

Promoting Language Proficiency and Academic Achievement Through Cooperation

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Cooperative learning is an instructional strategy that provides the social structure for learners to work cooperatively in groups. Although it was developed for use with native English speakers, cooperative learning has been found to be effective for promoting the academic achievement, language acquisition, and social development of English language learners (Calderón & Slavin, 1999; Ovando & Collier, 1998).

This digest discusses a project conducted in the Ysleta Independent School District in El Paso, Texas, that sought to integrate effective practices in literacy education, an empirically based cooperative learning model, and a classroom management model to help teachers develop the English and Spanish language proficiency of their students. The cooperative learning model selected was Cooperative Integrated Reading and Composition (CIRC) (Stevens, Madden, Slavin, & Farnish, 1987). CIRC consists of instructional practices that develop social, academic, and communication skills. It was selected for the following reasons: (1) It integrates oral language development, reading, and writing through all phases of instruction; (2) it enables bilingual teachers to manage their English, primary language, and transitional literacy activities effectively; (3) it develops critical thinking and social skills; (4) it develops self-esteem and self-confidence; (5) it uses children's literature in two languages and a variety of text genres, including student publications and reading texts; (6) it helps students appreciate and become proficient in their primary language while developing proficiency in English; and (7) it provides an English teaching and learning environment in which the subject matter is not watered down, and higher order discourse and thinking are the norm (Calderón, Hertz-Lazarowitz, & Slavin, 1998). This digest describes the features of the bilingual version of the CIRC model, now called BCIRC, and highlights initial findings from the Ysleta Independent School District.

At the time of the study, 74% of the students in the Ysleta Independent School District were nonnative English speakers; 70% were Hispanic and 24% were limited English speaking. Students were provided with intensive instruction in their native language from kindergarten through Grade 2. Reading and writing in English were given more emphasis in Grade 3, with continued instruction in Spanish. By Grade 4, students were reading and writing in both English and Spanish. However, the transitional phase continued through Grade 4. To study how students make the transition from their first language to English, Grade 2, 3, and 4 classes were selected for the project.

Twelve bilingual experimental BCIRC classes and 12 bilingual control classes were involved. Control and experimental teachers spent 60 to 90 minutes daily on reading and language arts instruction. During this time block, experimental teachers used only BCIRC and heterogeneous grouping. Control teachers grouped students by ability and used more traditional reading instruction approaches such as round robin, oral reading, simple cooperative activities, and workbook practice. They conducted English as a second language (ESL) instruction as a separate 30-minute block using a packaged curriculum. Control teachers alternated instruction in English and Spanish daily. Experimental teachers integrated second language acquisition principles and methods into BCIRC. They taught 2 weeks of Spanish literature followed by 2 weeks of English literature throughout the year. BCIRC students used Spanish for first language reading and English for ESL and transitional reading.

Features and Strategies of Bilingual CIRC

Phase I: Activities Before Reading

Building background, the vocabulary of cooperation, and team building. Interactive structures: Whole class or teams of four with teacher.

This feature is based on the premise that the more familiar readers are with the content and language of a reading selection, the easier it is for them to understand it. To build familiarity with content, it is necessary not only to fill information gaps but also to minimize cultural and vocabulary gaps. For example, without proper background knowledge, a Hispanic child may have difficulty understanding a story about a trip to New York City.

Team building is often incorporated into background-building activities. Before reading a story about a hummingbird, for example, students work in teams to develop posters on birds. This activity generates discussion around the topic of birds and builds a cognitive and factual knowledge base around the upcoming reading

selection. At the same time, learning becomes a cooperative, highly interactive venture. This creates a positive learning environment in which students value each others' contributions and work in teams. It also builds unity and appreciation, contextualizes the selection, and identifies content and language that may be new to the students. The secure and supportive environment also motivates students to take risks.

All of the selections in a teaching unit are related to the same theme. The vocabulary and concepts developed for one selection become background knowledge for the next selection. This thematic approach also facilitates the learning of key concepts and vocabulary. Themes allow students to associate words with a topic and make connections between words.

Making predictions. Interactive structures: Whole class or teams of four with teacher.

