Cognitive Development, Global Learning, and Academic Progress: Promoting Teacher Readiness for CLD Students and Families

Kevin G. Murry
Kansas State University

Abstract

Despite over two decades of steady growth in the school-age population of culturally and linguistically diverse (CLD) students, recent analyses indicate that classroom teachers remain inadequately prepared for the differential needs and assets of these students. Increasingly, the accommodation readiness spiral (ARS) provides a useful heuristic for the prioritization of teacher capacity building for classroom diversity (Herrera & Murry, 2011). The ARS highlights the fundamental importance of teachers’ readiness to maximize school-family connections (especially sociocultural/culture-bound contexts and scripts for learning) to improve students’ cognitive development and academic achievement in the classroom. The ecocultural approach offers a promising line of research for the optimization of these sociocultural routines in school-based and classroom activities that target new learning. Already this approach offers a variety of ecocultural strategies for teachers and teacher educators, three of which are detailed in this article: family support networks, communities of mothers, and family spaces for educative and decisive participation.

Perhaps the most salient trend in schools of the 21st century is increasing student diversity in the classroom. The fastest growing and most heterogeneous group of students today is that often referred to as culturally and linguistically diverse (CLD). Like many Americans, these students are immigrants from another country (Cushner, McClelland, & Safford, 2012). Some are recently immigrated; others are second- or third-generation Americans. CLD students constitute almost one-quarter of the child population in the United States (Passel, 2011). This is the highest proportion in the last 90 years. Recent forecasts indicate that the percentage of these children is expected to grow to about one-third by 2035 (Passel, 2011; Passel & Cohn, 2010).

General education teachers are often the least prepared for these rapidly changing CLD student demographics. Recent surveys and analyses of U.S. teachers by the National Staff Development Council are especially notable (NSDC, 2009, 2010). In 2009, the NSDC found that more than 66 percent of teachers had not received even one day of staff development specific to the assets and needs of CLD students during the previous three years of teaching. In fact, although most of these students are educated in general education classrooms for the greatest portion of the school day, the majority of teachers in these classrooms have had little or no professional development for meeting the differential needs of CLD students (Cosentino De Cohen & Clewell, 2007).
Readiness for the Accommodation of Increasing Classroom Diversity

Elsewhere, we have argued that the capacities that grade-level teachers should bring to culturally and linguistically diverse classrooms are effectively captured by a framework known as the accommodation readiness spiral, or ARS (Herrera & Murry, 2011; Herrera, Murry & Pérez, 2008). Highly effective teachers of these students target not one way, but rather, mutual accommodation (Arias & Morillo-Campbell, 2008; Espinoza, 2011; Nieto, 1992). Mutual accommodation expects unilateral accommodation from neither the student nor the educator. Rather, they collaborate to maximize the resources that each brings to the educational process and to select from among “the best strategies at the disposition of each” (Nieto, 1992, p. 258). Mutual accommodation thus defines a process in which both teacher and student are enriched. As the funds of knowledge that the CLD student brings to the classroom (e.g., bilingualism, cross-national experiences, prior schooling) are optimized, the teacher’s mutually accommodative responses to those assets typically include more thorough pre-assessments, highly differentiated instruction, alternative assessments of learning (e.g., population specific), and critical reflection on the success of differentiated practices. So, throughout the remainder of this article, our use of the term accommodation will indicate a goal of mutual accommodation among teachers and their CLD students.

A Framework for Accommodation/Teacher-Readiness in Diverse Classrooms

In today’s complex and diverse classrooms, the teacher’s preparedness to appropriately and effectively accommodate the CLD student is demonstrated by the six levels of the ARS (Herrera & Murry, 2011). These six levels of professional readiness are summarized in Figure 1.

The ARS is an empirical framework for readiness and is based on over ten years of field experience and evolving research with CLD students and their educators. The spiral ranges from Level 1, readiness for critical reflection on practice, to Level 6, readiness for application and advocacy. Necessarily, each of the six levels of the accommodation readiness spiral is progressive and is increasingly indicative of the teacher’s capacity building for effective praxis with the CLD student.

