

Principles of Effective English Language Learner Pedagogy

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Acknowledgments

The author would like to thank Haifa Matos-Elefonte and Jennifer Merriman Bausmith for their valuable guidance and insightful feedback in the conceptualization and formation of this report.

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Executive Summary

The purpose of this literature review is to identify the most effective instructional principles for English language learners (ELLs) as documented by prominent researchers in the field and existing research reviews. This report is intended as a high-level synthesis of existing reviews of the literature rather than a comprehensive search and documentation of all primary research articles on ELL teaching and learning. To this end, this review lists the most effective principles for ELL instruction and documents the supporting research evidence for those principles.

Principles 1 and 2 are about implementing challenging curriculum and designing the academic content. Principles 3, 4, and 5 are about effective instruction and the available strategies teachers may use in their teaching. Principles 6 and 7 deal with how to teach ELLs to acquire vocabulary and build reading ability. Principle 8 focuses on how to teach ELLs to use the English language. Last, Principle 9 is about the integration of four language skills: reading, writing, speaking, and listening.

Principle 1: Implement Challenging Curriculum with High Expectations

A curriculum designed for the ELLs should include not only basic skills and basic thinking, but also higher level thinking. Teachers should challenge ELLs on the content being taught and establish high expectations for them.

Principle 2: Design Standard Academic Content and Make It More Accessible

When designing academic content for ELLs, teachers should make sure that they keep the standards for academic content while using every possible means to make it more accessible to students. The language of the teaching materials should be authentic and culturally relevant.

Principle 3: Offer Explicit and Culturally Relevant Instruction

Teachers should take into account students' background knowledge and culture and make their instruction culturally relevant. Teachers should understand the English language developmental levels of their students and select the appropriate instructional strategies for each level.

Principle 4: Support Metacognitive Strategies and Specific Learning Strategies

Teachers should make explicit metacognitive and specific learning strategies for ELLs. They should make sure that students understand the strategies and know when and where it is appropriate to apply the strategy. Teachers should teach students how to use their metacognitive strategies to help with their learning even when their instructional goals are focusing on the academic content.

Principle 5: Use ELLs' First Language Strategically with Difficult Concepts

Teachers should view the first languages of the ELLs as a resource and use them strategically, if possible. The use of the first language will benefit those ELLs who have received some formal education in their first language.

Principle 6: Teach Vocabulary Within Multiple Contexts

Teachers should pay attention not only to breadth but also to depth and association of vocabulary learning. They should embed words in multiple contexts and use them frequently in class.

Principle 7: Build Reading Comprehension Ability

Teachers should adopt the instructional practices they use with native English speakers to improve ELLs' reading comprehension. Reading aloud frequently, connecting reading materials with ELLs' cultural background knowledge as well as content background knowledge and teaching reading in both English and the students' first language may be additional helpful strategies.

Principle 8: Provide Strong Oral and Written Language Models for Students to Follow

Teachers should cultivate students' ability to use oral English and create opportunities for them to use it. ELLs should communicate with teachers rather than solely with their English-speaking peers. Before asking ELLs to produce English either in oral or written form, teachers should set a good model for ELLs to follow.

Principle 9: Integrate Reading, Writing, Speaking, and Listening Skills

Teachers should integrate reading, writing, speaking, and listening skills in their teaching. They should teach ELLs to simultaneously develop their four language skills with academic English. They should not only provide extensive English input for ELLs — that is, chances to read and listen to English — but also create more opportunities for them to use English.

Purpose

Extensive research has been conducted on effective instructional strategies for English language learners (ELLs) from various perspectives. Researchers have been divided about whether instruction for native English speakers would also work for ELLs. Some researchers maintain that what we know about good instruction and curriculum for native speakers also holds true for ELLs (Goldenberg, 2008). However, other researchers claim that it is not safe to presume that what works for English-speaking students will also work for ELLs (La Celle-Peterson & Rivera, 1994; Meltzer & Hamann, 2004; NCTE, 2008).

