Cultural considerations with Response to Intervention models

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Now that the Individuals with Disabilities Education Improvement Act (IDEA, 2004) has been reauthorized, states have the option of discontinuing the use of IQ–achievement discrepancy formulas and using Response to Intervention (RTI) criteria as part of the special education identification process. This change has dramatic implications for culturally and linguistically diverse students who historically have been disproportionately overrepresented in special education programs (Artiles, Trent, & Palmer, 2004; Donovan & Cross, 2002; Heller, Holtzman, & Messick, 1982). RTI models hold promise for preventing academic failure by providing support for culturally and linguistically diverse students before they underachieve (Donovan & Cross; Vaughn & Fuchs, 2003). By offering quality literacy instruction in a supportive general education environment, we hope to decrease the number of students who are inappropriately referred to and placed in special education.

Although RTI models may be implemented in various ways (see Fuchs & Fuchs in this issue), and differ in the number of levels of support provided, the overall framework of the model remains the same. Generally, the first tier is considered quality instruction and ongoing progress monitoring within the general education classroom. The second tier is characterized by the provision of intensive intervention support for students who have not met expected benchmarks (i.e., who have not made adequate progress in the core program, as assessed using progress monitoring measures such as the Dynamic Indicator of Basic Early Literacy Skills, or DIBELS; Good & Kaminski, 2002). When students do not adequately respond to the second tier of intervention, they qualify either for special education or for an evaluation for possible placement in special education (Fuchs, Mock, Morgan, & Young, 2003).

Fundamental to the notion of the RTI model is that instructional practices or interventions at each level should be based on scientific evidence about what works. However, we would add that it is essential to find out what works with whom, by whom, and in what contexts (Cunningham & Fitzgerald, 1996). We ask, What should the first tier look like for culturally diverse students? For English-language learners? For students living in high-poverty areas? What should the second tier look like? Should it be the same for all? If not, how should it vary, and how should this be determined? How can we make sure that the instruction is in fact responsive to children's needs? What should be the time period between discovering that the instruction is not responsive to children's needs and developing a new instructional

plan? Who should monitor what happens in this transition period? These are important questions to consider as we move forward with RTI models.

Our position is that we must ensure that children have received culturally responsive, appropriate, quality instruction that is evidence based, but in order to be deemed appropriate, quality instruction, and evidence based it should be validated with students like those with whom it was applied. As with earlier identification criteria, this model must be based on students having received an adequate opportunity to learn. This concept of adequate opportunity to learn is a fundamental aspect of the definition of learning disabilities as part of its exclusionary clause: When children have not had sufficient opportunity to learn, the determination cannot be made that they have a learning disability.

Our perspectives on culturally responsive literacy instruction

What does it mean to provide culturally responsive literacy instruction? Moje and Hinchman (2004) noted, "*All* practice needs to be culturally responsive in order to be best practice" (italics added, p. 321). We wholeheartedly agree. This view is especially relevant when considering that culture is involved in all learning (Cole, 1998; Rogoff, 2003). Culture is not a static set of characteristics located within individuals but is fluid and complex (Gutierrez & Rogoff, 2003). Thus, culturally responsive teachers make connections with their students as individuals while understanding the sociocultural-historical contexts that influence their interactions.

Culturally responsive literacy instruction includes the skills deemed necessary for acquiring the ability to read (Delpit, 1995; National Institute of Child Health and Human Development [NICHD], 2000; Reyes, 1992; Snow, 2002) and frequent opportunities to practice reading with a variety of rich materials in meaningful contexts (Pressley, 2001). But it goes beyond these basic components. In conceptualizing culturally responsive literacy instruction, we draw upon Wiley's (1996) framework that includes accommodation, incorporation, and adaptation. These three courses of action are specific ways in which researchers have suggested working with students and families. *Accommodation* requires teachers, supervisors, personnel officers, and gatekeepers to have a better understanding of the communicative styles and literacy practices among their students and to account for these in their instruction (Wiley). Supporters of accommodation argue that "literacy learning begins in the home, not the school, and that instruction should build on the foundation for literacy learning established in the home" (Au, 1993, p. 35). Several qualitative studies have shown that, even in conditions of extreme poverty, homes can be rich in print and family members can engage in literacy activities of many kinds on a daily basis (Anderson & Stokes, 1984; Heath, 1983; Purcell-Gates, 1996; Taylor & Dorsey-Gaines, 1988; Teale, 1986).

Incorporation requires researchers to study community practices that have not been valued previously by schools and incorporate them with the curriculum. It also means surrendering a privileged position and acknowledging that much can be learned from other ethnic groups (Wiley, 1996). Incorporation has been well supported in the research community. Promoters of this perspective emphasize that "teachers and parents need to understand the way each defines, values, and uses literacy as part of cultural practices. Such mutual understanding offers the potential for schooling to be adjusted to meet the needs of families" (Cairney, 1997, p. 70). Advocates stress that "as educators we must not assume that we can only teach the families how to do school, but that we can learn valuable lessons by coming to know the families, and by taking the time to establish the social relationships necessary to create personal links between households and classrooms" (Moll, 1999, p. xiii). It is important to build on communities' "funds of knowledge" (Moll & González, 1994) as well as families' stories (Edwards, Pleasants, & Franklin, 1999).

