in educational institutions are not the result of the characteristics of individuals, such as effort, intelligence, gender, or the intrinsic merit of their cultural experiences. Instead, privileged positions are the result of dynamic and fluid interactions between students and institutions. In Bourdieuan terms, individuals of different social locations are socialized differently (Lareau, 2003). This socialization provides children with a sense of what is familiar or habitual (he labels this *habitus*). These common experiences also shape the quantity and type of resources (*capital*) that individuals inherit and utilize as they encounter various institutional arrangements (*fields*) in the social world (Lareau, 2003). The strength of this perspective on cultural capital is that it has been able to capture 'moments of cultural and social reproduction' by looking at the contexts in which capital is situated, the concrete and purposeful actions of individuals to activate their capital, and the institutional response to the activation of resources.

Unfortunately, as Lareau (2003) points out, existing research on cultural capital has not paid sufficient attention to the difference between possession of capital and activation of capital. Nor, she argues, has the work focused on examining the mediating role of individuals who serve as 'gatekeepers' and decision makers in educational institutions. Other researchers (Bills, 2003) argue that the theory of cultural capital is less clear about whether educational institutions also impart *habitus* or merely reward those students who

have already acquired it in their family and cultural settings. We argue that researchers must examine these stratification issues in a wider range of social classes.

In a similar way, but from an anthropological perspective, González et al. (2005) used the concept of *household practices* to understand the lived experiences of students and families. Indeed, the funds of knowledge approach has deliberately moved away from any uniform categorization of culture. It is critical to point out that González et al. (2005) are not implying that exclusively focusing on household practices will help students achieve their academic and life goals, but contend that an alternative perspective on such students' lives and backgrounds is needed to build respectful and pedagogically fruitful relationships between schools and communities. However, the empirical literature on funds of knowledge has not examined how and under which conditions the resources embedded in households can be converted and activated to yield (or not) educational profits. Future research on funds of knowledge needs to show empirically how individuals draw on specific funds of knowledge and on class-based cultural resources to interact with educational institutions.

To conclude this section, the funds of knowledge approach can benefit from adopting a capital perspective that not only incorporates an examination of power issues within certain contexts, but also emphasizes key processes (i.e. recognition, transmission, conversion, and activation) that can help under-represented students achieve their academic and personal goals. In a similar way, the extensive research on social and cultural capital could benefit from examining the links between power, class, and pedagogical action.

(Mis)Recognition, transmission, conversion, and activation/mobilization of funds of knowledge and the forms of capital

The framework that we propose comprises several distinct mechanisms: (mis)recognition, transmission, conversion, and activation/mobilization. We believe that combining the constructs of capital and funds of knowledge is critical for enriching research that strives to understand the factors that influence the educational access and success of under-represented students. In presenting this framework we seek to address the following questions: (1) How can funds of knowledge and social and cultural capital inform research on educational opportunities of under-represented students? (2) How can this new approach advance research and theory?

The expanded framework that we propose is important for a number of reasons. First, as discussed earlier, social and cultural capital function from a perspective that privileges the dominant classes. Continuing to study attainment solely from a capital perspective will further perpetuate a deficit literature. Moreover, conducting research entirely from a funds of knowledge perspective may understate the power structures that function within the dominant system. Second, although some educational progress has occurred lasting recent years, gaps in educational attainment between under-represented students and their White and Asian American counterparts continue to widen (Renner and Moore, 2004). Finally, in a changing social and political climate, it is expected that educational policies will also shift, resulting in unexplored implications for under-represented students. For these various reasons, constructing an enhanced

framework to guide educational research on under-represented students is important and necessary.

