A study examined one SAIL (Students Achieving Independent Learning) teacher's development of instructional practices from a reading strategies instructor who promoted some group discussion to an experienced transactional strategies teacher. The teacher taught the same story for three consecutive years to three comparable groups of low-achieving second-grade students. An interaction-tracking and coding scheme was used to analyze the 45-minute lessons for changes in interactional patterns, participation by group members, instructional focus, strategy instruction, and promoted and self-regulated use of strategies by students. By the third year of the study, students participated more actively in story discussion and used strategies with less teacher prompting to support their interpretations of and responses to text. These changes appeared to occur because of modifications in the teacher's instructional practices. The instruction that emerged during the third year could be characterized as transactional strategies instruction, an approach that involves teaching reading group members to use comprehension strategies as they jointly construct interpretations of text. (Contains 29 references, and three tables and one figure of data. A description of interactional pattern types is attached.) (RS)
The Evolution of Transactional Strategies Instruction in One Teacher’s Classroom

Rachel Brown
State University of New York at Buffalo

Lynne Coy-Ogan
Montgomery County Public Schools
Rockville, Maryland

National Reading Research Center

READING RESEARCH REPORT NO. 19
Spring 1994
The Evolution of Transactional Strategies Instruction in One Teacher’s Classroom

Rachel Brown
State University of New York at Buffalo

Lynne Coy-Ogan
Montgomery County Public Schools
Rockville, Maryland

READING RESEARCH REPORT NO. 19
Spring 1994

The work reported herein is a National Reading Research Project of the University of Georgia and University of Maryland. It was supported under the Educational Research and Development Centers Program (PR/ Award NO. 117A20007) as administered by the Office of Educational Research and Improvement, U.S. Department of Education. The findings and opinions expressed here do not necessarily reflect the position or policies of the National Reading Research Center, the Office of Educational Research and Improvement, or the U.S. Department of Education.
NRRC
National Reading Research Center

Executive Committee
Donna E. Alvermann, Co-Director
University of Georgia
John T. Guthrie, Co-Director
University of Maryland College Park
James F. Baumann, Associate Director
University of Georgia
Patricia S. Koskinen, Associate Director
University of Maryland College Park
Nancy B. Mizelle, Acting Associate Director
University of Georgia
Jamie Lynn Metsala, Interim Associate Director
University of Maryland College Park
Linda C. DeGroff
University of Georgia
John F. O'Flahavan
University of Maryland College Park
James V. Hoffman
University of Texas at Austin
Cynthia R. Hynd
University of Georgia
Robert Serpell
University of Maryland Baltimore County

Publications Editors
Research Reports and Perspectives
Linda DeGroff, Editor
University of Georgia
James V. Hoffman, Associate Editor
University of Texas at Austin
Mariam Jean Dreher, Associate Editor
University of Maryland College Park
Instructional Resources
Lee Galda, University of Georgia
Research Highlights
William G. Holliday
University of Maryland College Park
Policy Briefs
James V. Hoffman
University of Texas at Austin
Videos
Shawn M. Glynn, University of Georgia

NRRC Staff
Barbara F. Howard, Office Manager
Carmie R. Bush, Senior Secretary
University of Georgia
Barbara A. Neizyey, Administrative Assistant
Valerie Tyra, Accountant
University of Maryland College Park

National Advisory Board
Phyllis W. Aldrich
Saratoga Warren Board of Cooperative Educational Services, Saratoga Springs, New York
Arthur N. Applebee
State University of New York, Albany
Ronald S. Brandt
Association for Supervision and Curriculum Development
Marsh T. DeLain
Delaware Department of Public Instruction
Carl A. Grant
University of Wisconsin-Madison
Walter Kintsch
University of Colorado at Boulder
Robert L. Linn
University of Colorado at Boulder
Luis C. Moll
University of Arizona
Carol M. Santa
School District No. 5
Kissepp, Montana
Anne P. Sweet
Office of Educational Research and Improvement, U.S. Department of Education
Louise Cherry Wilkinson
Rutgers University