Adaptation involves the expectation that children and adults must acculturate or learn to match or measure up to the norms of those who control the schools, institutions, and workplace (Wiley, 1996). This process must be additive rather than subtractive. It is within this final area that many controversies and conflicts emerge concerning how families should be involved in their children's literacy development and what they need to know to be effective partners (Darling & Hayes, 1990; Edwards, 1993; Handel, 1992; Winter & Rouse, 1990). Supporters of this course of action claim that culturally and linguistically diverse parents, parents living in poverty, and immigrant parents want to give their children linguistic, social, and cultural capital to deal in the marketplace of schools, but are unsure how to go about doing this (Gallimore, Weisner, Kaufman, & Bernheimer, 1989; Super & Harkness, 1986). It is schools' responsibility to make sure parents are assisted in their efforts to help their children acquire new forms of capital. "When schools fail to provide parents with

factual, empowering information and strategies for supporting their child's learning, the parents are even more likely to feel ambivalence as educators [of their own children]" (Clark, 1988, p. 95).

These three courses of action provide a framework for moving closer to leveling the educational playing field for African American, Hispanic, and other culturally and linguistically diverse students in the United States. We believe they also can be used as a backdrop for helping us think about culturally responsive literacy instruction. It is not enough to implement isolated evidence-based interventions. Central to our approach is the belief that instructional methods do not work or fail as decontextualized generic practices, but only in relation to the sociocultural contexts in which they are implemented (Artiles, 2002; Gee, 1999, 2001; Ruiz, 1998). These perspectives form the foundation for how we are thinking about culturally responsive RTI models.

Instructional practices/ interventions: What counts as evidence?

What does it mean when we say a practice is evidence based? What criteria are applied? Numerous debates have focused on this issue (see Eisenhart & Towne, 2003; Pressley, 2002). We value results from carefully designed experimental and quasi-experimental research studies, but we also believe that much can and should be learned through qualitative and mixed methods approaches that answer questions about complex phenomena (Hilliard, 1992; Pugach, 2001). Whereas quasi-experimental and experimental approaches can point to which instructional approaches are most effective in a general sense, they do not provide information that can help us understand essential contextual variables that contribute to the effectiveness of an approach, or increase our awareness of implementation challenges, or provide information about the circumstances under which and with whom a practice is most likely to be successful (Klingner, Sorrells, & Barrera, in press; Shavelson & Towne, 2002). Like Gee (2000), we promote "a broader view of both what constitutes empirical research and what sorts of empirical evidence are relevant to complex issues that integrally involve culture, social interaction, institutions, and cognition" (p. 126). This is particularly important as we move to RTI models.

Much can be learned, for example, by observing in schools and classrooms where culturally and linguistically diverse students excel as readers (Graves, Gersten, & Haager, 2004; Pressley, Allington, Wharton-McDonald, Block, & Morrow, 2001; Pressley, Wharton-McDonald et al., 2001; Taylor, Pearson, Clark, and Walpole; 2000).Taylor et al. conducted observations in 14 schools across the United States with high proportions of students living in poverty and found numerous characteristics that cut across the most effective schools. For instance, schools in which students did well included a balance between skills and holistic instruction (e.g., reading complete texts, composition writing), and greater student engagement (i.e., students spent more time productively reading and writing). Pressley and colleagues (Pressley, Allington et al., 2001; Pressley, Wharton-McDonald et al., 2001) achieved comparable results in their observations of exemplary first-grade classrooms. They noted that teachers ensured students were involved in tasks matched to their competency level, and that they accelerated demands as students' competencies improved. Teachers also encouraged students to regulate and monitor their own learning. Similarly, Graves et al. (2004) observed in first-grade classrooms that included English-language learners and found that the most effective teachers had sophisticated knowledge of reading instruction as well as second-language instruction. They were able to draw on the prior knowledge of struggling readers, make connections with what they already knew, and emphasize explicit instruction in word identification, phonological awareness, and vocabulary instruction. In addition, they provided structured opportunities to practice English. Teachers provided supportive learning environments in which students were highly engaged.

Evidence-based interventions: What works with whom, by whom, and in what contexts?

It is essential to find out what works with whom, by whom, and in what contexts. In other words, we are concerned with issues of population validity and ecological validity (Bracht & Glass, 1968).

With whom? Insufficient information about participants

To decide if a practice is appropriate for implementation as part of an RTI model, it should be vali-

dated with students like those with whom it will be applied. As noted by Pressley, "Experiments should include students who are the intended targets of the instruction being evaluated" (2003, p. 68). Not meeting this criterion is a fundamental limitation of almost all instructional research in education. Researchers typically provide inadequate information about participants in their reports, making it hard to determine if a practice should be considered appropriate (Artiles, Trent, & Kuan, 1997; Donovan & Cross, 2002; Gersten, Vaughn, Deshler, & Schiller, 1997; Simmerman & Swanson, 2001; Troia, 1999). For this reason, we are cautious in interpreting research findings when applied to culturally and linguistically diverse students. Research reports should include information about the language proficiency, ethnicity, life experiences (e.g., socioeconomic, specific family background, immigration status), and other characteristics of participants (Bos & Fletcher, 1997; Keogh, Gallimore, & Weisner, 1997). Furthermore, data should be disaggregated to show how interventions might differentially affect students from diverse backgrounds.