(Mis)Recognition

As discussed earlier, most of the literature on funds of knowledge urges teachers and school administrators to *recognize* working-class students' and families' funds of knowledge in order to help under-represented students succeed in school. However, we believe that recognition of funds of knowledge per se will not suffice to help these students to reach their goals. It is plausible that institutions and institutional agents intentionally *misrecognize* the funds of knowledge of students and families, a practice Valenzuela (1999) captures in her study of subtractive schooling processes. Bourdieu (1991) argued that misrecognition denotes an institutionally organized failure to recognize that the connection between material or cultural wealth and prestige is not natural at all, but arbitrarily and socially reproduced (Wilson, 2002). Thus, instead of simply asking teachers to recognize students' and families' funds of knowledge, we argue that it is important to help under-represented students realize that, in order to attain certain goals, they may need to: (1) recognize their funds of knowledge, (2) access various forms of capital, (3) convert their funds of knowledge into forms of capital, and (4) activate/mobilize their funds of knowledge and/or social and cultural capital. By doing so, students' resources can be acknowledged as legitimate, thus providing enhanced opportunities for educational advancement. At the same time, we argue that we must also challenge the dominant system that assigns value to certain types of resources and success. Consequently, future research must make explicit the instances and mechanisms utilized by educational institutions and institutional agents to deliberately misrecognize the forms of capital and funds of knowledge of under-represented students.

Transmission

Vélez-Ibañez and Greenberg (1992) claim that a key characteristic in the transmission of funds of knowledge is that 'multiple household domains provide children with a *zone of comfort* that is familiar, yet experimental, where error is not dealt punitively, and where self-esteem is not endangered' (p. 62). They maintain that traditional pedagogical approaches to learning used in public schools threaten the cultural frame of such *zones of comfort*. We argue that the transmission of funds of knowledge, as described by Vélez-Ibañez and Greenberg (1992), contradicts the way 'school knowledge' (Anyon, 1980: 4) is taught in many public schools around the country. Anyon (1980) claimed that the 'curriculum-in-use' (p. 32) in schools serves as a reproduction tool, as well as a barrier to transforming school practices. Curriculum as a form of reproduction is further explored in tracking literature which highlights tracking and ability grouping as examples of 'structures of opportunity' (Rosenbaum, 1978) that further stratify students into academic hierarchies in schools (Oakes, 1987), a mechanism that specifically affects low-income and students of color (Apple, 2001). Specifically, tracking works against under-represented students by reinforcing traditional forms of capital, functioning as a tool of social reproduction, and acting as mechanisms of subtractive schooling (Valenzuela, 1999).

We argue here that the framework of funds of knowledge serves as a basis for teachers to re-think what is *useful* knowledge for under-represented students. What is most important, as Anyon (1980) suggests, is to make available to all under-represented students the cultural and ideological tools to begin to transform their resources, and we argue their sociocultural capital and funds of knowledge, into agency and power. Future research needs to examine in more depth how the transmission of funds of knowledge and of social and cultural capital within households interacts with the transmission of certain types of *habitus* that occurs in educational institutions. We also argue that researchers must examine the process of transmission in a wider range of social classes and of educational contexts.

Conversion

Bourdieu (1986) and Coleman (1988) argued that the forms of capital could be converted into one another. Most research in education has focused on the type of conversions that either Coleman or Bourdieu described. We, on the other hand, define conversion as the process in which students and families convert their funds of knowledge into forms of capital. In order to be able to convert funds of knowledge into, for instance, cultural capital deemed as legitimate, it is necessary to be aware of the existing 'currency' exchange rate. The exchange rate in the field of education is determined by an 'arbitrary' class- and race-based process that is context specific. Most recently, Ream and Palardy (2008) claimed that the rate of convertibility of social capital depends on several factors, including which of the many forms of social capital are in question, how they are measured, and which outcomes are being considered. Thus, we urge researchers to take into consideration the exchange rates when analyzing the attainment of educational outcomes among under-represented students.

Activation/mobilization

The concept of activation is relatively well explained in existing literature on social and cultural capital (Lareau and Horvat, 1999; Ream and Palardy, 2008). For example, Bourdieu (1986) argued that there is a considerable difference between *potential* and *actualized* resources inherent in social networks. Also, Ream and Palardy (2008) claimed that the simple availability of parental social capital does *not* ensure its activation on behalf of students. Similarly, Lareau and Horvat (1999) discussed the critical role of activating cultural capital. They used the terms 'social inclusion' and 'social exclusion' to describe parents' efforts to become involved in schools. It is crucial, then, when understanding the activation or mobilization of capital and of funds of knowledge in school settings, that the power relationships in which they exist are not ignored. As argued by Moll and Rios-Aguilar (2008), the mobility of knowledge entails an exercise of power. Power within the educational setting is often in response to the social class or 'social location' that students and families come from (Lareau, 2003). Lareau (2003) describes the common belief that hard work will provide children with similar educational and life chances by stating, 'this perspective rejects the notion that parents' social location

systemically shapes children's life experiences and outcomes' (p. 235). Levels of capital are directly influenced by social location and are valued and rewarded accordingly. Examples of these dynamics are illustrated in the distant, separate, and subdued relationships that working-class and lower-income families experienced in school settings (Lareau, 2003); the predetermined notions and values about parental involvement (Lareau, 1987); and the way in which school personnel responded to parents' concerns and the important role that race played as it intersected with class (Lareau and Horvat, 1999).