The purpose of this literature review is to identify the most effective principles for ELL instruction as documented by prominent researchers in the field and existing research reviews. Because the research base on teaching and learning for ELLs is vast, I intentionally chose this narrow search focus to ensure that the principles identified have broad and deep scientific evidence to support them. There might be some other areas that are relevant to effective instruction. For example, research shows that formative assessment¹ is the key to effective instruction (Black & William, 1998; Carr, Lagunoff, & Sexton, 2007). However, relatively little research has been found in the context of ELL instruction; therefore, it is not included in the current literature review. This report is intended as a high-level synthesis of existing reviews of the literature, rather than a comprehensive search and documentation of all primary research articles on ELL teaching and learning. To this end, this review lists the most effective principles for ELL instruction and documents the supporting research evidence for those principles.

Methods

ERIC, PSYCINFO, PSYCARTICLES, and other databases were searched for all studies involving ELLs, language minority students, and related descriptors. Citations in other reviews and articles were also obtained. The main standards of methodological adequacy and relevance to the purpose of the review were:

- 1. ELLs in U.S. schools, primarily in middle schools and high schools;
- 2. Research or literature reviews done by a prominent research institute or university;
- 3. Research or literature reviews conducted on either the national or state level;
- 4. Research or literature reviews conducted within the last 20 years; and
- 5. Articles written by a recognized scholar in the field of teaching ELLs.

The principles were developed by converging evidence from multiple studies and then synthesizing the evidence into thematic principles. A primitive thematic principle was formed when at least two pieces of evidence supported the themes about educating English language learners. Then those primitive thematic principles were merged to form the final

^{1.} Formative assessment is an ongoing process rather than an actual test that teachers and students use during the instruction to provide feedback to adjust instruction so as to improve students' learning (Popham, 2008; Popham, 2009; FAST SCASS, 2008). It is the key to effective instruction (Black & William, 1998; Carr, Lagunoff, & Sexton, 2007). The literature review done by Black and William (1998) indicated that formative assessment did improve student learning. They also found that the learning gains were the largest ever reported for the any other educational interventions. The effectiveness is much more evident when teachers employ formative assessment. However, relatively little research has been found targeting formative assessments in the context of ELL instruction; therefore, it is not included in the current literature review. It will be included in the future.

primary principles. For each of the nine principles, the overarching principle is first presented, followed by a summary of the supporting research.

The first five principles are about academic content instruction. Teachers should have high expectations for ELLs (August & Shanahan, 2006; Coady, Hamann, Harrington, Pho, & Yedlin, 2008; Meltzer & Hamann, 2004; Thompson, 2004) and challenge students with tasks requiring high-level thinking and language processing (Galguera & Hakuta, 1997; Hakuta, 1998). They should design comprehensible materials (Alliance for Excellent Education, 2005) and use the metacognitive strategies in their instructions (Chamot, 2009; Cohen, 2010; Cohen, 2011; Zimmerman, 2008). Principles 1 and 2 are about implementing challenging curriculum and designing the academic content. Principles 3, 4, and 5 are about the most effective instruction and available strategies teachers may use in their instructions.

Generally speaking, the main challenge most ELLs face is to learn academic content while simultaneously improving their English proficiency (Goldenberg & Coleman, 2010). Teachers should attempt to unify language learning and content learning (Spaulding, Carolino, & Amen, 2004). They may teach language through content by contextualizing English but maintaining the crucial academic content and concepts. That being said, there are still some principles (Principles 6–9) that focus on instructional strategies to help ELLs develop English language ability. Principles 6 and 7 deal with how to teach ELLs to acquire vocabulary and build reading ability. Principle 8 focuses on how to teach ELLs to use the language. Principle 9 is about the integration of four language skills: reading, writing, speaking, and listening.

Principle 1: Implement Challenging Curriculum with High Expectations

A curriculum designed for ELLs should include not only basic skills and basic thinking, but also higher level thinking. Teachers should challenge ELLs on the content being taught and establish high expectations for them.

When English language learners are still learning English, middle and high schools tend to assign them to courses that offer limited challenges (Freeman & Freeman, 2009). However, research shows that teachers should provide challenging, theme-based curriculum to ELLs to help develop academic concepts (Freeman, Freeman, & Mercuri, 2003). Teachers should challenge students with tasks requiring high-level thinking and language processing (Galguera & Hakuta, 1997; Hakuta, 1998). High-level or higher order thinking refers to the mental processes of application, analysis, synthesis, and evaluation (AYP, 2011). Teachers should incorporate these thinking skills into the curriculum (Thompson, 2004) and provide opportunities for ELLs to learn to use these higher order thinking skills (Chamot, 1995).