Dissemination Coordinator
Jordana E. Rich
University of Georgia

Text Formatters
Michael R. Latimer
Ann Marie Vansstone
University of Georgia

NRRC - University of Georgia
318 Aderhold
University of Georgia
Athens, Georgia 30602-7125
(706) 542-3674 Fax: (706) 542-3678
INTERNET: NRRC@uga.cc.uga.edu

NRRC - University of Maryland College Park
2102 J. M. Patterson Building
University of Maryland
College Park, Maryland 20742
(301) 405-8035 Fax: (301) 314-9625
INTERNET: NRRC@umail.umd.edu
The National Reading Research Center (NRRC) is funded by the Office of Educational Research and Improvement of the U.S. Department of Education to conduct research on reading and reading instruction. The NRRC is operated by a consortium of the University of Georgia and the University of Maryland College Park in collaboration with researchers at several institutions nationwide.

The NRRC's mission is to discover and document those conditions in homes, schools, and communities that encourage children to become skilled, enthusiastic, lifelong readers. NRRC researchers are committed to advancing the development of instructional programs sensitive to the cognitive, sociocultural, and motivational factors that affect children's success in reading. NRRC researchers from a variety of disciplines conduct studies with teachers and students from widely diverse cultural and socioeconomic backgrounds in prekindergarten through grade 12 classrooms. Research projects deal with the influence of family and family-school interactions on the development of literacy; the interaction of sociocultural factors and motivation to read; the impact of literature-based reading programs on reading achievement; the effects of reading strategies instruction on comprehension and critical thinking in literature, science, and history; the influence of innovative group participation structures on motivation and learning; the potential of computer technology to enhance literacy; and the development of methods and standards for alternative literacy assessments.

The NRRC is further committed to the participation of teachers as full partners in its research. A better understanding of how teachers view the development of literacy, how they use knowledge from research, and how they approach change in the classroom is crucial to improving instruction. To further this understanding, the NRRC conducts school-based research in which teachers explore their own philosophical and pedagogical orientations and trace their professional growth.

Dissemination is an important feature of NRRC activities. Information on NRRC research appears in several formats. Research Reports communicate the results of original research or synthesize the findings of several lines of inquiry. They are written primarily for researchers studying various areas of reading and reading instruction. The Perspective Series presents a wide range of publications, from calls for research and commentary on research and practice to first-person accounts of experiences in schools. Instructional Resources include curriculum materials, instructional guides, and materials for professional growth, designed primarily for teachers.

For more information about the NRRC's research projects and other activities, or to have your name added to the mailing list, please contact:

Donna E. Alvermann, Co-Director
National Reading Research Center
318 Aderhold Hall
University of Georgia
Athens, GA 30602-7125
(706) 542-3674

John T. Guthrie, Co-Director
National Reading Research Center
2102 J. M. Patterson Building
University of Maryland
College Park, MD 20742
(301) 405-8035
NRRC Editorial Review Board