Power relations extend into higher education as well. Higher education is described as a hierarchy where, 'agents and institutions occupy dominant and subordinate positions' (Naidoo, 2004: 458). These hierarchical attributes play out in the ways in which students are recruited and admitted into post-secondary institutions. Academically talented students are often those with higher levels of cultural capital, who come from dominant social classes, and who fit the profile of the institution's academic capital and classification (Naidoo, 2004).

These examples highlight the powerlessness and distrust that many families feel when navigating the educational system, as well as the social reproductive nature of educational institutions. Lareau's (2003) explanation of why these feelings and dynamics exist verifies the importance of theoretical frameworks like funds of knowledge. She explains, 'the routine rituals of family life are not equally legitimized in the broader society' (p. 244). Ultimately, the way in which students are excluded from the education system represent 'one of the most pervasive forms of power' (Lamont and Lareau, 1988: 159).

Given the previous discussion, we think of activation/mobilization as the process in which individuals engage to take advantage of an investment to achieve a certain goal. As Ream and Palardy (2008) suggest, parents from *all* social classes have accumulated a certain amount of social capital; nevertheless, its activation does not translate into concrete educational benefits for *all* students. In a similar way, we have argued that the mere recognition of funds of knowledge has not translated into better educational and labor market outcomes for under-represented students. Future research on educational opportunity must look closely at the specific mechanisms in which activation/mobilization of social and cultural capital and funds of knowledge occur. In addition, researchers need to pay attention to a diverse set of educational phenomena, not simply to parental involvement.

Conclusion

The proposed framework of (mis)recognition, transmission, conversion, and activation/mobilization allows for researchers to explore educational (in)equity from a combined theoretical approach of funds of knowledge *with* forms of capital. This complementary framework is significant as it shifts traditional research which studies students and families from either a funds of knowledge *or* forms of capital approach. By combining these theoretical constructs researchers can better understand the varied influences on educational access and success. Perhaps most significant is the examination of power dynamics

across individual and institutionalized processes that influence the (mis)recognition, transmission, conversion and activation/mobilization mechanisms.

There are underlying assumptions with the idea of activating capital and funds of knowledge and these invite one to question whether or not individuals, communities, and particularly under-represented students and families know they should be activating funds of knowledge, social, and cultural capital in order to attain their academic and occupational goals. An additional assumption suggests that this is the correct way of attaining one's goals. In acknowledging these assumptions, we believe the discussion provided in this article challenges researchers to think about the relationship between funds of knowledge and forms of capital; the processes occurring between these relationships; the dimensions of power between and among these relationships; and whether the educational context in which these processes are situated should continue to function in the same exclusionary ways.

Implications for future research

Perhaps one of the most pressing theoretical implications to continue to address in future research is the question of the link between funds of knowledge and other forms of capital. We learned here that what is defined as funds of knowledge in certain literature is described as social and cultural capital in others. We maintain that the terminology one uses to describe either families' funds of knowledge or individuals' capital is based primarily on social class and the privileges associated with them. 'Funds of knowledge' has become the accepted term for describing capital in lower income and immigrant communities. In addition, it seems likely that funds of knowledge are being traded for traditional forms of capital. If this is the case, can students and families learn to navigate both – switching between funds of knowledge and forms of capital when in different environments? Not only are these questions that will push researchers to better understand the theoretical parallels between funds of knowledge and forms of capital, they serve as an opportunity for future research on educational and occupational attainment.