The teacher shows the reading selection to the students, who then work in groups of four to formulate their predictions about it. One child acts as a recorder in each group, and with the help of the other group members, writes a prediction. If consensus is not reached on one prediction, several predictions may be generated by the group. Later in the process, students are asked to read a story up to a certain point, then stop and make predictions before reading the rest of the story. Asking students to make predictions entices them to read the story more carefully and to use context clues more effectively as they work through the process of confirming or rejecting their predictions. Students appear to remember events in the story better when the events discussed contribute to their prediction making.

Previewing a selection and building content vocabulary. Interactive structure: Whole class with teacher.

Previewing is particularly important when students are reading in a second language. In the preview, the teacher leads the students sequentially through a selection, establishing elements of the plot and characters. Vocabulary development familiarizes students with the words, idioms, and grammatical constructions of the selection before they read it. This includes posting and reviewing ESL definitions of new vocabulary. The new words are also written in sentences and posted for the students to see throughout the week.

Phase II: Activities During Reading

Shared reading. Interactive structures: Whole class or small groups with teacher.

During shared reading, the teacher reads a story aloud as students follow the text in a big book or in their own copies. As the teacher reads aloud, students hear the flow, rhyme, and rhythm of the language and make connections between the written and oral forms. This step includes modeling, paraphrasing, restating, gesturing, acting out, and questioning, as well as strategies for decoding and comprehension, such as think alouds, self-correction, and rereading. Later, students mimic and practice, in small groups, the pronunciation of the words and the rhythm and structure of the text.

Partner reading. Interactive structures: Dyads and groups of four.

Students sit in pairs and take turns reading stories aloud. At first, partners read alternating sentences. Weeks later, they are ready to alternate between paragraphs or pages. Often, partners track the text for one another using their index finger. Through partner reading, ESL students learn to assist each other with the pronunciation and decoding of words. As students work through the text, a helping bond develops between them. Reading aloud becomes an enjoyable and interactive experience that helps students develop fluency and confidence in their ability to read. An important consideration in partner reading is the pairing of students. In this project, teachers were asked to rank students as high, medium, or low in reading ability in both English and Spanish. Partners were then grouped as follows: high with medium and medium with low. These four later become a heterogeneous team.

Another important aspect of partner reading is modeling. Teachers first role-play partner reading with several students. Next, students role-play reading in pairs, while the teacher provides guidance and feedback on the helping strategies. The emphasis is on developing strategies for helping one's partner read fluently.

Treasure hunt: Story comprehension. Interactive structures: Dyads, groups of four, individuals.

During this step, students first discuss with their reading partners responses to a list of questions about the story listed on several sheets referred to as a treasure hunt. Next, students come together in teams of four in a Numbered Heads Together activity. In this activity, students number off from 1 to 4, the teacher asks a question, then each team consults to ensure everyone knows the answer. Next, the teacher picks a number, and the students with that number answer the question for their team. The partner reading activity described above ensures oral fluency for all students, and the Numbered Heads Together activity ensures comprehension of the story elements by all students. After the oral processing of information, students write their own answers to the questions on the treasure hunt sheets.

Story mapping. Interactive structure: Teams of four.

Using a story map, the students work in small groups to map out the names or attributes of the characters, the setting, the main events, and the ending of a selection. Story mapping engages students in a variety of mental processes as they discuss and organize the story. It helps students better understand and remember the events in the story and learn to use story maps for other reading and for writing.

Story retell. Interactive structures: Dyads or teams of four, storyteller to whole class.

After the story mapping activity, students sit with a partner and take turns retelling the story without looking at the text or the maps. Before students do this activity on their own, teachers role-play with several students, paying special attention to probing and cuing strategies so the retelling is as accurate and complete as possible. Next, pairs of students role-play, retelling the story while the teacher provides guidance and feedback on the interaction. The teacher then moves around the room and helps students practice with their partners. Afterwards, partners discuss what they liked about the story.

Story-related writing. Interactive structures: Dyads, teams of four, individuals.

Working with a partner or in small groups, students discuss, edit, and publish books that adapt the selection just read or retell the story with a different ending. They help each other develop story lines and characters, sequence events, plan the mechanics of putting the book together, give each other feedback, and build on each other's ideas.

Words out loud and spelling. Interactive structures: Dyads, individuals.

Words from the story are compiled into word banks to be learned and mastered. Through an array of interactive activities, students learn to read fluently, spell, and use the words in their word banks correctly in meaningful sentences.