A related concern is that culturally and linguistically diverse students, particularly English-language learners, are often omitted from participant samples because of their limited English proficiency. Yet language dominance and proficiency are important research variables and can affect treatment outcomes (Ortiz, 1997). That practice limits the external validity and applicability of such studies, especially for teachers who have culturally and linguistically diverse students in their classes. Although English-language learners do not participate in many studies, research findings generally are touted as applying widely across student populations. For instance, the National Reading Panel report "did not address issues relevant to second language learning" (NICHD, 2000, p. 3), yet the report's conclusions are commonly cited as support for Reading First initiatives for all students.

By whom? Looking in classrooms

Ongoing analyses of general education classrooms should be an essential component of RTI models. When children are struggling, school personnel should first consider the possibility that they are not receiving adequate instruction before it is assumed they are not responding because they have deficits of some kind (Harry & Klingner, 2006). Variations in classroom instruction are to be expected, based on differences across teachers, curricula, and the wider school context.

The idea of looking in classrooms certainly is not new (Good & Brophy, 2002). Yet it would seem that it is an often forgotten step when considering why students may be struggling to achieve. In their investigation of the special education referral process in high-need schools, Harry and Klingner (2006) found that the classroom context was rarely considered when making referral or eligibility decisions. Rather, school personnel seemed quick to attribute a child's struggles to internal deficits or the home environment.

We are not the first to suggest that an analysis of classroom instruction should be an integral part of RTI models. Fuchs et al. (2003), Grimes and Kurns (2003), Vaughn and Fuchs (2003), and Vellutino, Scanlon, Small, Fanuele, and Sweeny (in press) all included an analysis of classroom instruction in their models. However, we do assert that, as the field considers how RTI models should be implemented, not enough attention has focused on the role of classroom teachers. By looking in classrooms, we can tell a great deal about teachers' instruction, the activity, and the ways teachers and students interact. What do we notice about the nature of the relationship between a teacher and students? How are students supported? How does the teacher promote interest and motivation? With so much variability in teachers' knowledge, skills, and dispositions, it is unrealistic to assume that all teachers will be able to implement interventions in such a way that we can have confidence they are providing students with an adequate opportunity to learn.

In what contexts? Looking in schools

We believe it is essential to examine school contexts when implementing RTI models. Are there culturally diverse children in some schools who respond favorably to an intervention and comparable culturally diverse children in another school who do not respond as well? Richardson and Colfer (1990) noted that a student's school failure is quite fluid, meaning that a student can be considered at risk at one time and not at another, and in one class but not in another. Thus, there may be important variation across schools that affect the academic success of culturally diverse students. We know that variations in program implementation and effectiveness across schools and classrooms are common (see the First Grade Studies for a classic example, Bond & Dykstra, 1967). What is occurring when this happens? Is it the program, the teachers' implementation, or the school context? What is it about the system that facilitates or impedes learning? Schools are dependent on larger societal in-

fluences that should not be ignored (Bronfenbrenner, 1977). Thus, we not only recommend looking in classrooms, but also promote a systems approach to reform that entails looking across multiple layers of the home, community, school, and society at large (Klingner, Artiles et al., 2005; Miramontes, Nadeau, & Commins, 1997; Shanklin et al., 2003). Debates about instructional methods and considerations of student performance should be framed within the larger context of how literacy practices interrelate with issues of social practice, culture, and power across these levels (Gee, 1999). Our point is that to conclude that failure resides within students when they do not progress with a certain intervention, and then move them onto the second or third tier in an RTI model or decide they belong in special education without considering other factors, is problematic.

Issues of fidelity and generalizability

Similarly, the issue of implementation fidelity is an important one in RTI models, and is related to the belief that the results of experimental studies should be generalizable and transferable from one setting to another. When results do not transfer, the assumption by some is that those implementing the model did not use it correctly (Klingner, Cramer, & Harry, 2006). Or the gap between research and practice is lamented (Gersten et al., 1997). Yet, when a teacher does not implement an instructional practice with fidelity, what does that really mean? To what extent is the teacher's reluctance, resistance, or inability to implement a practice in a certain way due to differences between his or her students and the students for whom the practice was originally developed, or perhaps to variations in the school context? When teachers struggle with implementation, this is an indication we need to look more closely at what is occurring.

There are significant differences between laboratory or controlled studies and the world of practice, especially in high-need urban schools. When interpreting the success of a research-based model and considering the extent to which it was implemented with fidelity, it is important to examine the constraints under which those who implemented the model were operating (Herman et al., 2000). For example, the creators of Success for All offer the caveat that their program is effective only when fully implemented (Slavin & Madden, 2001). Yet implementation challenges can be frequent with this approach (Klingner, Cramer, & Harry, 2006). Similarly, in Foorman, Francis, Fletcher, Schatschneider, and Mehta's (1998) often cited study of different approaches to early reading instruction, their sample was culturally and linguistically diverse, and the range of students on free or reduced-price lunch varied from 32.3% to 71.4%. There were substantial differences across schools in this range. Our point is not that the students who receive free lunch are necessarily different in terms of their level of poverty, but that there are noteworthy school differences (e.g., Kozol, 1991) that must be taken into account when interpreting variations in program implementation and research results. By not acknowledging these challenges, culturally and linguistically diverse students (and students living below poverty levels) are held accountable, presumed to have deficits, and then are placed more often in special education programs.

