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Literacy for Middle School Students: Challenges of Cultural Synthesis

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Abstract

In this manuscript, the author explores the question, What does research suggest for middle level readers? To answer it, she conducts a synthesis of empirical studies published between 1990 and 2001 that appeared in journals linked to the author's professional membership (i.e., *Research in Middle Level Education (RMLE), Reading Research Quarterly (RRQ), Journal of Adolescent and Adult Literacy (JAAL), American Educational Research Journal (AERJ), Reading Research and Instruction (RRI),* and *Review of Educational Research (RER)*). This examination noted attention to eight categories: (1) interests, (2), strategy instruction, (3) vocabulary, (4) student attributes, (5) comprehension, (6) context, (7) discussion, and (8) tutoring. The author then explores the implications of these findings for researchers and practitioners. Specifically, the author calls for a stronger attention to the literacy learning of middle level students and a greater degree of interplay between researcher and practitioner agendas.

Many national studies and numerous research dollars has been spent in an effort to address literacy issues (e.g., National Reading Panel, 2000; Snow, Burns, & Griffin, 1998; Taylor & Pearson, 2002). However, these efforts generally overlook middle level readers and, by that neglect, impact those who continue to need and deserve literacy assistance. This stance is especially noticeable in this nation's current mantra to leave no student behind. As NAEP data (Donahue, Voelkl, Campbell, & Mazzeo, 1999) suggest, many middle level students have already been left behind. International comparisons (e.g., Elley, 1992) show the drop of attainment that occurs between the ages of 9 and 14. In spite of these trends, national directives and funding sources continue to focus on the youngest readers. In addition to the neglect of middle level readers at the national policy level, other researchers fail to distinguish them from upper elementary readers (e.g., Taylor, Graves, & Van Den Broek, 2000). Even the International Reading Association, in a position statement on adolescent literacy (Moore, Bean, Birdyshaw, & Rycik, 2002), blurs the distinctions between middle level and high school students. The school climate and culture of students housed in middle schools differ in significant ways from students in elementary or high schools. Those differences demand separate attention to consider, rather than overlook, their impact on literacy instruction and attainment.

I offer a redirection of this national trend by focusing on the question, What does research suggest for middle level readers? Many prominent texts inform middle level literacy (e.g., Atwell, 1998; Barbieri, 1995; Hynds, 1997; Rycik & Irvin, 2001; Wilhelm, 1995). From these individual accounts, we learn about classroom features that spark students' literacy learning, the variability that exists across middle level readers, and the importance of balancing caring with attention to literacy growth. I acknowledge the groundwork those works provide. However, I seek a broader synthesis of research that can inform a wide array of practitioners. In other words, I want to understand what researchers and teachers learn from existing research. So, instead of exploring a single topic linked to middle level literacy (e.g., comprehension instruction), looking at research that supports an orientation toward its instruction (e.g., a workshop approach), or including research that does not focus exclusively on middle level students, I look across existing literacy research exclusively aimed at middle school students. My goal is to understand the range and depth of topics it addresses. This allows a different understanding of the contributions of this research to classroom practices and the relationship between practice and research.

Roe and Kleinsasser (2000) recognize the chasm between middle level research and practice. To bridge this gap, they propose a cultural synthesizer. Cultural synthesizers understand the culture of the school and can articulate the research that matches the challenges the practitioners encounter. Ultimately, they can link the worlds of teaching and research. Invoking this concept as a lens for understanding middle-level literacy research coincides with my intention to bridge these dimensions.

My real world experiences as a middle-level literacy teacher and a university teacher educator and researcher position me to assume this role in this review of research for middle level readers. However, instead of specifying a particular school's problems of practice, I propose the broad dilemma faced by all middle schools: assembling a research base from which literacy teachers can draw. In collecting evidence to inform this shared dilemma, I tap the resources that would arrive at the doorstep of a cultural synthesizer who values professional memberships and turns to their publications as ongoing resources. Using these materials as a basis for the review unveils what educators would glean from an ongoing but practical attempt to remain current and well informed.