A spiral best illustrates the six levels of readiness because the process of capacity building for each subsequent level is progressive. However, regression to a prior level is always a possibility. This is so because the teacher’s efficacy with complex and frequently unfamiliar interactions across cultures and languages tend to demand a capacity for critical reflection. This capacity involves not only the validity testing of assumptions about students and families but a willingness to contextualize those assumptions in one’s own socialization to a particular culture. Recurrent reflection on such interactions progressively builds the teacher’s readiness to maintain progression up the spiral toward readiness for effective practices with classroom diversity.
The double-helical nature of the ARS further illustrates potential differences between apparent and demonstrable readiness for accommodation among teachers. That is, the former, which represents what the teacher believes and espouses about his...
or her readiness for classroom diversity, may not faithfully parallel the latter, which accounts for demonstrable and effectual readiness in practice. Demonstrable or practical readiness, unlike apparent, is often more indicative of the teachers’ unchecked preconceptions and assumptions about students and families whose culture or language are different. Without regular attention to these differing helices of the spiral, the spiral becomes unstable – that is, these unsurfaced, unchallenged biases tend to hinder efficacy in professional practice with diversity.

As a heuristic for diversity readiness, the ARS offers teachers and teacher developers visual benchmarks for growth and the capacity building essential to differentiated practice. Ultimately, the spiral demonstrates that professional development for classroom diversity begins with teachers, but culminates with applications and advocacy for CLD students and their families.

School-family dynamics of accommodation. In particular, the ARS informs us that readiness for the mutual accommodation of increasing levels of cultural and linguistic diversity in the schools surrounds certain fundamental understandings of both what the CLD student brings to the learning environment and the potential contribution to learning by family members (Level 2 of the ARS). In fact, it has been estimated that out-of-school variables of home and family influence are more powerful predictors of student success than the in-school variables of curriculum and instruction (Halgunseth & Peterson, 2009; Semke & Sheridan, 2011; Weiss, Bouffard, Bridglall, & Gordon, 2009). Thus teachers benefit from explicit preparation and professional development that enhances their capacities to build, and to elaborate upon, school-family connections. Among the many benefits of such capacity building among teachers in diverse classrooms, research and critical analyses of the literature have highlighted the following positive outcomes:

- accelerated first and second language acquisition,
- improved classroom participation and school attendance,
- sustained academic achievement gains,
- enhanced interest in science among adolescents, and
- enhanced growth in cognitive abilities across subject areas.

Yet, research on specific ways that teachers might maximize school-family connections, especially connections with CLD families, is extremely limited (Semke & Sheridan, 2011). In addition, capacity building for effective school-home and school-family connections remains one of the most neglected aspects of both preservice teacher preparation and inservice professional development for teachers and other school educators (Arias & Morillo-Campbell, 2008; Weiss et al., 2009). Of particular concern is the surprising range of assumptions and misconceptions that continue to surround the potential contribution of CLD family members to the learning environment (Bullard, 2008; Fuller & Garcia Coll, 2010; Herrera & Murry, 2011).

Therefore, this article will focus on Level 2 of the ARS, readiness for CLD students and families. More specifically, this discussion will emphasize family
involvement in the learning environment and the maximization of school-family connections as fostered and nurtured by the teachers of CLD students. Perhaps one of the most pragmatic ways to organize this discussion is to frame it in terms of the key critical dimensions of the CLD student biography: the sociocultural, cognitive, academic, and linguistic dimensions. Elsewhere, we have detailed the ways in which these dimensions define the challenges that CLD students confront both inside and outside the classroom and the essential processes that they must transcend to be successful (Herrera & Murry, 2011).

Readiness for CLD Family Accommodation: Cognitive and Academic Dimensions

Central to these challenges and processes are the cognitive and academic dimensions of CLD students' biographies and the ways that family connectedness may promote growth in each of these. By definition, each of these dimensions is critical to adequate yearly progress (AYP) among CLD students, as necessitated by No Child Left Behind (NCLB, 2001). Nevertheless, research or syntheses that yield strategies for teachers that are specific to each dimension are extremely limited in the current literature (Grant, Wong, & Osterling, 2007; Koga & Hall, 2009). As a result, a wide range of school and classroom practices remain grounded in persistent myths and misconceptions about the cognitive and academic potentials of CLD students, as well as, the capacities of their family members to influence those potentials.

Misconceptions about students’ cognitive and academic capacities. For example, one widely circulated misconception argues that CLD students who are limited in their English language proficiency along with their parents who are assumed to be limited English proficient (LEP), are by association cognitively and academically deficient, as well. Among the realities that this “deficit orientation” fails to account for are the following. First, many CLD students bring extensive and seldom maximized schooling and learning biographies from their home country. Second, some CLD students have been educated in private (e.g., Catholic) schools outside (and sometimes inside) the United States and possess skills in certain subjects that are above grade-level expectations in the U.S. public schools. Third, the extent to which a CLD student’s prior cognitive and academic biographies contribute to his or her success in school tends to be a function of the teacher’s readiness to constructively connect these with current learning in the classroom.