Looking more closely at nonresponders

For the reasons we have described, we suggest looking more closely at students who do not respond to research-based interventions. To continue with Foorman et al.'s (1998) study of different models of reading instruction as an example, Foorman and colleagues found that their direct code (DC; i.e., in letter–sound correspondence as practiced in decodable text) group outperformed implicit code (IC) and embedded code (EC) groups on a measure of isolated word reading. The authors reported that "46% of students in IC research group, and 44% in EC group exhibited no demonstrable growth in word reading compared with only 16% in the DC group" (p. 51). This much cited study is considered evidence in favor of direct code approaches, and certainly this difference among groups is impressive. But what about the 16% of students who did not progress? We would like to understand more about them, and what happened in their classrooms. Did these students not respond because they may have had disabilities, or for other reasons?

As educators and researchers, we must continue to ask whether we are truly doing all we can to improve outcomes for culturally and linguistically diverse students who do not respond and seem to be left behind. Current policies emphasize finding what works. But, again, we ask, "What works with whom?" If Intervention A is found to be better than Intervention B (or no intervention), we must not assume that Intervention A is the best we can do for all

students. How do we know when an instructional approach works and increased outcomes are good enough? What are our assumptions about student growth? It is generally considered acceptable for students to make adequate gains. But what does that mean? What if culturally and linguistically diverse students are making modest or adequate gains with an intervention while mainstream students are making outstanding gains? If we were to see only slight or modest gains among culturally and linguistically diverse students in the early grades, this could in part explain why by the third grade we already see an achievement gap. Snow, Burns, and Griffin (1998) noted that children "living in high-poverty areas tend to fall further behind, regardless of their initial reading skill level" (p. 98). Gee (1999) interpreted this finding as evidence of a mismatch between schools and students of diverse backgrounds: "The more you already know about school...before you get to school, the better you do in school" (p. 367).

We wonder what the outcomes would be if we were to adapt Intervention A to be culturally responsive to a particular group of students and then compare Culturally Responsive Intervention A with Traditional Intervention A. For example, let us suppose that Intervention A was found to be superior to Intervention B in an experimental study, and that 63% of the students in the sample were middle class white students and the other students were of other ethnicities and different levels of socioeconomic status (SES). Some were English-language learners. Results of the study indicated that Intervention A was superior at a statistically significant level, and the effect size was impressive—say, .60. On the surface, the logical conclusion would be that Intervention A was better than B. However, if we look more closely and disaggregate our data by ethnicity, or by SES, or by language proficiency, we might see interaction effects (Reynolds, 1988). What if it turns out that B was actually better for some of the students in the sample? And what if Intervention A focused on explicit instruction in phonological awareness and the alphabetic principle, and that Intervention B did precisely the same, but with the addition of components considered culturally responsive? What if the majority of the sample (the middle class white students) did better with A, because, after all, school instruction tends to be compatible with white middle class culture? And what if many of the culturally and linguistically diverse students did better with B? What would we then conclude?

This view does not mean that we should abandon evidence-based interventions and give up trying to figure out what works. The interventions already identified as effective are beneficial on average for many students, including culturally and linguistically diverse students. But there is limited evidence they will work well with everyone, or lead to maximum growth for a particular subset of students (Dillon, O'Brien, & Heilman, 2000). We suggest that additional research is needed in which mixed-methods approaches are used to investigate culturally responsive practices singularly and in combination with other approaches. In the end, the best instructional practice is based on sound pedagogical principles implemented thoughtfully and sensitively by a knowledgeable and reflective teacher who adapts instruction to students' needs and even may act in ways inconsistent with some research findings (Duffy, 2002).

A possible RTI model for culturally and linguistically diverse students

We propose the following four-tiered RTI model that represents a new and needed direction for research.

Tier 1

The foundation of the first tier should be culturally responsive, quality instruction with ongoing progress monitoring within the general education classroom. We see this first tier as including two essential components: (a) evidence-based interventions (Vaughn & Fuchs, 2003), and (b) instruction by teachers who have developed culturally responsive attributes (Gay, 2000; Ladson-Billings, 2001; Villegas & Lucas, 2002). In their teacher education programs as well as through ongoing professional development, teachers should become familiar with instructional strategies linked to academic growth for their population of students as well as assessment procedures that can be used to monitor progress, particularly in language and literacy (Ortiz, 2001).

The success of the RTI process for culturally and linguistically diverse students depends on teachers having access to appropriate evidenced-based instructional approaches that have been validated with diverse populations. Yet this research base is limited. Teachers need to know if their interventions are effective and how to adjust instruction for students who do not seem to be responding. In addition, all preservice and inservice teachers should learn what it means to be culturally responsive and should partici-

pate in experiences designed to prepare them to teach in diverse settings (Gay, 2000; Kea & Utley, 1998; Ladson-Billings, 2001). In this sense, as Townsend argued (2002), no teacher should be left behind. Researchers have conducted in-depth qualitative studies that have enabled them to describe the kinds of dispositions and practices of teachers whose culturally and linguistically diverse students excel (e.g., Ladson-Billings, 1994, 2001; Nieto, 1999). These dispositions and practices should be incorporated into further research on culturally responsive teaching. Teachers of English-language learners also should learn about bilingual education and English as second language (ESL) teaching methods, as well as the language acquisition process.

Tier 2

When culturally and linguistically diverse students have not reached expected benchmarks or have not made adequate progress when taught using appropriate, culturally responsive methods implemented with fidelity, a second tier of intervention is warranted. This tier is characterized as providing a level of intensive support that supplements the core curriculum and is based on student needs as identified by ongoing progress monitoring.