Assuming the role of a cultural synthesizer coincides with the challenges of the times in several important ways. First, a cultural synthesizer acts on the expectation that classroom teachers invoke empirically based rationales in their design of a reading program. Second, a cultural synthesizer considers whether middle-level literacy researchers provide those scientifically based proposals needed to guide middle-level literacy practices. Finally, the combined efforts of a cultural synthesizer converge around the combined hope held by researchers and teachers—to unveil and provide the research-based practices that hold the potential to help middle level students read better.

To present my journey as a cultural synthesizer, I begin by explaining the process I used to survey the research literature. Then, I consider the messages this literature provides for researchers and teachers. Finally, and in alignment with the role of a cultural synthesizer, I collapse across these two categories to consider the shared messages that apply across practitioner and researcher boundaries.

The Path to My Discoveries

Reviewing this research as a cultural synthesizer serves two audiences: the teachers who work directly with middle level readers and the teacher educators and researchers who focus on middle level readers in their teaching and scholarship. In keeping with my intention to include journals readily available, I initially examined empirical studies in journals linked to my professional membership (i.e., *Research in Middle Level Education (RMLE), Reading Research Quarterly (RRQ), Journal of Adolescent and Adult Literacy (JAAL), American Educational Research Journal (AERJ), Reading Research and Instruction (RRI), and Review of Educational Research (RER)*). These studies could tap any research method (e.g., survey, case study, experimental), but the authors needed to make their adherence to the attributes of that method clear. To make this a manageable yet timely inquiry, it included studies conducted between 1990 and 2001. Three changes later occurred. First, references that appeared in sources from the original selections led me to include *The Elementary School Journal*. Second, since I was unable to access bound copies of *RMLE*, I added *RMLE Online*. Finally, my initial hope to target students with reading needs proved fruitless. Therefore, I broadened my focus to include all middle level readers.

The analysis of the selected articles proceeded in steps. First, I read and summarized each article. This led to the creation of a table that noted a reference citation, a label for the research (i.e., vocabulary, student attributes), and a summary of its findings (who, what, when, where, and why). Next, based on what the study addressed, I combined the studies into broader categories. This generated frequency counts (i.e., the number of references for each conceptual category). Then, I read and reread my initial summaries to establish the central messages for each category. From this analytic task, and in keeping with the ultimate role of a cultural synthesizer, I intended to address my two audiences by generating a package of recommendations for middle-level literacy programs—one rooted in research and generated exclusively by attention to middle level students and their teachers—and earmarking needs for future investigations for the research community. Instead, I realized that my findings spoke separately to these two audiences: the research community who cares about middle level literacy and the teachers who interact daily with middle level students to forward their reading achievement. Therefore, reporting in a traditional style—citing a category and providing an interpretive vignette generated from it (Linn & Erickson, 1990)—would conceal the details that move this information from the banal to the provocative. To capture this richer characterization of the findings, I consider them in light of their messages for practitioners and researchers and the problems they create for a cultural synthesizer who wants to make sense of both. Therefore, I provide general information about the territory the available research addresses and then separate the implications, limitations, and possibilities of this information for teachers and researchers.

Categories of Investigation

Collapsing the topics of the research included in this synthesis resulted in eight categories: (1) interests, (2), strategy instruction, (3) vocabulary, (4) student attributes, (5) comprehension, (6) context, (7) discussion, and (8) tutoring. (Refer to Table 1 and Table 2 for the frequency count of articles in each category and the articles designated to them.) A full understanding of the category division requires an explanation of the criteria that distinguish them.

The category of interests takes a broad sweep and includes research that addresses students' choice of materials and their perception of inviting classroom practices. Articles in the category of student attributes explore affective features such as motivation and self-regulation as well as case-studies that provide rich descriptions of students and their stances as readers. While each category links in some way to students' understanding of text, the category of strategy instruction includes research about a specific strategy such as metacognition or text structure, a combination of strategies, or the features of quality strategy instruction. Research placed under comprehension differs in that these pieces cite understanding text as the primary intention. If categorized as context, the study looks at the settings where reading occurs or labels the instructional environment as a cultural context.