Notes

1. In this article, we use the terms 'theoretical framework' and 'theoretical construct' interchangeably. However, we are aware that there are differences between these two terms.
2. We define under-represented students as those possessing one or more of the following characteristics: low income, racial/ethnic minority, foreign origin (immigrant, undocumented, and second-generation), foreign accent, non-English fluency, and being first-generation college students.
3. In this article, we define social capital as embedded resources or assets in social networks (Lin, 1999), and cultural capital as high-status cultural signs, such as behaviors, tastes, and attitudes that are used for social and cultural exclusion (Lamont and Lareau, 1988).
4. Community cultural wealth is defined as an array of knowledge and skills, abilities and contacts possessed and utilized by communities of color to survive and resist macro and micro forms of oppression (Yosso, 2005). Included in the concept of community cultural wealth are the following forms of capital: aspirational, familial, social, linguistic, navigational, cultural, and resistant capital.

5. Although it would be of importance to analyze the relationship between all the types of capital and funds of knowledge, it would be too ambitious to accomplish in this article. Thus, our analysis centers on studying the link between funds of knowledge and social and cultural capital.
6. Valencia (2010) defines *deficit thinking* as ‘a type of cognition that is a relatively simple and efficient form of attributing the “cause” of human behavior’ (p. xvi).

References

- Allard A (2005) Capitalizing on Bourdieu: How useful are concepts of ‘social capital’ and ‘social field’ for researching ‘marginalized’ young women? *Theory and Research in Education* 3: 63–79.
- Akom AA (2006) The racial dimensions of social capital: Toward a new understanding of youth empowerment and community organizing in America’s urban core. In: S Ginwright, P Noguera and J Cammarota (eds) *Beyond Resistance! Youth Activism and Community Change: New Democratic Possibilities for Practice and Policy for America’s Youth*, pp. 81–92. New York, NY: Taylor and Francis Group.
- Andrews J and Yee CW (2006) Children’s ‘funds of knowledge’ and their real life activities: Two minority ethnic children learning in out-of-school contexts in the UK. *Educational Review* 58: 435–49.
- Anyon J (1980) Social class and the hidden curriculum of work. *Journal of Education* 162: 67–92.
- Apple MW (2001) Markets, standards, teaching and teacher education. *Journal of Teacher Education*. 52(3): 182–96.
- Ares N and Buendía E (2007) Opportunities lost: Local translations of advocacy policy conversations. *Teachers College Record* 109(3): 561–89.
- Ayers M, Fonseca J, Andrade R and Civil M (2001) Creating learning communities: The ‘build your dream house’ unit. In: E McIntyre, A Rosebery and N Gonzalez (eds) *Classroom Diversity: Connecting Curriculum to Students’ Lives*, pp. 92–9. Portsmouth, NH: Heinemann.
- Bankston C (2004) Social capital, cultural values, immigration, and academic achievement: The host country context and contradictory consequences. *Sociology of Education* 77: 176–9.
- Basu SJ and Calabrese Barton A (2007) How do urban minority youth develop a sustained interest in science? *Journal of Research in Science Teaching* 44(3): 466–87.
- Bénabou R (1996) Heterogeneity, stratification and growth: Macroeconomic implications of community structure and school finance. *American Economic Review* 86: 584–609.
- Bensimon E (2007) The underestimated significance of practitioner knowledge in the scholarship of student success. *The Review of Higher Education* 30(4): 441–69.
- Bernstein B (1964) Elaborated and restricted codes: Their social origin and consequences. *American Anthropologist* 66: 55–62.
- Bills D (2003) Credentials, signals, and screens: Explaining the relationship between schooling and job assignment. *Review of Educational Research* 73(4): 441–9.
- Bourdieu P (1977) *Outline of a theory of practice*. New York, NY: Cambridge University Press.
- Bourdieu P (1984) *Distinction: A Social Critique of the Judgment of Taste*. Cambridge, MA: Harvard University Press.
- Bourdieu P (1986) The forms of capital. In: JG Richardson (ed.) *Handbook of Theory and Research for the Sociology of Education*, pp. 241–58. Westport, CT: Greenwood Press.
- Bourdieu P (1991) *Language and Symbolic Power*. Cambridge: Polity Press.
- Bourdieu P and Passeron JC (1977) *Reproduction in Education, Society, and Culture*. Beverly Hills, CA: SAGE.
- Cammarota J, Moll L, Cannella C and Gonzalez M (2009) Sociocultural perspectives on interpersonal relationships in schools. Manuscript submitted for publication.