Patricia Adkins
University of Georgia

Peter Afflerbach
University of Maryland College Park

JoBeth Allen
University of Georgia

Patty Anders
University of Arizona

Tom Anderson
University of Illinois at Urbana-Champaign

Harriette Arrington
University of Kentucky

Irene Blum
Pine Springs Elementary School
Falls Church, Virginia

John Borkowski
Notre Dame University

Cynthia Bowen
Baltimore County Public Schools
Towson, Maryland

Martha Carr
University of Georgia

Suzanne Clewell
Montgomery County Public Schools
Rockville, Maryland

Joan Coley
Western Maryland College

Michelle Comemiras
University of Georgia

Linda Cooper
Shaker Heights City Schools
Shaker Heights, Ohio

Karen Costello
Connecticut Department of Education
Hartford, Connecticut

Karin Dahl
Ohio State University

Lynne Diaz-Rico
California State University-San Bernardino

Pamela Dunston
Clemson University

Jim Flood
San Diego State University

Dana Fox
University of Arizona

Linda Gambrell
University of Maryland College Park

Valerie Garfield
Chattahoochee Elementary School
Cumming, Georgia

Sherrie Gibney-Sherman
Athens-Clarke County Schools
Athens, Georgia

Rachel Grant
University of Maryland College Park

Barbara Guzzetti
Arizona State University

Jane Haugh
Center for Developing Learning Potentials
Silver Spring, Maryland

Beth Ann Herrmann
University of South Carolina

Kathleen Heubach
University of Georgia

Susan Hill
University of Maryland College Park

Sally Hudson-Ross
University of Georgia

Cynthia Hynd
University of Georgia

Gay Ivey
University of Georgia

Robert Jimenez
University of Oregon

Karen Johnson
Pennsylvania State University

James King
University of South Florida

Sandra Kimbrell
West Hall Middle School
Oakwood, Georgia

Kate Kirby
Gwinnett County Public Schools
Lawrenceville, Georgia

Sophie Kowzun
Prince George's County Schools
Landover, Maryland

Linda Labbo
University of Georgia

Rosary Lalik
Virginia Polytechnic Institute

Michael Law
University of Georgia

Sarah McCarthy
University of Texas at Austin

Veda McClain
University of Georgia

Lisa McFall
University of Georgia

Mike McKenna
Georgia Southern University

Donna Mealey
Louisiana State University
Barbara Michalove  
*Fowler Drive Elementary School*  
*Athens, Georgia*

Akintunde Morakinyo  
*University of Maryland College Park*

Lesley Morrow  
*Rutgers University*

Bruce Murray  
*University of Georgia*

Susan Neuman  
*Temple University*

Caroline Noya  
*University of Georgia*

John O'Flahavan  
*University of Maryland College Park*

Penny Oldfather  
*University of Georgia*

Joan Pagnucco  
*University of Georgia*

Barbara Palmer  
*Mount Saint Mary’s College*

Mike Pickle  
*Georgia Southern University*

Jessie Pollack  
*Maryland Department of Education*  
*Baltimore, Maryland*

Sally Porter  
*Blair High School*  
*Silver Spring, Maryland*

Michael Pressley  
*State University of New York at Albany*

Tom Reeves  
*University of Georgia*

Lenore Ringer  
*New York University*

Mary Roe  
*University of Delaware*

Nadeen T. Ruiz  
*California State University-Sacramento*

Rebecca Sammons  
*University of Maryland College Park*

Paula Schwanenflugel  
*University of Georgia*

Robert Serpell  
*University of Maryland Baltimore County*

Betty Shockley  
*Fowler Drive Elementary School*  
*Athens, Georgia*

Susan Sonnenschein  
*University of Maryland Baltimore County*

Steve Stahl  
*University of Georgia*

Anne Sweet  
*Office of Educational Research and Improvement*

Liqing Tao  
*University of Georgia*

Ruby Thompson  
*Clark Atlanta University*

Louise Tomlinson  
*University of Georgia*

Sandy Tumarkin  
*Strawberry Knolls Elementary School*  
*Gaithersburg, Maryland*

Sheila Valencia  
*University of Washington*

Bruce VanSledright  
*University of Maryland College Park*

Chris Walton  
*Northern Territory University*  
*Australia*

Janet Watkins  
*University of Georgia*

Louise Waynant  
*Prince George’s County Schools*  
*Upper Marlboro, Maryland*

Priscilla Waynant  
*Rolling Terrace Elementary School*  
*Takoma Park, Maryland*

Dera Weaver  
*Athens-Clarke County Schools*  
*Athens, Georgia*

Jane West  
*University of Georgia*

Steve White  
*University of Georgia*

Allen Wigfield  
*University of Maryland College Park*

Shelley Wong  
*University of Maryland College Park*
About the Authors

Rachel Brown is a faculty member in the Department of Counseling and Educational Psychology, Graduate School of Education, State University of New York at Buffalo. She received her Ph.D. from the University of Maryland. Her research interests include strategies instruction, self-regulated reading, sociocognition, and the use of technology to enhance reading comprehension.