As previously mentioned, the heart of what I learned goes beyond identifying, classifying, and synthesizing the middle-level literacy research housed in the selected journals. I now pinpoint those insights.

Findings of Importance for Researchers

Researchers make important decisions that impact the utility of their findings. They decide what to investigate, with whom, and how. While researchers maintain the freedom to choose, and undermining these freedoms would be unwise, several discoveries from this exploration unveil examples of unforeseen consequences those decisions foster.

Too Little Attention to Middle Level Literacy

The search of these journals identified 45 articles that met the selection criteria. That translates to fewer than five articles per year and fewer than seven articles per journal across a ten-year span. In light of the expanse of my inclusion criteria, these numbers dramatically underscore the lack of attention middle level students generate. While I suspect that an aggregation of empirical studies from these same journals would offer more, perhaps dramatically more, articles about elementary reading instruction, to neglect their middle level counterparts is simply unconscionable. Boyer (1996) proclaims that "the most urgent task our generation now confronts is to ensure literacy . . . for all children" (p. 11). He does not exclude middle level readers from this mandate nor should the research community. If we want teachers to seek research to guide their practice, they deserve a sufficiently robust base to consult.

Minimal Programmatic Guidance

The categories of information that emerge from this analysis (i.e., student interests and attributes, vocabulary, comprehension, strategy instruction) generally coincide with the expectations for research about middle level literacy. (See Table 1 for a complete listing.) However, an inclusion of appropriate categories does not assure sufficient attention to them. While information within each category provides systematically obtained information and suggestions, these suggestions do not form enough direction to create a classroom plan. (See Table 2 for the separation of articles by category.) While the paucity of articles partially explains this failure, other concerns surface.

An example from Scott and Nagy (1997), whose work falls under the category of vocabulary, typifies one wider problem—providing cautionary notes without pedagogical guidance. They planned to unveil how students understand novel verbs. They did not use real text or real words. So, while teachers can develop a sensitivity to students' difficulties with unknown verbs from this experimental environment and perhaps invoke dictionary use with more reservations, they do not learn what to do in their classrooms with the real life demands of real students who read real books that contain unknown verbs.

In addition, topics within a category wander. Of the studies in the category of strategy instruction, Langer (2001) analyzed the characteristics of instruction that accompanied students' literacy achievement. Gordon (1990) addressed text structure. McAuliffe (1993) compared instructional differences that appeared when a teacher shifted her focus from reading better to test preparation. Guthrie, Schafer, Want, and Afflerback (1995) explored the link between reading more and the higher use of cognitive strategies. Nolan (1991) investigated the merits of combining prediction and question generation. These individual pieces of information matter, but they fall short of adequately capturing strategy instruction in ways that benefit teachers and their students. Wilhelm (1995) pinpointed many strategies that his readers invoked to understand text. Having explicit support for two strategies fails to capture this range and complexity.

In the category of tutoring, Fuchs, Fuchs, Mathes, and Simmons (1997) looked at class wide peer tutoring while Jacobson et al. (2001) studied the benefits for a tutor in a cross-age tutoring program. Of the six studies aggregated under comprehension (Dymock, 1993; Gaskins, 1996; Golden, Gersten, & Woodward, 1990; Katims & Harris, 1997; Loxterman, Beck, & McKeown, 1994; Reutzel & Hollingsworth, 1991), six topics received attention.

Even when strategies are packaged within a single study and placed in a classroom context, concerns remain. Jimenez (1997) tapped several features under strategic literacy knowledge (e.g., cognitive strategy instruction, key reading strategies, and opportunities to build fluency). His work promotes the interplay between strategies and the impact of combining them. However, the account of the interactions with these low-literacy Latina/o students falls short of providing several key ingredients posed by Erickson and Guiterrez (2002): (1) sufficiently careful description of the interactions that would allow replication of them, and (2) attention to the contexts that allow (or prohibit) these interactions' success.

Overall, the spread of categorically linked ideas allowed me to list things to do and points to consider, but stymied my intention to generate central messages. Categories of importance demand a rich and related compilation of empirical evidence. When studies stand alone, their conclusions, however individually powerful, fail to contribute to a rigorous and empirically validated program for middle level students. Certainly, simple panaceas for the complexities of middle level literacy do not exist. However, a lack of congruency further problematizes the potential of research to provide a convergence of evidence, strengthen important ideas, and create a realistic implementation path.