For now, we do not know a great deal about what this intensive support should look like for culturally and linguistically diverse students, or the extent to which it should differ from the second tier of support provided to all students identified as at risk. McCardle, Mele-McCarthy, and Leos (2005) discuss the need for more research with English-language learners who show early signs of struggling. Although it may seem appropriate to use approaches developed for and validated with native English speakers, it is important to consider that English-language learners may benefit more from strategies that have been adapted or are different altogether (McCardle et al). Fortunately, recent research with English-language learners using RTI models shows promising results (Gerber et al., 2004; Leafstedt, Richards, & Gerber, 2004; Linan-Thompson, Vaughn, Hickman-Davis, & Kouzekanani, 2003; Linan-Thompson, Vaughn, Prater, & Cirino, in press; Vaughn, Linan-Thompson, & Hickman, 2003; Vaughn, Mathes, Linan-Thompson, & Frances, 2005).

Progress monitoring continues during a second tier. For students who do not adequately respond to intensive supplemental instruction, Tier 2 becomes the gatekeeper for a possible referral to special education.

Tier 3

This phase of a multitiered model starts with a referral to a Teacher Assistance Team (TAT; Chalfant, Psych, & Moultrie, 1979) or a Child Study Team. In our conceptualization, this step in the process can overlap with the second tier. In other words, the provision of intensive support does not need to stop for a referral to begin. The make-up of this team should be diverse and include multiple members with expertise in culturally responsive pedagogy. A bilingual or ESL specialist should also be involved when the student is an English-language learner (Harry & Klingner, in press). In addition, it is important for there to be a team member who can offer guidance with culturally sensitive ongoing assessment. Teams should have a wide range of meaningful intervention strategies available to them. Using a problem-solving approach (see Fuchs & Fuchs in this issue), they should determine how to alter the support a student has been receiving and develop specific instructional objectives based on student performance data (Garcia & Ortiz, 1988; Harry & Klingner, in press). An important role for the team should be observing the student in the classroom as well as in other settings.

Resources are available to help schools evaluate and improve their special education referral process for culturally and linguistically diverse students (National Alliance of Black School Educators & ILIAD Project, 2002; National Association for Bilingual Education & Local Implementation by Local Administrators [ILIAD] Project, 2002). Similarly, Garcia and Ortiz (1988) developed a flowchart and a series of questions to guide practitioners through the referral decision-making process. These resources can help educators determine if students have been provided with meaningful, appropriate prereferral strategies and adequate opportunities to learn and if a student's difficulties have been observed across time and settings. We think these have valuable applications in an RTI model.

Tier 4

In the model we propose, this tier would be special education. The hallmark of instruction at this level is that it is tailored to the individual needs of the student and is even more intensive than at previous tiers. Unlike the second or third tiers, this assistance is not limited to a set number of weeks.

Conclusion

We are encouraged by the potential of RTI models to improve educational opportunities for culturally and linguistically diverse students and to reduce their disproportionate representation in special education. RTI models represent a new beginning and a novel way of conceptualizing how we support student learning. At the same time, we are concerned that if we do not engage in dialogue about the critical issues raised in this article, RTI models will simply be like old wine in a new bottle, in other words, just another deficit-based approach to sorting children. We believe that ultimately the most effective interventions for culturally and linguistically diverse students will come from bringing together diverse perspectives, and from careful examination of notions about disability and cultural diversity within their full sociocultural and historical contexts.

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REFERENCES

ANDERSON, A.B., & STOKES, S.J. (1984). Social and institutional influences on the development and practice of literacy. In H. Goelman, A. Oberg, & F. Smith (Eds.), *Awakening to literacy* (pp. 24–37). Exeter, NH: Heinemann.

ARTILES, A.J. (2002). Culture in learning: The next frontier in reading difficulties research. In R. Bradley, L. Danielson, & D.P. Hallahan (Eds.), *Identification of learning disabilities: Research to policy* (pp. 693–701). Hillsdale, NJ: Erlbaum.

ARTILES, A.J., TRENT, S.C., & KUAN, L. (1997). Learning disabilities empirical research on ethnic minority students: An analysis of 22 years of studies published in selected refereed journals. *Learning Disabilities Research & Practice*, *12*, 82–91.

ARTILES, A.J., TRENT, S.C., & PALMER, J. (2004). Culturally diverse students in special education: Legacies and prospects. In J.A. Banks & C.M. Banks (Eds.), *Handbook of research on multicultural education* (2nd ed., pp. 716–735). San Francisco: Jossey-Bass.

AU, K.H. (1993). *Literacy instruction in multicultural settings*. Fort Worth, TX: Harcourt Brace Jovanovich.

BOND, G.L., & DYKSTRA, R. (1967). The cooperative research program in first-grade reading instruction. *Reading Research Quarterly*, *2*, 10–141.

BOS, C.S., & FLETCHER, T.V. (1997). Sociocultural considerations in learning disabilities inclusion research: Knowledge gaps and future directions. *Learning Disabilities Research & Practice*, *12*, 92–99.

BRACHT, G.H., & GLASS, G.V. (1968). The external validity of experiments. *American Educational Research Journal*, *5*, 437–474.

BRONFENBRENNER, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, *32*, 513–531.

CAIRNEY, T.H. (1997). Acknowledging diversity in home literacy practices: Moving towards partnership with parents. *Early Child Development and Care*, *127–128*, 61-73.