- Coleman J (1987) Families and schools. *Educational Researcher* 16: 32–8.
- Coleman J (1988) Social capital in the creation of human capital. *The American Journal of Sociology* 94: S95–S120.
- Commins N and Miramontes O (1989) Perceived and actual linguistic competence: A descriptive study of four low-achieving Hispanic bilingual students. *American Educational Research Journal* 26: 443–72.
- Conant F, Rosebery A, Warren B and Hudicourt-Barnes J (2001) The sound of drums. In: E McIntyre, A Rosebery and N Gonzalez (eds) *Classroom Diversity: Connecting Curriculum to Students' Lives*, pp. 51–60. Portsmouth, NH: Heinemann.
- Dewey J (1915) *The School and Society*, rev. edn. Chicago, IL: University of Chicago Press.
- Dika S and Singh K (2002) Applications of social capital in educational literature: A critical synthesis. *Review of Educational Research* 72(1): 31–60.
- DiMaggio P (1982) Cultural capital and school success: The impact of status culture participation on the grades of U.S. high school students. *American Sociological Review* 47(2): 189–201.
- Durkheim E (1973) *Moral Education*. New York: The Free Press.
- Dyk PH and Wilson SM (1999) Family-based social capital considerations as predictors of attainments among Appalachian youth. *Sociological Inquiry* 69(3): 477–503.
- Foster M and Peele T (2001) Ring my bell: Contextualizing home and school in an African American community. In: E McIntyre, A Rosebery and N Gonzalez (eds) *Classroom Diversity: Connecting Curriculum to Students' Lives*, pp. 27–36. Portsmouth, NH: Heinemann.
- Goldthorpe J (2007) 'Cultural capital': Some critical observations. In: S Scherer et al. (eds) *From Origin to Destination: Trends and Mechanisms in Social Stratification Research*, pp. 78–101. Chicago, IL: University of Chicago Press.
- González N, Moll L and Amanti C (2005) *Funds of Knowledge: Theorizing Practices in Households, Communities, and Classrooms*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Granovetter M (1973) The strength of weak ties. *American Journal of Sociology* 78(6): 360–80.
- Kilgore S (1991) The organizational context of tracking in schools. *American Sociological Review* 56: 189–203.
- Kingston P (2001) The unfulfilled promise of cultural capital theory. *Sociology of Education* 74: 88–99.
- Kiyama JM (2010) College aspirations and limitations: The role of educational ideologies and funds of knowledge in Mexican American families. *American Educational Research Journal* 47(2): 330–56.
- Lamont M and Lareau A (1988) Cultural capital: Allusions, gaps and glissandos in recent theoretical developments. *Sociological Theory* 6: 153–68.
- Lareau A (1987) Social class differences in family–school relationships: The importance of cultural capital. *Sociology of Education* 60(2): 73–85.
- Lareau A (2000) *Home Advantage: Social Class and Parental Intervention in Elementary Education*. Lanham, MD: Rowman and Littlefield.
- Lareau A (2003) *Unequal Childhoods: Class, Race, and Family Life*. Berkeley, CA: University of California Press.
- Lareau A and Horvat E (1999) Moments of social inclusion and exclusion: Race, class and cultural capital in family–school relationships. *Sociology of Education* 72(1): 37–53.
- Lee V and Croninger R (2001) Elements of social capital in the context of six high schools. *Journal of Socio-Economics* 30: 165–7.
- Lin N (1999) Building a network theory of social capital. *Connections* 22(1): 28–51.
- Lin N (2000) Inequality in social capital. *Contemporary Sociology* 29: 185–95.
- Lubienski S (2003) Celebrating diversity and denying disparities: A critical assessment. *Educational Researcher* 32: 30–8.