Inattention to Replication

Replication seldom occurs. The series of investigations within the category of discussion typify this concern. Here, one researcher and her colleagues (Alvermann, 1995; Alvermann, O'Brien, & Dillon, 1990; Alvermann, et al., 1996) account for the knowledge base for discussion. From them we learn about the nature of discussions, students' perspectives of peer-led discussions, and students' characterization of a good discussion. A trend of one topic, one study, and one set of author(s) defines this category. While this category is especially narrow, replication does not occur in any category. Again, a lack of replication does not question a confidence of the individual findings. It does introduce a call for more attention to contextual variables that replication affords.

Selecting Topics over Context

In these investigations and across categories, the researchers more often select individual topics or limit the cultural context. These decisions ease the design of the research but neglect the practical challenges teachers face. For example, Jimenez (1997) considered Latino/a literacy learners. Teachers more often would have second language learners from an array of linguistic backgrounds sitting side by side with 25 other students. Their ability to invoke a student's first language, one feature of Jimenez's intervention, would obviously lessen. Guthrie, Schafer, Want, and Afflerback (1995) unveil the relationship between time spent reading and the use of cognitive strategies. Teachers struggle to obtain books that encourage students to read silently. Without acknowledging the cultural context where teachers and students interact, these suggestions and others like them, no matter how powerful in the research context, lose viability for real teachers in real schools.

Teachers, however, ache for ideas and the journals I perused for this synthesis offer them. In fact, I encountered numerous manuscripts that proposed ideas for teachers (e.g., Rosenbaum, 2001; Taylor & Nesheim, 2000; Williams, 2001). While these proposals usually have theoretical ties, they lack systematic inquiry. They seemingly appeal to teachers. Too many researchers simply discount these practitioner-generated suggestions as stories masquerading as evidence. Instead of embracing or snubbing these promising practices, they present an opportunity to join what many scholars label craft and expert knowledge by submitting them to systematic consideration. Researchers enjoy the freedom to choose the topics they explore. Perhaps they can consider exploring the practices classroom teachers use.

Choice of Research Method

In this compilation of studies, the preponderance of researchers tap qualitative method. This impacts the types of questions that gain attention and the types of information teachers acquire. It leads to the possibility that we understand affect more than effect. I agree with Feuer, Towne, and Shavelson (2002) that, in spite of numerous complicating factors, "experimentation has been shown to be feasible in education and related fields and is still the single best methodological route to ferreting out systematic relations between actions and outcomes" (p. 8). However, a blend of qualitative and quantitative method might best capture the unique complexities inherent in middle level literacy. I again concur with them that "when properly applied, quantitative and qualitative research tools can both be employed rigorously and together often can support stronger scientific inferences than when either is employed in isolation" (p. 8).

The available contributions from this body of research problematizes a cultural synthesizer's intention to inform classroom teachers about preferred practices. However, important ideas do emerge and articulating them becomes the next task.

Findings of Importance for Teachers

Teachers face a broader set of challenges than considering a single idea. Unlike researchers, they do not have the luxury to exclusively consider one topic or even one category. Instead, they must piece together information within and across categories to develop quality programs. So, when using research such as I compiled, teachers struggle on two fronts. They need to make sense of loosely connected ideas *and* create a way to suit them to their work circumstances. Here, and to reiterate, this collection of research creates rather than rectifies these challenges. The task of merging them into a classroom's literacy culture remains the teacher's challenge. So, as a cultural synthesizer, I am unable to provide a *package* of practices that hold empirical validation. In these studies, that work did not receive attention. However, I can consolidate the information from each category to pose separately viable guidelines that contribute to middle level students' literacy learning.

First, students benefit when teachers broaden the curriculum materials available for their use. To maximize the potential of this shift, teachers can help students make good personal choices, allow those self-selected materials to be central rather than peripheral to the students' programs, and remember the value of culturally relevant texts—especially for under-represented groups (Ollmann, 1993; Tatum, 2000; Worthy, Moorman, & Turner, 1999).