Phase III: Activities After Reading

Word meaning practice. Interactive structures: Individuals, teams of four, dyads.

In discussions with the teacher, students write meaningful sentences that include key words from the reading selection that give the writer and reader a clear picture of what the words mean. Students write sentences in teams first, then individually. Partners check each other's sentences.

Partner checking. Interactive structures: Dyads; teams of four.

After students complete the activities above, their partners initial the student assignment form. Students are given daily expectations about the number of activities to be completed, but they can go at their own rate and complete the activities earlier than planned, creating additional time for independent reading.

Sentence writing. Interactive structures: Dyads, teams of four, individuals.

Writing meaningful sentences often requires a great deal of discussion between students and the teacher as they explore various possibilities for generating good sentences. Student dyads learn how to integrate word definitions with their own ideas and how to evaluate and refine their sentences using criteria for meaningful sentences. Usually, teachers spend several months modeling this phase through whole-class presentations. Students then practice writing meaningful sentences in teams, then with partners, then individually.

Test. Interactive structure: Individuals.

Students are given a comprehension test on the story, asked to write meaningful sentences for each vocabulary word, and asked to read the word list aloud to the teacher. Students are not permitted to help one another on these tests.

Direct instruction in reading comprehension. Interactive structures: Whole class; small groups.

Throughout the lesson cycle, the teacher provides direct instruction in reading comprehension skills such as identifying main ideas, drawing conclusions, cause and effect, and comparing and contrasting. The story line and events in the selection determine the point at which these comprehension skills are taught in context.

Writing workshops. Interactive structures: Whole class, small groups, dyads, individuals.

The teacher provides step-by-step explanations and ideas for completing a writing assignment. Students work closely with the teacher and in teams through writing, rewriting, revising, and editing activities until they are comfortable enough to use the writing process on their own.

Family literacy. Interactive structures: Individual with parents, family, or friend.

During independent reading activities, students are asked to read a book of their choice every evening for at least 20 minutes. Parents are encouraged to discuss the readings with their children and to initial forms indicating that the students have read for the required time. Parents are shown how to conduct these literacy events at home. Students earn points for their team if they submit a complete form each week. Independent reading and book reports replace all other homework in reading and language arts.

Findings

Qualitative and quantitative data from this study suggest that CIRC is an effective classroom management tool for bilingual and ESL content instruction. The strategy of spending 2 weeks studying a piece of literature and doing related writing in the native language followed by 2 weeks studying the literature and doing related writing in English provided a solid base for developing proficiency in two languages.

Quantitative data showed that BCIRC students outperformed control students on the Texas Assessment of Academic Skills test. In writing, the English language learners in the 12 experimental CIRC classes outperformed regular English students in the control classes. Nine of the 12 BCIRC teachers had students who placed first, second, or third in the school's writing contests. Analysis of student products from BCIRC and control classes showed that the quantity and quality of writing samples from the students in BCIRC classes were superior. For example, students wrote longer and more comprehensive narratives with much more detail and accuracy of events.

Analysis of videotapes revealed that students in BCIRC classes had better peer helping strategies and cooperation skills than did those in control classes. Students were also much more comfortable speaking in their groups and in front of the class.

Perhaps one of the most important outcomes of the project was the creation of a better learning environment for the students learning English. The development of interactive skills also fostered the development of social skills and helping skills. Students learned to value each other and to concentrate on positive relationships. Throughout the year, as new students came into the classes, they were immediately integrated into the teams. Guided interaction around meaningful and interesting tasks and interesting reading selections helped even the most reluctant learners become actively engaged in learning.

The exposure to different abilities in Spanish and English helped students value their own bilingual abilities and see their achievements as positive. According to teachers' reports, student self-esteem had never been higher. Being accepted, appreciated, supported, and praised by their peers seemed to have a profound impact on students' self esteem.

Conclusion

For students learning English, BCIRC offers language experiences that integrate speaking, listening, reading, and writing. The activities are meaningful, relevant, and interesting, and tap into students' linguistic and cultural backgrounds. The extensive interaction involved in BCIRC activities helps students develop fluency in and comfort with English and Spanish. The teaching strategies used allow students to tackle increasingly complex material, build their vocabulary, and gain confidence and independence in reading. Students also learn that they are active participants in helping others learn, and that their ideas are valued and encouraged.

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