Teachers should have high expectations for ELLs and should believe that ELLs can achieve or surpass the levels depicted in state standards (August & Shanahan, 2006; Coady et al., 2008; Meltzer & Hamann, 2004; Thompson, 2004). Teachers should have confidence in students (Freeman & Freeman, 1989). Students must be taught the important core subject matter content expected of all students. Teachers often find that ELLs, even those students who have passed English language proficiency assessments (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006), have difficulty in completing their learning tasks (NCTE, 2008). Teachers may think that ELLs are the same as students with learning disabilities. However, research has shown that ELLs are different from students with learning disabilities (McCardle, Mele-McCarthy, Cutting, Leos, & D'Emilio, 2005; NCTE, 2008). Students with specific learning disabilities may have lower IQ and have difficulties in acquiring some knowledge or using their abilities to learn. The main difficulty for most regular ELLs, however, lies in their disability in

using English, more specifically, academic English (NCTE, 2008). Early intervention will help ELLs succeed in their courses (NCTE, 2008).

Principle 2: Design Standard Academic Content and Make It More Accessible

When designing academic content for ELLs, teachers should make sure that they keep the standards for academic content while using every possible means to make it more accessible to students. The language of the teaching materials should be authentic and culturally relevant.

While there is little research on the topic of designing learning materials for the ELLs (Howard & Major, 2005; NCTE, 2006), it is important that instructional materials be appropriate to the needs of the students who need access to specialized materials (August & Hakuta, 1997). The extant research reveals that textbooks should be progressive, varied, and challenging (Garinger, 2002). English teaching materials should offer opportunities for integrated language use and should be connected to each other to provide a progression of skills (Howard & Major, 2005). The design and selection of the English learning materials should take into account the cultural background of the students and include culturally relevant materials (August & Shanahan, 2006; Howard & Major, 2005; NCTE, 2006). The language must be authentic and written to inform or entertain. The materials should choose a variety of texts around a certain theme (NCTE, 2006). The activities designed should contribute to learners' language acquisition (Garinger, 2002).

The materials should be attractive and flexible (Howard & Major, 2005). To help students easily figure out essential information and its relationship to supporting ideas, a variety of visual aids, including pictures, diagrams, charts, and concept maps should be added to make both the content and the language more accessible to students (Alliance for Excellent Education, 2005). Reading achievement is significantly related to the diversity and depth of ELLs' English vocabulary knowledge (Genesee, Lindholm-Leary, Saunders, & Christian, 2005). If possible, texts should be provided in the native language of the ELLs in the class (NCTE, 2006; Goldenberg & Coleman, 2010).

Principle 3: Offer Explicit and Culturally Relevant Instruction

Teachers should take into account students' background knowledge and culture and make their instruction culturally relevant. Teachers should understand the English language developmental levels of their students and select the appropriate instructional strategies for each level.

Research suggests that explicit instruction in academic concepts, academic language, and reading comprehension strategies is necessary for the completion of the classroom tasks (Alliance for Excellent Education, 2005). According to Krashen's second language acquisition theory, the best teaching method for ELLs is to provide communicative and comprehensible input to the students (Krashen, 1985). Instruction should be explicit (Goldenberg, 2006; Norris & Ortega, 2000) and comprehensible (Thompson, 2004; Bayley, 2009). To provide explicit instruction, teachers must modify their instruction to take into account ELL students' language limitations (Goldenberg, 2008), and students' backgrounds (Callahan, 2005; Galguera & Hakuta, 1997; Marzano, 1998), such as their prior education, socioeconomic status, prior content knowledge, immigration status, life experience, and culture (Freeman et al., 2003; NCTE, 2008). Research has shown that these modifications will benefit not only ELLs but native speakers as well (NCTE, 2008).

Teachers should also try to activate students' cultural background knowledge (Rivera, Francis, Fernandez, Moughamian, Lesaux, & Jergensen, 2010; Short & Fitzsimmons, 2007) as well as their background content knowledge (Meltzer & Hamann, 2004) to create a friendly classroom environment for the ELLs (Galguera & Hakuta, 1997; NCTE, 2006). Teachers should integrate the language and cultures of immigrant students in language learning (NCTE, 2006; Spaulding et al., 2004). When students are interested in something and feel that they can connect what they are learning to their real lives or cultural backgrounds, they are more highly motivated and tend to learn more (Alliance for Excellent Education, 2005; Meltzer & Hamann, 2004).