Second, addressing vocabulary across the language arts period rather than considering it as a separate area of study makes sense (Harmon, 1998). When students learn new words, they need numerous opportunities to encounter them across various texts. In addition, teachers cannot forget the importance of explicit vocabulary instruction that offers chances for students to acquire independent word learning strategies. Of importance, this instruction must coincide with students' needs and acknowledge their current practices. However, in guiding students to move beyond what they currently know and do, teachers must anticipate and encourage varied rather than unidimensional strategy use (Buikema & Graves, 1993; Harmon, 2000; Medo & Ryder, 1993). Finally, while dictionaries can offer valuable information about unknown words, teachers must be cautious in their use. As Scott and Nagy (1997) remind us, students have difficulty in extracting accurate understanding from a dictionary's definition. To use a dictionary wisely and well, students need assistance from teachers who recognize its drawbacks and can support and scaffold its appropriate use.

In addition, teachers walk that tightrope of providing overt instruction without sacrificing an attention to student interest, preferences, and needs. In these studies, prediction, self-questioning, and attention to text structure find direct support (Gordon, 1990; Nolan, 1991). When instruction leads to test preparation, teachers must not abandon the daily practices that promote students' literacy learning. In fact, as McAuliffe (1993) found, maintaining a fealty to them seemingly affords a more sophisticated attention to literacy demands than a focus on test responses.

Most teachers have students for whom English is a second language. When possible, helping them access their native-language strengths escalates their literacy learning. While strategy instruction matters to all students, it particularly impacts second language learners (Jimenez, 1997).

Students benefit from comprehension instruction. Using a paraphrasing strategy to help students acquire information from expository texts along with the inclusion of think-aloud strategies finds explicit support (Katims & Harris, 1997). In a rush to teach comprehension, successful teachers do not overlook students' emotional involvement with a text's content and its influence on understanding it (Gaskins, 1996). For some students, understanding better demands knowing more. Therefore, teachers who realize this attend to enlarging students' vocabulary and world knowledge (Dymock, 1993).

Overall, and as Reutzel and Hollingsworth (1991) conclude, teachers must exert care not to reduce comprehension to a set of discrete skills and present them sequentially. As Johnston (1984) reminded us almost two decades ago, "The dynamic interactive nature of the reading process does not lend itself well to specification in terms of discrete objectives with simple criteria. Such specification has tended to decontextualize and trivialize the process" (p. 160). Viewing comprehension as a unitary process that is directly influenced by the text a student reads affords a more productive path (Reutzel & Hollingsworth).

Finally, all students need an ample opportunity to read. The contribution of ongoing general reading to students' literacy growth cannot be ignored (Guthrie, Schafer, Want, & Afflerback, 1995).

Ivey (1999) summarizes a central message that a cultural synthesizer might share with teachers: "Who middle school students are as readers and who they will become is shaped by the context of instruction" (p. 177). She further asserts that "matching reading tasks and texts to students' interests and instructional levels leads to increased skill and motivation to read" (p. 177). This compilation of research supports this stance and encourages teachers to confront the complexity of middle school students, help them develop self-efficacy, and design programs that reflect their needs and wants. As Alvermann (1999) and her colleagues conclude, "Valuing individual choice, making a variety of textual resources available, and working to make an institution like schooling become more responsive to adolescents are worthy goals" (p. 256).

Recently, Broaddus and Ivey (2002) stated that research about middle level readers supports three principles: knowing students as readers, having a wide range of reading materials, and providing time to read. This synthesis supports their claims (and others), but like this synthesis, oversimplifies and fails to address the dire needs that too many middle level readers face. To reiterate a well-established point, and to underscore what this attempt at cultural synthesis portrays, if we expect teachers to turn to empirical data for confirmation and direction for their practices, more needs to be done. I suspect that if middle-level literacy teachers read this packet of studies they would agree that it confirms what they experience on a daily basis but offers too little guidance about how to respond to the day-to-day realities they encounter. To truly impact middle level students' literacy accomplishments, a closer bond must exist between what teachers need and what researchers investigate.