Lynne Coy-Ogan is an Assistant Principal in Montgomery County Public Schools. She received her M.A. in Counseling from John Hopkins and her B.S. in Special Education and Elementary Education from Boston University. She has taught several courses and workshops on strategies-based instruction and effective teaching practices.
The Evolution of Transactional Strategies Instruction in One Teacher’s Classroom

Rachel Brown
State University of New York at Buffalo

Lynne Coy-Ogan
Montgomery County Public Schools
Rockville, Maryland

Abstract. In this study, one teacher taught the same story for three consecutive years to three comparable groups of low-achieving second-grade students. An interaction-tracking and coding scheme was used to analyze the 45-minute lessons for changes in instructional patterns, participation by group members, instructional focus, strategy instruction, and prompted and self-regulated use of strategies by students. By the third year of the study, students participated more actively in story discussion and used strategies with less teacher prompting to support their interpretation of and responses to text. These changes appeared to occur because of modifications in the teacher’s instructional practices. The instruction that emerged during the third year could be characterized as transactional strategies instruction, an approach that involves teaching reading group members to use comprehension strategies as they jointly construct interpretations of text.

Transactional strategies instruction (TSI) involves teaching reading group members to construct meaning from text by emulating expert readers’ use of comprehension strategies (Pressley, E-Dinary, et al., 1992). Teachers use TSI to help students (a) set goals and plan for reading, (b) process text by using background knowledge in conjunction with text cues to construct meaning, (c) monitor ongoing comprehension, (d) solve problems encountered while reading, and (e) evaluate intermediate progress and overall performance (Schuder, 1993). To support these high-level functions (Baker & Brown, 1984; Gagne, 1985; Garner, 1987), students learn to use a repertoire of strategies across a variety of purposes and text types (Dole, Duffy, Roehler, & Pearson, 1991; Pressley, Goodchild, Fleet, Zajchowski, & Evans, 1989; Pressley, Johnson, Symons, McGoldrick, & Kurita, 1989). Students are also encouraged to respond personally and aesthetically to text (Beach & Hynds, 1991) and to discuss their interpretations with others.
(Bloom & Green, 1984). This complex, integrated program is taught through direct explanation methods, such as modeling, explicit instruction, and corrective feedback (Duffy & Roehler, 1987; Pearson & Dole, 1987), and is practiced during transactions between reading group members and the text (Rosenblatt, 1978). Years of such socially mediated instruction and practice are expected to result in the internalization of processes initially modeled and controlled by the teacher but later carried out by the group (Pressley, El-Dinary, et al., 1992), a notion consistent with Vygotskian theory (1978).

The school-based developers of transactional strategies interventions grounded their programs in research from cognitive strategy instruction, metacognition, self-regulated learning, sociocognition, attribution, reader response, and schema theory (Gaskins & Elliot, 1991; Schuder, 1993). However, they adapted the findings from these diverse research domains and theoretical perspectives to meet the specific needs of their students (initially low-achieving readers) and to integrate strategies-based instruction with other important reading instructional activities.

A primary goal of transactional strategies instruction is to prepare students to become self-regulating readers. Students are taught to use a repertoire of strategies flexibly and adaptively (see Table 1 for a list of these strategies). They are taught not only how to apply strategies but also why and when to use them, learning a relatively small set of strategies for monitoring their comprehension (e.g., predicting, visualizing, summarizing) and for solving problems when they encounter unfamiliar words or do not understand what they are reading (e.g., guessing, skipping, rereading). They are also taught to employ strategies to support their interpretations of text. For example, after predicting or visualizing, students are asked to draw on background knowledge, personal experiences, textual information, or picture clues to support their evolving interpretations. They are often asked to "think aloud" or verbalize their mental processing as well. By having students think aloud, teachers convey the message that what matters most is the process of interpreting text—not the accuracy of a particular response.