Additionally, teachers should know the English language developmental levels of their students and the instructional strategies appropriate at each level (Thompson, 2004). They need to recognize the different linguistic and academic needs of students in various ELL subpopulations (e.g., recently arrived immigrants with native language literacy, recently arrived immigrants without native language literacy, and long-term ELLs) (Freeman et al., 2003; Spaulding et al., 2004). Teachers should understand that second language acquisition is a gradual developmental process and is built on students' knowledge and skill in their native language (NCTE, 2006). Teachers should also encourage schema building by helping students access the background content knowledge they already have and use it (Rea & Mercuri, 2006).

Teachers should differentiate their instruction to ELLs because ELLs may have different experiences learning English. Students' prior education, socioeconomic status, content knowledge, and immigration status may lead to variety in the process of learning English (August & Shanahan, 2006; Ellis, 2008). Teachers should recognize the different linguistic and academic needs of various ELLs (Spaulding et al., 2004).

Principle 4: Support Metacognitive Strategies and Specific Learning Strategies

Teachers should make explicit metacognitive and specific learning strategies for ELLs. They should make sure that students understand the strategies and know when and where it is appropriate to apply the strategy. Teachers should teach students how to use their metacognitive strategies to help with their learning even when their instructional goals are focusing on the academic content.

Metacognitive strategies, or self-regulated learning strategies, involve the process of setting goals, planning what they will do, selecting and deploying learning strategies and monitoring the effectiveness of those strategies, solving problems encountered, and evaluating performance and achievement (Chamot, 2009; Cohen, 2010; Cohen, 2011; Zimmerman, 2008). Metacognition is a crucial skill for learning a second language and a skill used by highly proficient readers of any language (Alliance for Excellent Education, 2005). Students who have poor understanding of cognitive learning strategies are more likely to struggle with reading and writing (Conley, 2008). What's more, most students not only have limited knowledge of effective learning strategies but also do not know how to select, evaluate, and adjust strategies (Cleary & Zimmerman, 2004). Teachers should also instruct students in language learning strategies (Spaulding et al., 2004). Instructional techniques that use metacognitive strategies tend to have strong effects on improving student achievement (Marzano, 1998). A recent survey of a group of international experts revealed a consensus that strategies that involve a metacognitive component enhance performance in language learning (Cohen & Macaro, 2007).

Research shows that metacognitive strategies are teachable and can lead to improvement in students' achievement (Schunk, 1996; Schunk & Zimmerman, 1998, as cited in Zimmerman, 2002). Explicit teaching of metacognitive strategies is very important. Teachers should model the strategy by thinking aloud (Chamot, 2009; Cobb, 2004; Cohen, 2011; Rea & Mercuri, 2006), using the strategy names, telling students why the strategy is important and how it can help them, reminding students to use strategies as they study, and providing opportunities for students to discuss and use strategies (Chamot, 2009; Rea & Mercuri, 2006) so that they can internalize the use of the strategies (Cohen, 2011). Even if the instructional goals focus on the knowledge, teachers should also involve the metacognitive components in their instruction (Marzano, 1998).

Principle 5: Use ELLs' First Language Strategically with Difficult Concepts

Teachers should view the first languages of the ELLs as a resource and use them strategically, if possible. The use of the first language will benefit those ELLs who have received some formal education in their first language.

When ELLs are in the process of learning English, their first language is usually a resource they can use (NCTE, 2008). ELLs may use linguistic, metacognitive, and experiential sources from their first language (NCTE, 2008). Research has shown that English language literacy development is similar in some important and fundamental aspects to ELLs' native language literacy development (NCTE, 2008); thus, oral proficiency and literacy in the first language can be used to facilitate literacy development in English (Genesee, Lindholm-Leary, Saunders, & Christian, 2006). Aspects such as phonological awareness, inferencing, and monitoring comprehension are related to underlying cognitive developments and are likely to influence acquisition in any language (NCTE, 2008). Some good strategies such as monitoring comprehension can be used across languages (Durgunoğlu, 2009).