- Marshall E and Toohey K (2010) Representing family: Community, funds of knowledge, bilingualism and multimodality. *Harvard Education Review* 80(2): 221–41.
- Marx K (1933 [1849]) *Wage-labour and Capital*. New York: International Publishers Co.
- McDonough P (1997) *Choosing Colleges: How Social Class and Schools Structure Opportunity*. New York: State University of New York Press.
- McNamara E, Weininger E and Lareau A (2003) From social ties to social capital: Class differences in the relations between schools and parent networks. *American Educational Research Journal* 40(2): 319–51.
- Mercado C (2005) Reflections on the study of households in New York City and Long Island: A different route a common destination. In: N González, L Moll and C Amanti (eds) *Funds of Knowledge: Theorizing Practices in Households, Communities, and Classrooms*, pp. 233–55. Mahwah, NJ: Lawrence Erlbaum Publishers.
- Moll LC (2005) Reflections and possibilities. In: N González, L Moll and C Amanti (eds) *Funds of Knowledge: Theorizing Practices in Households, Communities, and Classrooms*, pp. 275–88. Mahwah, NJ: Lawrence Erlbaum Associates.
- Moll L and González N (1994) Lessons from research with language minority children. *Journal of Reading Behavior* 25: 439–56.
- Moll L and Greenberg J (1990) Creating zones of possibilities: Combining social contexts for instruction. In LC Moll (ed.) *Vygotsky and Education*, pp. 319–48. Cambridge: Cambridge University Press.
- Moll L and Rios-Aguilar C (2008) Immigrant families and the mobilization of knowledge. Keynote address presented at the ONS Conference, University of Guelph, Canada.
- Moll L, Amanti C, Neff D and González N (1992) Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into Practice* 31: 132–41.
- Naidoo R (2004) Fields and institutional strategy: Bourdieu on the relationship between higher education, inequality, and society. *British Journal of Sociology of Education* 25: 457–71.
- Nora A (2004) The role of habitus and cultural capital in choosing a college, transitioning from high school to higher education and persisting in college among minority and nonminority students. *Journal of Hispanic Higher Education* 3(2): 180–208.
- Oakes J (1987) Tracking in secondary schools: A contextual perspective. *Educational Psychologist* 21(2): 129–54.
- Olmedo P (1997) Voices of our past: Using oral history to explore funds of knowledge within a Puerto Rican family. *Anthropology and Education Quarterly* 28: 550–73.
- Pérez P and McDonough P (2008) Understanding Latina and Latina/o college choice: A social capital and chain migration analysis. *Journal of Hispanic Higher Education* 7: 249–65.
- Perna L and Titus M (2005) The relationship between parental involvement as social capital and college enrollment: An examination of racial/ethnic group differences. *Journal of Higher Education* 76: 485–518.
- Portes A (1998) Social capital: Its origins and applications in modern society. *Annual Review of Sociology* 24: 1–24.
- Putnam R (1995) Tuning in, tuning out: The strange disappearance of social capital in America. *Political Science and Politics* 28(4): 664–83.
- Ream R and Palardy G (2008) Reexamining social class differences in the availability and the educational utility of parental social capital. *American Educational Research Journal* 45(2): 238–73.
- Renner KE and Moore T (2004) The more things change, the more they stay the same: The elusive search for racial equity in higher education. *Analyses of Social Issues and Public Policy* 4(1): 1–15.
- Riojas-Cortez M and Bustos Flores B (2009) Sin olvidar a los padres: Collaborating within school and university partnerships. *Journal of Latinos and Education* 8(3): 231–9.