CHALFANT, J., PSYCH, M., & MOULTRIE, R. (1979). Teacher assistance teams: A model for within building problem solving. *Learning Disability Quarterly*, *2*, 85–96.

CLARK, R.M. (1988). Parents as providers of linguistic and social capital. *Educational Horizons*, *66*(2), 93–95.

COLE, M. (1998). Can cultural psychology help us think about diversity? *Mind, Culture, and Activity*, *5*(4), 291–304.

CUNNINGHAM, J.W., & FITZGERALD, J. (1996). Epistemology and reading. *Reading Research Quarterly*, *31*, 36–60.

DARLING, S., & HAYES, A.E. (1990). *Breaking the cycle of illiteracy: The Kenan family literacy model program—Final report 1988–1989*. Louisville, KY: National Center for Family Literacy.

DELPIT, L. (1995). *Other people's children*. New York: The New Press.

DILLON, D.R., O'BRIEN, D.G., & HEILMAN, E.E. (2000). Literacy research in the next millennium: From paradigms to pragmatism and practicality. *Reading Research Quarterly*, *35*, 10–26.

DONOVAN, S., & CROSS, C. (2002). *Minority students in special and gifted education*. Washington, DC: National Academy Press.

DUFFY, G. (2002). Visioning and the development of outstanding teachers. *Reading Research and Instruction*, *41*, 331–344.

EDWARDS, P.A. (1993). *Parents as partners in reading: A family literacy training program* (2nd ed.). Chicago: Children's Press.

EDWARDS, P.A., PLEASANTS, H.M., & FRANKLIN, S.H. (1999). *A path to follow: Learning to listen to parents*. Portsmouth, NH: Heinemann.

EISENHART, M., & TOWNE, L. (2003). Contestation and change in national policy on "scientifically based" education research. *Educational Researcher*, *32*(7), 31–38.

FOORMAN, B.R., FRANCIS, D.J., FLETCHER, J.M., SCHATSCHNEIDER, C., & MEHTA, P. (1998). The role of instruction in learning to read: Preventing reading failure in at-risk children. *Journal of Educational Psychology*, *90*(1), 37–55.

FUCHS, D., MOCK, D., MORGAN, P.L., & YOUNG, C.L. (2003). Responsiveness to intervention: Definitions, evidence, and implications for the learning disabilities construct. *Learning Disabilities Research & Practice*, *18*, 157–171.

GALLIMORE, R., WEISNER, R., KAUFMAN, S., & BERNHEIMER, L.P. (1989). The social construction of ecocultural niches: Family accommodation of developmentally delayed children. *American Journal of Mental Retardation*, *94*, 216–230.

GARCIA, S.B., & ORTIZ, A.A. (1988). Preventing inappropriate referrals of language minority students to special education. *FOCUS/NCBE*, *5*, 1–17.

GAY, G. (2000). *Culturally responsive teaching: Theory, research & practice*. New York: Teachers College Press.

GEE, J.P. (1999). Critical issues: Reading and the new literacy studies: Reframing the National Academy of Sciences Report on Reading. *Journal of Literacy Research*, *31*, 355–374.

GEE, J.P. (2000). The limits of reframing: A response to Professor Snow. *Journal of Reading Behavior*, *32*, 121–128.

GEE, J.P. (2001). A sociocultural perspective on early literacy development. In S.B. Neuman & D.K. Dickinson (Eds.), *Handbook of early literacy research* (pp. 30–42). New York: Guilford.

GERBER, M.M., JIMENEZ, T., LEAFSTEDT, J., VILLARUZ, J., RICHARDS, C., & ENGLISH, J. (2004). English reading effects of small-group intensive intervention in Spanish for English learners. *Learning Disabilities Research & Practice*, *19*, 239–251.

GERSTEN, R., VAUGHN, S., DESHLER, D., & SCHILLER, E. (1997). What we know about using research findings: Implications for improving special education practice. *Journal of Learning Disabilities*, *30* (5), 466–476.

GOOD, R.H., & KAMINSKI, R.A. (2002). *Dynamic benchmark assessment: Assessment of big ideas in beginning reading*. Eugene, OR: Institute for the Development of Educational Achievement, University of Oregon, College of Education.

GOOD, T.L., & BROPHY, J.E. (2002). *Looking in classrooms* (9th ed.). Boston: Allyn & Bacon.

GRAVES, A., GERSTEN, R., & HAAGER, D. (2004). Literacy instruction in multiple-language first grade classrooms: Linking student outcomes to observed instructional practice. *Learning Disabilities Research & Practice*, *19*, 262–272.

GRIMES J., & KURNS, S. (2003, December). *An intervention-based system for addressing NCLB and IDEA expectations: A multiple tiered model to ensure every child learns*. Paper presented at the National Research Center on Learning Disabilities Responsiveness-to-Intervention Symposium, Kansas City, MO.

GUTIERREZ, K., & ROGOFF, B. (2003). Cultural ways of learning: Individual traits or repertoires of practice. *Educational Researcher*, *32* (5), 19–25.

HANDEL, R.E. (1992). The partnership for family reading: Benefits for families and schools. *The Reading Teacher*, *46*, 117–126.

HARRY, B., & KLINGNER, J.K. (2006). *Why are so many minority students in special education? Understanding race and disability in schools*. New York: Teachers College Press.

HEATH, S.B. (1983). *Ways with words: Language, life, and work in communities and classrooms*. New York: Cambridge University Press.