Native language development can have a positive impact on ELLs' English development (Spaulding et al., 2004). The use of the first language would be especially helpful if the ELLs have received some formal education in the first language; it would promote higher levels of reading achievement in English (Goldenberg, 2008; Hakuta, 1998). Home language experiences can have a positive impact on literacy achievement (August, & Shanahan, 2006). Thus, teachers should use students' native language strategically (Freeman & Freeman, 2009; Goldenberg, 2006) when explaining difficult concepts. However, Hakuta (2011) argued that the language of instruction is not the question researchers should focus on, unless the goal is to foster bilingualism.

Principle 6: Teach Vocabulary Within Multiple Contexts

Teachers should pay attention not only to breadth but also to depth and association of vocabulary learning. They should embed words in multiple contexts and use them frequently in class.

Vocabulary development is crucial for ELLs' academic success (Short & Fitzsimmons, 2007). Teachers should focus on vocabulary development (Francis et al., 2006; Rivera et al., 2010). They should attach importance not only to the breadth but also to the depth of the vocabulary instruction. Expanding students' vocabulary is essential for the development of other language skills such as reading, writing, speaking, and listening. ELLs' conceptual knowledge of words and their association determines the level of their language proficiency (Francis et al., 2006). Additionally, the specific academic vocabulary of different content areas needs to

be explicitly taught (Ballantyne, Sanderman, & Levy, 2008; Durgunoğlu, 2009; Moughamian, Rivera, & Francis, 2009; Short & Echevarria, 2004).

The useful vocabulary learning strategies include actively using the words in a variety of situations and providing multiple exposures to the words (August, Carlo, Dressler, & Snow, 2005). Although effective vocabulary instructional approaches and activities for native English students can also be used in teaching ELLs (Graves, 2000; Graves, 2006; Stahl & Nagy, 2006, as cited in Lesaux, Kieffer, Faller, & Kelley, 2010), teachers need to consider which strategies are effective in their classrooms (Lesaux et al., 2010). Useful vocabulary teaching strategies include offering increased exposure to words in different contexts, teaching students metacognitive strategies for learning, and vocabulary development strategies. Students should engage themselves in significant amounts of academic reading materials. Teaching academic vocabulary within a context is beneficial to improving students' vocabulary and reading comprehension (Lesaux et al., 2010).

Principle 7: Build Reading Comprehension Ability with Strategies

Teachers should adopt the instructional practices they use with native English speakers to improve ELLs' reading comprehension. Reading aloud frequently, connecting reading materials with ELLs' cultural background knowledge as well as content background knowledge, and teaching reading in both English and the students' first language may be additional strategies that are helpful.

The effective reading instructional strategies used with native English-speaking students, including vocabulary, comprehension, and phonics, are also important for ELLs (August & Shanahan, 2006). Phonemic awareness, phonics, fluency, vocabulary, and text comprehension are all key components of reading as identified by the National Reading Panel (NICHD, 2000). These essential components of literacy should be emphasized in teaching ELLs as well (August & Shanahan, 2006; Garcia, 2009). Effective reading instruction that can provide substantial coverage in these components may have benefits for ELLs. While it is noted that phonemic awareness and phonics are the basic components emphasized for beginners, the fact that there are always ELLs coming into the U.S. at any time with little knowledge of English, coupled with the lack of mastery of phonemic awareness and phonics by some ELLs, suggests that some instruction on phonemic awareness is still necessary at the middle school level. Teachers may use different teaching approaches at the middle and high school. What teachers should do is point out phonemes that are homophones during instruction that is, contextualize the phonemic instruction (Calderon, 2007).

To offer effective reading instruction, teachers should have a solid background in language learning, reading process, and reading comprehension strategies (Short & Fitzsimmons, 2007; Thompson, 2004). Effective literacy instruction should include a combination of teaching techniques such as systematic and explicit reading instruction with consistent feedback, guided reading, teaching learning strategies, and free reading (AYP, 2011). Reading aloud frequently is a good way to help ELLs improve phonemic awareness and phonics knowledge (NCTE, 2006); it allows students to become familiar with the sounds and structure of the written language. Reading aloud with text at hand helps facilitate the connection between oral and written language.