- Rios-Aguilar C (2010) Measuring funds of knowledge: Contributions to Latina/o students' academic and non-academic outcomes. *Teachers College Record* 112(8): 2209–57.
- Rios-Aguilar C and Deil-Amen R (2011) Beyond getting in and fitting in: An examination of social networks and professionally-relevant social capital among Latina/o university students. *Journal of Hispanic Higher Education* (under review).
- Rios-Aguilar C and Kiyama JM (forthcoming) Funds of knowledge: A proposed approach to study Latina/o students' transition to college. *Journal of Latinos and Education* 11(1).
- Rosenbaum JE (1978) The structure of opportunity in school. *Social Forces* 57(1): 236–56.
- Sandefur RL and Laumann EO (1998) A paradigm for social capital. *Rationality and Society* 10(4): 481–501.
- Smith S (2005) 'Don't put my name on it': Social capital activation and job-finding assistance among the Black urban poor. *American Journal of Sociology* 111(1): 1–57.
- Stanton-Salazar R and Dornbusch S (1995) Social capital and the reproduction of inequality: Information networks among Mexican-origin high school students. *Sociology of Education* 68: 116–35.
- Suad Nasir N, Hand V and Taylor EV (2008) Culture and mathematics in school: Boundaries between 'cultural' and 'domain' knowledge in mathematics classroom and beyond. *Review of Research in Education* 32: 187–240.
- Valencia R (2010) *Dismantling Contemporary Deficit Thinking: Educational Thought and Practice*. New York, NY: Taylor and Francis.
- Valenzuela A (1999) *Subtractive Schooling: U.S.–Mexican youth and the politics of caring*. Albany, NY: State University of New York Press.
- Vélez-Ibáñez C (1988) Networks of exchange among Mexicans in the U.S. and Mexico: Local level mediating responses to national and international transformations. *Urban Anthropology* 17(1): 27–51.
- Vélez-Ibáñez C (1996) *Border Visions: Mexican Cultures of the Southwest United States*. Tucson, AZ: University of Arizona Press.
- Vélez-Ibáñez C and Greenberg J (1992) Formation and transformation of Funds of Knowledge among U.S.-Mexican households. *Anthropology and Education Quarterly* 23: 313–35.
- Villalpando O and Solorzano DG (2005) The role of culture in college preparation programs: a review of the research literature. In: WG Tierney, ZB Corwin and JE Colyar (eds) *Preparing for College: Nine Elements of Effective Outreach*, pp.13–28. Albany, NY: State University of New York Press.
- Vygotsky L (1978) Speech and thinking. In: Vygotsky LS, *Collected Works* Vol. 1, ed. R Rieber and A Carton, trans. N Minick, pp. 39–285. New York: Plenum.
- Williams A (2005) 'Right get your book bags!': Siblings playing school in multiethnic London. In: E Gregory, S Long and D Volk (eds) *Many Pathways to Literacy: Young Children Learning with Siblings, Grandparents, Peers, and Communities*, pp. 52–65. New York, NY: Taylor and Francis.
- Wolf E (1966) *Peasants*. Englewood Cliffs, NJ: Prentice Hall.
- Yosso T (2005) Whose culture has capital? A Critical Race Theory discussion of community cultural wealth. *Race, Ethnicity, and Education* 8(1): 69–91.
- Zipin L (2009) Dark funds of knowledge, deep funds of pedagogy: Exploring boundaries between lifeworlds and schools. *Discourse: Studies in the Cultural Politics of Education* 30(3): 317–31.
- Zhou M and Bankston CL (1998) *Growing up American: How Vietnamese Children Adapt to Life in the United States*. New York: Russell Sage Foundation.

Biographical notes

Cecilia Rios-Aguilar is an assistant professor at the Center for the Study of Higher Education at the University of Arizona, Tucson, Arizona. Her research uses a variety of conceptual frameworks and of statistical approaches to study the educational and occupational trajectories of under-represented minorities, including Latina/os, English learners, and immigrant and second-generation students. *Address:* Center for the Study of Higher Education, College of Education, 1430 East Second Street, University of Arizona, Room 327A, PO Box 210069, Tucson, Arizona 85721, USA. [email: ceciliar@email.arizona.edu]

Judy Marquez Kiyama is an assistant professor in the Warner School of Education and Human Development, University of Rochester, New York. Her research focuses on college access and transition with particular interest in the families and communities of under-represented students. *Address:* Warner School of Education and Human Development, University of Rochester, Dewey 1-337, PO Box 270425, Rochester, New York 14618, USA. [email: jkiyama@warner.rochester.edu]

Michael Gravitt is a PhD candidate at the Center for the Study of Higher Education at the University of Arizona. He is also the Director of Enrollment Management and Student Services of the College of Fine Arts at the University of Arizona. *Address:* Center for the Study of Higher Education, College of Education, 1430 East Second Street, University of Arizona, Room 327A, PO Box 210069, Tucson, Arizona 85721, USA. [email: mgravitt@email.arizona.edu]

Luis C. Moll is professor of Language, Reading and Culture at the University of Arizona College of Education, Tucson, Arizona. His research addresses the connections among culture, psychology and education, especially in relation to the education of Latino children in the US. *Address:* University of Arizona College of Education, Room 507, PO Box 210069, Tucson, Arizona 85721, USA. [email: moll@email.arizona.edu]