HELLER, K.A., HOLTZMAN, W.H., & MESSICK, S. (Eds.). (1982). *Placing children in special education: A strategy for equity*. Washington, DC: National Academy Press.

HERMAN, R., CARL, B., LAMPRON, S., SUSSMAN, A., BERGER, A., & INNES, F. (2000). *What we know about comprehensive school reform models*. Washington, DC: American Institutes for Research.

HILLIARD, A.G., III. (1992). The pitfalls and promises of special education practice. *Exceptional Children*, *52*, 168–172.

INDIVIDUALS WITH DISABILITIES EDUCATION IMPROVEMENT ACT OF 2004, Pub. L. 108–466.

KEA, C.D., & UTLEY, C.A. (1998). To teach me is to know me. *Journal of Special Education*, *32*, 44–47.

KEOGH, B., GALLIMORE, R., & WEISNER, T. (1997). A sociocultural perspective on learning and learning disabilities. *Learning Disabilities Research & Practice*, *12*, 107–113.

KLINGNER, J.K., ARTILES, A.J., KOZLESKI, E., HARRY, B., TATE, W., ZION, S., ET AL. (2005). Addressing the disproportionate representation of culturally and linguistically diverse students in special education through culturally responsive educational systems. *Education Policy Analysis Archives*, *13*(38), 1–39.

KLINGNER, J.K., CRAMER, E., & HARRY, B. (2006). Challenges in the implementation of Success for All by four urban schools. *Elementary School Journal*, *106*, 333–349.

KLINGNER, J.K., SORRELLS, A.M., & BARRERA, M. (in press). Three-tiered models with culturally and linguistically diverse students. In D. Haager, S. Vaughn, & J. Klingner (Eds.), *Validated practices for three tiers of reading intervention*. Baltimore: Paul H. Brookes.

KOZOL, J. (1991). *Savage inequalities: Children in America's schools*. New York: HarperPerennial.

LADSON-BILLINGS, G. (1994). *The dreamkeepers: Successful teachers of African American children*. San Francisco: Jossey-Bass.

LADSON-BILLINGS, G. (2001). *Crossing over to Canaan: The journey of new teachers in diverse classrooms*. San Francisco: Jossey-Bass.

LEAFSTEDT, J.M., RICHARDS, C.R., & GERBER, M.M. (2004). Effectiveness of explicit phonological-awareness instruction for at-risk English learners. *Learning Disabilities Research & Practice*, *19*, 252–261.

LINAN-THOMPSON, S., VAUGHN, S., HICKMAN-DAVIS, P., & KOUZEKANANI, K. (2003). Effectiveness of supplemental reading instruction for second-grade English language learners with reading difficulties. *Elementary School Journal*, *103*, 221–238.

LINAN-THOMPSON, S., VAUGHN, S., PRATER, K., & CIRINO, P.T. (in press). The response to intervention of English language learners at-risk for reading problems. *Journal of Learning Disabilities*.

MCCARDLE, P., MELE-MCCARTHY, J., & LEOS, K. (2005). English language learners and learning disabilities: Research agenda and implications for practice. *Learning Disabilities Research & Practice*, *20*, 68–78.

MIRAMONTES, O., NADEAU, A., & COMMINS, N.L. (1997). *Restructuring schools for linguistic diversity: Linking decision-making to effective programs*. New York: Teachers College Press.

MOJE, E.B., & HINCHMAN, K. (2004). Culturally responsive practices for youth literacy learning. In T.L. Jetton & J.A. Dole (Eds.), *Adolescent literacy research and practice* (pp. 321–350). New York: Guilford.

MOLL, L. (1994). Foreword. In J. Paratore, G. Melzei, & B. Krol-Sinclair (Eds.), *What should we expect of family literacy? Experiences of Latino children whose parents participate in an intergenerational literacy project* (p. xiii). Chicago; National Reading Conference.

MOLL, L.C., & GONZÁLEZ, N. (1994). Critical issues: Lessons from research with language minority children. *JRB: A Journal of Literacy*, *26*, 439–456.

NATIONAL ALLIANCE OF BLACK SCHOOL EDUCATORS & ILIAD PROJECT. (2002). *Addressing over-representation of African American students in special education*. Arlington, VA: Council for Exceptional Children.

NATIONAL ASSOCIATION FOR BILINGUAL EDUCATION & LOCAL IMPLEMENTATION BY LOCAL ADMINISTRATORS. (2002). *Determining appropriate referrals of English language learners to special education: A self-assessment guide for principals*. Washington, DC: Author.

NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.

NIETO, S. (1999). Multiculturalism, social justice and critical teaching. In I. Shor & C. Pari (Eds.), *Education is politics: Critical teaching across differences, K–12* (pp. 1–32). Portsmouth, NH: Boynton/Cook.

ORTIZ, A.A. (1997). Learning disabilities occurring concomitantly with linguistic differences. *Journal of Learning Disabilities*, *30*, 321–332.

ORTIZ, A.A. (2001). *English language learners with special needs: Effective instructional strategies*. Washington, DC: ERIC Education Reports.

PRESSLEY, M. (2001). *Effective beginning reading instruction* (Executive Summary). Chicago: National Reading Conference.

PRESSLEY, M. (2002). Effective beginning reading instruction. *Journal of Literacy Research*, *34*, 165–188.

PRESSLEY, M. (2003). A few things reading educators should know about instructional experiments. *The Reading Teacher*, *57*, 64–71.