By way of example, recent research indicates that CLD family socialization perspectives and goals contribute to resiliency (e.g., personalismo in Hispanic cultures) among children in cognitively demanding tasks and academically rigorous learning environments (Garcia Coll& Marks, 2009; Halgunseth, Ispa, & Rudy, 2006; Hardway & Fuligni, 2006; Umana-Taylor, & Guimond, 2010). Teachers who are ready to incorporate these perspectives are contextually situated to effectively maximize cultural and academic learning goals in the classroom. For instance, teachers with a cross-cultural understanding of personalismo frequently engage in social, small talk (e.g., about home, family, friends, interests) with CLD students. In turn, these students, with
whom the teacher has targeted personalismo, are then more likely to ask for assistance or posit questions about academic constructs that are difficult or foreign to their biographical range of experiences.

Among other misconceptions associated with the cognitive and academic dimensions of student learning and CLD family connectedness with the school are (a) the prior schooling experiences of CLD students in countries outside the United States are consistently inferior; (b) the curriculum for CLD students and the homework sent to the families of those students should emphasize skill-building exercises, drills, and rote memorization schemes; and (c) since these students are not yet capable of higher-order thinking skills in English, and (d) teaching to the test best insures their capacities to demonstrate AYP on high-stakes assessments (Arias & Morillo-Campbell, 2008; Suarez-Orozco, 2010; Umana-Taylor & Guimond, 2010).

**Capacity building for students’ cognitive and academic growth.** On the other hand, once the myths and misconceptions about CLD students and their families are set aside, the findings of research and cross-cultural analyses in the social sciences strongly indicate that the teacher’s invitations (or lack thereof) are pivotal in determining the degree to which CLD family members are respected and effective contributors to the student’s cognitive development and academic performance (Arzubiaga, MacGillivray, & Rueda, 2002; Arzubiaga, Rueda, & Monzó, 2002; Fuller & Garcia Coll, 2010; Halgunseth et al., 2006; Umana-Taylor & Guimond, 2010). That is, CLD family connectedness with the cognitive and academic dimensions of the child’s success in school may be powerfully determinate upon perceived invitations from either the teacher directly or the CLD student, as indirectly prompted by the teacher (Arias & Morillo-Campbell, 2008; Hardaway & Fuligini, 2006).

In part, these findings may point to the high degree of deference to the education professional that many CLD family members frequently tend to exhibit. Yet, these findings also remind us of the high degree of readiness for family-based mores and cognitive-development scripts that effective teachers of CLD students need to demonstrate in the increasingly diverse classroom.

**An Ecocultural Approach to CLD Student and Family Accommodation and Efficacy**

One of the most promising frameworks for CLD family readiness among teachers, at the cognitive and academic levels, is an *ecocultural* approach. Consistent with the notion of the sociocultural dimension as central to the CLD student and family biography (Herrera & Murry, 2011), an ecocultural approach builds upon the existing body of research, which argues that cognitive development and academic learning are culturally, historically, and socially mediated processes (Arzubiaga, MacGillivray, & Rueda, 2002; Arzubiaga et al., 2002; Fuller & Garcia Coll, 2010; Janhonen-Abruquah, 2006; Suarez-Orozco, 2010).
Following this ecocultural perspective, a universal task for CLD families is to organize a sustainable daily routine (Arzubiaga et al., 2002). The social and cultural dimensions of this daily routine, in turn, produce the zones of proximal development in which the CLD student’s cognitive and academic growth is influenced through interactions with more capable parents, siblings, aunts, uncles, grandparents, and other extended family members (Arzubiaga et al., 2002; Fuller & Garcia Coll, 2010). This ecocultural approach further assumes that the adaptations required of the family involve balancing ecology (resources, constraints), culture (philosophies, values, schema), and the needs and capacities of its members. From an ecocultural perspective, thinking (i.e., cognition) and learning are inseparable from the contexts in which they occur or the circumstances and interactions of those involved in those contexts (Arzubiaga et al., 2002; Umana-Taylor & Guimond, 2010).

For example, families construct their own ecocultural niches. Janhonen-Abruquah (2006) has likened this theoretical concept to the placement of the transnational family in a hot air balloon basket. Although the family is inevitably affected by social and economic forces, they take individual and collective action to modify and counteract them. From this mix of forces and actions, the family constructs its ecocultural niche, through which children’s global learning and approaches to academics are notably influenced.

The findings of recent research and analyses utilizing an ecocultural approach have important implications for the efficacy of teachers who are seeking to promote family connections with, and contributions to, cognitive development and academic achievement among CLD students (Fuller & Garcia Coll, 2010; Garcia Coll & Marks, 2009; Halgunseth et al., 2006; Hardway & Fuligni, 2006; Umana-Taylor & Guimond, 2010). In particular, the following findings have implications for teacher readiness to promote and sustain family involvement or connectedness in CLD students’ cognitive and academic development.