Shared Messages: A Final Word for Researchers and Practitioners

The boundaries established for this research synthesis linked to my assuming a role as a cultural synthesizer and invoked limitations. Perhaps a broader net (e.g., including conference proceedings) would have unveiled more studies, affected the designation of categories, and expanded what I learned within each category. While I am not convinced that breadth would eliminate the concerns I raise, an examination of that possibility remains for another day. For now, and as I revisit the time I spent thinking as a cultural synthesizer and reconsidering the proposals these studies generate, disappointment remains but hope surfaces.

In the best of worlds, the spotlight would shift to middle level literacy and the number of studies addressing middle level literacy would increase. Researchers would consider the array of questions that concern middle level teachers and other stakeholders and offer a clear map for improving the literacy of middle level students. Even with this vision in place, we would want to make sure that what seems like a blessing would not become a curse. A prescriptive path will remain elusive. The best and most complete research will still demand customization to meet the multiple contexts where middle level literacy learning occurs.

To direct a profitable resurgence of a middle level focus, researchers can begin to address the concerns raised by this synthesis of a selected body of research, e.g., selecting middle level audiences more often, addressing research questions in ways that maximize their utility for teachers, and balancing the types of research they tap. In addition, much can be learned from the richer research base available for elementary teachers. The recent work of Taylor and Pearson (2002) provides an important example of an initial direction. Just as they did with "beat-the-odds" schools, middle level researchers can seek out successful teachers, especially those who teach under dire circumstances, and conduct a close investigation of what they do and how. Then, they can link the practices this unveils to professional development models and examine their potential for transfer and their impact on other students. Other examples of promise to emulate exist. To capitalize on them, the research community needs to move forward to the middle ground.

I anticipate a future where middle level researchers and practitioners join forces to make a commitment to research based literacy practices for these students a priority. This alliance would improve the likelihood that the research that matters receives attention and that what is learned gets implemented. Only then can we solidify a commitment to leaving no child behind.

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Figures and Tables

TABLE 1. Categories of identified topics and their frequency

Category label	Number of articles	Percentage of total articles
Interests	8	.18
Strategy instruction	7	.16
Vocabulary	7	.16
Student attributes	7	.16
Comprehension	6	.13
Context	5	.11
Discussion	3	.06
Tutoring	2	.04

TABLE 2. Categories and related studies

Interests	Ollmann, 1993; Palmer & Stewart, 1997; Rinehart, Gerlach, Wisell, & Welker, 1998; Stewart, Paradis, Ross, & Lewis, 1996; Swartz & Hendricks, 2000; Tatum, 2000; Walker-Dalhouse, Dalhouse, & Mitchell, 1997; Worthy, Moorman, & Turner, 1999
Vocabulary	Buikema & Graves, 1993; Harmon, 2000; Harmon, 1998; Koppelman & Verna, 2002; Medo,1993; Scott & Nagy, 1997; Stanley & Ginther, 1991
Strategy instruction	Gordon (1990); Guthrie, Schafer, Want, & Afflerback (1995); Ivey & Broaddus (2001); Jimenez (1997); Langer (2001); McAuliffe (1993); Nolan (1991)
Comprehension	Dymock, 1993; Gaskins, 1996; Golden, Gersten, & Woodward, 1990; Katims & Harris,1997; Loxterman, Beck, & McKeown,1994; Reutzel & Hollingsworth, 1991
Student attributes	Anderman & Maehr, 1994; Arizpe, 1993; Dembo & Eton, 2000; Ivey, 1999; Kos, 1991; Saunders, 1997
Context	Alvermann, Young, Green, & Wisenbaker, 1999; Fairbanks, 2000; Meyers, 1992; Roe & Kleinsasser, 2000; Slavin, 1990
Discussions	Alvermann, 1995; Alvermann, O'Brien, & Dillon, 1990; Alvermann, et al., 1996
Tutoring	Fuchs, Fuchs, Mathes, & Simmons, 1997; Jacobson, Thrope, Fisher, Lapp, Frey, & Flood, 2001