PRESSLEY, M., ALLINGTON, R., WHARTON-MCDONALD, R., BLOCK, C.C., & MORROW, L.M. (2001). *Learning to read: Lessons from exemplary first grades*. New York: Guilford.

PRESSLEY, M., WHARTON-MCDONALD, R., ALLINGTON, R., BLOCK, C.C., MORROW, L., TRACEY, D., ET AL. (2001). A study of effective grade-1 literacy instruction. *Scientific Studies of Reading, 5*, 35–58.

PUGACH, M.C. (2001). The stories we choose to tell: Fulfilling the promise of qualitative research for special education. *Exceptional Children*, *67*, 439–453.

PURCELL-GATES, V. (1996). Stories, coupons, and the *TV Guide*: Relationships between home literacy experiences and emergent literacy knowledge. *Reading Research Quarterly*, *31*, 406–428.

REYES, M. DE LA LUZ. (1992). Challenging venerable assumptions: Literacy instruction for linguistically diverse students. *Harvard Educational Review*, *62*, 427–446.

REYNOLDS, C. (1988). Putting the individual into aptitude-treatment interaction. *Exceptional Children, 54*, 324–331.

RICHARDSON, V., & COLFER, P. (1990). Being at-risk in school. In J.I. Goodlad & P. Keating (Eds.), *Access to knowledge: An agenda for our nation's schools* (pp. 107–124). New York: College Entrance Examination Board.

ROGOFF, B. (2003). *The cultural nature of human development*. New York: Oxford University Press.

RUIZ, N. (1998). Instructional strategies for children with limited-English proficiency. *Journal of Early Education and Family Review*, *5*, 21–22.

SHANKLIN, N., KOZLESKI, E.B., MEAGHER, C., SANDS, D., JOSEPH, O., & WYMAN, W. (2003). Examining renewal in an urban high school through the lens of systemic change. *International Journal of School Leadership and Management*, *23*, 357–378.

SHAVELSON R.J., & TOWNE, L. (Eds.). (2002). *Scientific research in education*. Washington, DC: National Academies Press.

SIMMERMAN, S., & SWANSON, H.L. (2001). Treatment outcomes for students with learning disabilities: How important are internal and external validity. *Journal of Learning Disabilities*, *34*, 221–235.

SLAVIN, R.E., & MADDEN, N.A. (2001). *Success for All and comprehensive school reform: Evidence-based policies for urban education*. Washington, DC: Office of Educational Research and Improvement.

SNOW, C.E. (2002). *Reading for understanding: Toward an R&D program in reading comprehension*. Santa Monica, CA: RAND.

SNOW, C.E., BURNS, M.S., & GRIFFIN, P. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.

SUPER, C., & HARKNESS, S. (1986). The development niche: A conceptualization at the interface of child and culture. *International Journal of Behaviour Development*, *9*, 1–25.

TAYLOR, B.M., PEARSON, P.D., CLARK, K., & WALPOLE, S. (2000). Effective schools and accomplished teachers: Lessons about primary-grade reading instruction in low-income schools. *Elementary School Journal*, *101*, 121–165.

TAYLOR, D., & DORSEY-GAINES, C. (1988). *Growing up literate: Learning from inner-city families*. Portsmouth, NH: Heinemann.

TEALE, W.H. (1986). Home background and literacy development. In W.H. Teale & E. Sulzby (Eds.), *Emergent literacy: Writing and reading*. Norwood, NJ: Ablex.

TOWNSEND, B.L. (2002). Leave no teacher behind: A bold proposal for teacher education. *International Journal of Qualitative Studies in Education*, 15, 727–738.

TROIA, G.A. (1999). Phonological awareness intervention research: A critical review of the experimental methodology. *Reading Research Quarterly*, *34*, 28–52.

VAUGHN, S., & FUCHS, L. (2003). Redefining learning disabilities as inadequate response to instruction: The promise and potential problems. *Learning Disabilities Research & Practice*, *18*, 137–146.

VAUGHN, S., LINAN-THOMPSON, S., & HICKMAN, P. (2003). Response to instruction as a means of identifying students with reading/learning disabilities. *Exceptional Children*, *69*, 391–409.

VAUGHN, S., MATHES, P., LINAN-THOMPSON, S., & FRANCES, D.J. (2005). Teaching English language learners at risk for reading disabilities to read: Putting research into practice. *Learning Disabilities Research & Practice*, *20*, 58–67.

VILLEGAS, A.M., & LUCAS, T. (2002). Preparing culturally responsive teachers: Rethinking the curriculum. *Journal of Teacher Education*, *53*, 1, 20–32.

VELLUTINO, F.R., SCANLON, D.M., SMALL, S.G., FANUELE, D.P., & SWEENY, J. (in press). Preventing early reading difficulties through kindergarten and first grade intervention: A variant of the three-tier model. In D. Haager, S. Vaughn, & J.K. Klingner (Eds.), *Validated practices for three tiers of reading intervention*. Baltimore: Paul H. Brookes.

WILEY, T.G. (1996). Literacy and language diversity in sociocultural contexts. *Literacy and language diversity in the United States*. Washington, DC: Center for Applied Linguistics and Delta Systems.

WINTER, M., & ROUSE, J. (1990). Fostering intergenerational literacy: The Missouri parents as teachers program. *The Reading Teacher*, *43*, 382–386.

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