- The promotion of cognitive development by family members, through culture-bound activities (e.g., by maximizing the youth’s desire to be competent with intracultural family routines and learning scripts), has a positive influence on both learning motivation and self-concepts about learning among CLD students.
- Family knowledge about how institutions (e.g., schools) work (instrumental knowledge) influences both student learning (present) and the student’s involvement in schools as a parent (future).
- CLD students’ ways of knowing and thinking depend upon, not just cultural schema or scripts, but also the environmental contexts (i.e., social-ecological, global learning) to which family members have been exposed.
- Family connectedness that results in a strong sense of ethnic identity tends to impact the student’s sense of engagement with and retention of learning.
- The value that CLD students place upon learning tends to be inversely/indirectly proportional to the workload of family members.
These findings of ecocultural research not only reflect the significance of families in student success; they also highlight the importance of teacher readiness to promote family involvement in the student’s cognitive development and academic progress. Critical to that involvement is the teacher’s capacity to consider the ways in which the family is balancing cultural traditions and parenting goals in cognitive development for the child against the constraints of their social ecology, including daily work obligations, living conditions, language isolation, and time for literacy development.

For instance, among CLD students of Mexican descent (currently the largest CLD group), language brokering (translating, interpreting, or mediating information for parents and family) is prevalent, especially among girls (Love & Buriel, 2007). Brokering generally tends to accelerate sociocognitive development as brokers negotiate decisions that often impact the entire family. Research associated with the positive effects of brokering indicates that it contributes to feelings of self-efficacy, biculturalism, acculturation, and academic performance (Acoach & Webb, 2004; Love & Buriel, 2007). This is especially true in households where there is a good fit between the brokering task and accomplishments of the student and the cultural role expectations of the family.

**Ecocultural strategies for cognitive and academic growth through families.** Increasingly, the ecocultural perspective on family involvement in the CLD student’s cognitive development and academic achievement suggests certain strategies that teachers may utilize to promote family connectedness with positive learning outcomes. Among strategies pivotal for success is the shaping of family support networks. Although this strategy demands of schools and teachers an initial and sometimes considerable investment in time and relationship building, the dividends to be gained accrue to both families and teachers throughout the school year.

**Family support networks.** In order to implement this strategy effectively, key school faculty and gatekeepers, especially teachers, contact those resource providers, visit or otherwise link with those providers or agencies (e.g., family literacy services, migrant education programs, boys and girls club), and attend those professional development sessions that allow them to develop a network of collaborators in the social ecosystem of the school. Such collaborators can, in turn, assist both the teacher and the family with, for example, access to affordable childcare, financial assistance to reduce the necessity for overtime at work, family support services, less expensive healthcare services, low-cost tutoring, and more.

Network-based collaborations and interventions of this sort promote not only family connectedness within the home (and therefore, CLD students’ self-concepts about learning), but also family connectedness with the learning environment at school. For example, one factor that busy school educators may overlook is that many immigrant and refugee students and their families face unique emotional and behavioral health issues, and these issues can operate as delimiters to classroom learning and to student achievement.
In particular, cross-cultural adjustment challenges tend to impact immigrant students’ capacities for self-regulation. Self-regulation is the ability to manage one’s behavior so as to withstand impulses, maintain focus, and undertake tasks even if there are other more absorbing alternatives available. Self-regulation underlies the ability to undertake tasks, especially those that are cognitive (Eisenberg et al., 2004). So it has implications for how students get along with peers and family, as well as their capacities to focus and learn in the classroom.

Teachers and administrators, held accountable for student achievement, focus on teaching strategies and educational performance; and they may miss cues pointing to self-regulation issues that impact CLD student achievement. Partnering with a network of mental health collaborators may help school faculty and staff in recognizing the self-regulation needs of immigrant and refugee students, and in the engagement of the entire family in addressing them.

Communities of mothers. Research by Rogasner (2010) found that the strategy of developing a community of mothers was surprisingly effective for both CLD parents and their children. She found that many CLD mothers were isolated from other families. For example, most mothers went outside of their homes only to visit the store, attend church, go to a neighbor’s home, or pick-up their children from school. The mothers often lived far away from their own natal families. Familial support was, therefore, often not available to these mothers. Some related their fears about going outside, especially in the daytime. The mothers who did not work outside the home had limited experience interacting with other mothers outside of their immediate surroundings. Yet, when the mothers left their homes, they always walked with their children, no matter the distance or weather.