Teachers should use effective reading strategies (Rivera et al., 2010). They should understand that reading skills are acquired through abundant reading (NCTE, 2006). For example, when introducing reading materials, teachers should connect the readings with students' background knowledge and experiences (NCTE, 2006; Strangman & Hall, 2004; Short &

Echevarria, 2004). Before students attend class, teachers may ask them to read a simple text on the same topic or read a similar text in their first language to stimulate their content knowledge of the text (NCTE, 2006). In the classroom, teachers should teach key vocabulary essential to the topic (NCTE, 2006; Short & Echevarria, 2004). They should encourage students to read silently and then teach language features such as text structure, vocabulary, and grammar to facilitate comprehension of the text (NCTE, 2006). They should ask students to discuss the reading materials both before and after reading (NCTE, 2006).

ELLs may learn to read best if taught both in their native language and in English from the beginning of formal instruction (Slavin & Cheung, 2003). Reading instruction in a familiar language may help decoding, sound blending, and generic comprehension strategies. These strategies may transfer among languages that use phonetic orthographies (Slavin & Cheung, 2003). The development of the first language of ELLs is good for their second language academic achievement (Genesee et al., 2006).

Principle 8: Provide Good Language Use Models for Students to Follow

Teachers should cultivate students' ability to use oral English and create opportunities for them to use it. ELLs should communicate with teachers rather than solely with their Englishspeaking peers. Before asking ELLs to produce English either in oral or written form, teachers should set a good model for ELLs to follow.

The development of English oral language is important to the school success of ELLs (August, 2003; August & Shanahan, 2006; Genesee et al., 2005). Research has shown that there is a positive relationship between English oral proficiency and English reading performance (August & Shanahan, 2006). ELLs usually need intensive oral English language development, especially academic English instruction (Goldenberg, 2008). As English oral proficiency improves, ELLs are more likely to use English as a tool to apply more complex language learning strategies.

Students should be given the opportunity to talk with more fluent English speakers (AYP, 2011; Bitter & Golden, 2010) and to express complex meanings even when their English proficiency is limited (NCTE, 2008). They should provide ELLs with goal-directed opportunities to interact with each other to build specific content knowledge and skills (Sherris, 2008). However, teachers should interact more with ELLs instead of letting ELLs talk exclusively with their English-speaking peers, given that research has revealed that less proficient ELL students might benefit more from their interaction with their teachers (Genesee et al., 2005). Even if ELLs possess fluent oral English ability, they may still need to learn forms and structures of academic language (August & Shanahan, 2006).

Teachers should help students learn writing skills in a number of ways (NCTE, 2006). First, teachers should provide models of well-organized papers and highlight the specific points that are well written. Second, teachers should introduce cooperative, collaborative writing activities that can promote discussion. Third, teachers should make comments on the strength of the paper. Teachers should model writing clear sentences and topic sentences. Higher level students can be given the opportunity to revise written text for clarity (Bitter & Golden, 2010).

Principle 9: Integrate Reading, Writing, Speaking, and Listening Skills

Teachers should integrate reading, writing, speaking, and listening skills in their teaching. They should teach ELLs to simultaneously develop their language skills with academic English.

They should not only provide extensive English input (i.e., chances to read and listen to English) for ELLs but also create more opportunities for them to use English.

Listening, reading, writing and speaking are integral parts of language use. Oral English will facilitate English reading ability development (August & Shanahan, 2006). Because reading and writing are closely related skills, students need to engage in oral communication in the classroom in order to develop academic English proficiency, but they also need to engage in reading and writing activities (Short & Fitzsimmons, 2007).

Teachers should not focus only on one of the four language skills at the sacrifice of the others. Instead, they should integrate the four skills in their instruction and they should do so from the very start (Short & Fitzsimmons, 2007). Teachers should design their lessons in such a way that students can work together to understand what they read by listening, speaking, reading, and writing collaboratively about the academic concepts in the text (Alliance for Excellent Education, 2005; Freeman & Freeman, 2009; Sherris, 2008). Teachers should teach ELLs in secondary school, like their K-8 peers, to simultaneously develop their skills with academic English and learn content in a variety of disciplines (NCTE, 2008). Teachers should provide extensive second-language input for ELLs and create opportunities for using the language as well (Ellis, 2008).

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