Schools and teachers, who foster and nurture a community of mothers, therefore accomplish dual purposes. On the one hand, this second strategy not only fulfills parental needs for connectedness, it also enables new and purposive links among parents, schools, teachers, and students. In turn, these links encourage opportunities for mothers to extend the cognitive development of CLD students through daily routines (e.g., walks, story-telling time) that prepare the student for academic tasks and challenges, as communicated to the mother by the teacher or other school faculty.

Family spaces for educative and decisive participation. Recent research, undertaken using a critical communicative methodology, found that schools with informal spaces for families and school faculty to dialogue increased both the educative and decisive participation of CLD families in school goals and objectives for learning (Díez, Gatt, & Racionero, 2011). Educative participation spaces provide families with unstructured, communicative opportunities to share assets (including background experiences, funds of knowledge, and ways of knowing) useful to teachers in communicating, reinforcing, and evaluating learning objectives and outcomes targeted in classrooms. Decisive participation spaces afford parents the background and
understandings necessary to make informed decisions about the approaches, methods, or strategies that the school and teacher are utilizing to encourage cognitive development and academic achievement among CLD students.

Some schools begin the implementation of this third strategy of educative and decisive participation spaces by being creative in the formulation of get-acquainted venues, such as family movie nights (great for parents who work days) or lunch with the teacher (better for parents who work night shifts). Subsequently, faculty often progress toward more educative venues such as a share with our school fair. Using this tool, teachers, administrators, and translators operate knowledge and information sharing booths. At these content-area or grade-level booths, school educators share key lesson topics, thematic units, and learning outcomes that are targeted during the school year. Family members are then invited to share their experiences with, perspectives on, or knowledge about these with school faculty. Highly effective schools offer more institutionalized opportunities for educative participation through venues such as a family-partner sharing zone or a family-teacher lounge.

Among venues that enable the decisive participation of CLD families, few are as recurrently cited in the literature as parent or family education programs, especially those that are externally funded, responsive to family work schedules, and conducted at the school where the children attend (Arias & Morillo-Campbell, 2008; Rogasner, 2010; Weiss et al., 2009). Those that emphasize culturally relevant texts (e.g., Los Siete Medios de Llenar una Bolsa Vacia by George S. Clason) in family literacy development have proven especially well attended, enabling, and evocative (Arias & Morillo-Campbell, 2008; Larrotta & Gainer, 2008). Such venues further encourage students’ cognitive development and academic achievement by inspiring deep, topical conversations (opportunities for literacy development situated in culturally-relevant thinking) between parents and their children and by situating opportunities for reflection (metacognition) on relevant life experiences.

Conclusion

Already about one-quarter of the nation’s school-age population, the number of culturally and linguistically diverse (CLD) students is expected to grow to about one-third by 2035. Yet, recent surveys and analyses indicate that teachers remain inadequately prepared for the differential assets and needs of this student population. The Accommodation Readiness Spiral (ARS, Herrera & Murry, 2011) offers a useful framework for prioritizing teachers’ capacity building for this persistent and growing challenge in the nation’s classrooms. As illustrated by the spiral (Figure 1), the teacher’s readiness to build and elaborate upon school-family connections is pivotal to CLD students’ cognitive development and academic success in the classroom. Although research on such connections is limited, an ecocultural approach to readiness and efficacy offers a great deal of promise. It is especially effective in helping educators situate goals and scripts for cognitive and academic growth in the critical and sociocultural contexts through which students have developed and learned in home and
in familial settings. Inter alia, these contexts and associated expectations, scripts, and routines promote student engagement, global learning perspectives, the tendency to persist in learning, and academic resiliency. Of particular value to teacher educators, the ecocultural perspective yields a variety of strategies for teachers, including family support networks, well-supported communities of mothers, and spaces for educative and decisive participation, to maximize the assets of, yet meet the differential learning needs of, this growing population of students.

References


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About the Author

Kevin Murry, Ph.D., is an Associate Professor of Curriculum and Instruction at Kansas State University. His recent research and scholarship have emphasized teacher readiness for best practice with culturally and linguistically diverse students, culturally responsive teaching and assessment practices, as well as, the linguistic and cross-cultural dynamics of critical-reflective and biography-driven teaching. His recent publications have appeared in the Journal of Hispanic Higher Education, the Journal of Teaching and Learning, and the Bilingual Research Journal. Dr. Murry has written texts for Pearson/Allyn and Bacon, as well as text chapters for Erlbaum & Associates and ATE/ACEI. E-mail: xmas@ksu.edu