Transactional strategies instruction also emphasizes the collaborative construction of meaning by all members in a reading group. When reading alone, readers build personal interpretations. However, when reading together, students influence and are influenced by the social construction of text meaning (Bloom & Green, 1984). They bring to bear their own experiences, feelings, and background knowledge in response to text and share their diverse interpretations with others. By participating in lively reading group interactions where thinking aloud occurs frequently, students observe their teacher and peers construct unique interpretations of text. It is expected that through interaction and practice in reading groups a student will, over time, assimilate the strategic and interpretive processes carried out by the group (Pressley, El-Dinary, et al., 1992).

Teaching students to become self-regulating readers is a complex, long-term task (Pressley, El-Dinary, et al., 1992). And learning to become an effective teacher of an intervention as multifaceted as transactional strategies instruction can be rather difficult, particularly
if the teacher needs to alter his or her current teaching practices and adopt new ones (Pressley, Schuder, SAIL Teachers, Bergman, & El-Dinary, 1992).

In this report we describe one SAIL teacher's (the second author's) development from a reading strategies instructor who promoted some group discussion to an experienced transactional strategies teacher. Her progress is tracked by analyzing the interactions of three different low-achieving reading groups that were taught the same story in three consecutive years.

METHOD

Participants

Teacher. The teacher described the content of her elementary and special education training as "traditional"; she was taught to preteach vocabulary, to activate background knowledge through motivational activities, to use basals with accompanying materials for skills development, and to provide follow-up instruction in the form of phonics, word attack, and vocabulary and comprehension worksheets. Her course work in education also emphasized strong teacher control and close teacher management of instruction.

The teacher taught first and second graders in a school system on the East Coast from 1987 to 1992. During her first two years (1987-1989), she implemented the instructional practices cited above that were promoted by her teacher education program. At the beginning of her third year, however, she was introduced to Students Achieving Independent Learning (SAIL), a prototypical transactional strategies intervention (Bergman & Schuder, 1992; Pressley, El-Dinary, et al., 1992). Her initial training consisted of seven half-day workshops and periodic observations conducted by SAIL developers and peer coaches (see Schuder, 1993, for a description of SAIL training). Following the training, she integrated SAIL instruction into the regular reading program of her classes.

Students. From 1989-1992, the teacher taught SAIL to second graders in two schools serving comparable populations (i.e., Chapter 1 status, similar geographical location, and similar school demographics). The low-achieving groups consisted of six students in 1989-1990, six in 1990-1991, and eight in 1991-1992. Participants, with the exception of two students in the 1991-1992 group who were not tested, had scored at or below the fourth stanine on standardized achievement tests at the end of first grade. At the beginning of second grade in each of the three years, the teacher administered informal reading assessments to her students and found that the low achievers scored at or below the primer level of the Botel Reading Inventory, Word Recognition List (1970) and had difficulty reading teacher-selected passages from the primer level of the Heath Basal Series (Alvermann et al., 1989). Thus, all students in the study, including the two who were not tested, were reading 12 to 18 months below grade level at the beginning of second grade.

Lesson

The same story, Where the Wild Things Are (Sendak, 1983), was taught to the three different reading groups in the spring of 1990, 1991,
and 1992. The narrative text constituted one part of a comprehensive unit on Sendak’s work. The story, a visually rich and challenging text for low-achieving second-grade readers, was selected because it offered numerous opportunities for teacher modeling and student use of strategies.

In the story, a mischievous child named Max is sent to his room without dinner for misbehaving. Soon the room undergoes a transformation; a forest, an ocean, and a sailboat appear. Max climbs into the boat and sails off "over a year, and in and out of weeks, and through a day". He arrives at an island where he is greeted by an array of fantastic creatures. They growl, snarl, and hiss, but Max is undaunted. The wild things make him their king and celebrate his coronation jubilantly. However, after the revelry, Max becomes lonely and decides to go home. Despite the creatures’ protests, he climbs into the boat and journeys home. Upon his return, he finds his dinner waiting in his room, still hot.

Procedure

The Wild Things lessons were audiotaped (1991) or videotaped (1990, 1992). In all 3 years, students were accustomed to observation and had been audiotaped or videotaped on numerous occasions prior to their respective Wild Things lessons.

For the first analysis, the transcribed lessons were segmented into distinct interactional units. Breaks in oral story reading, initiated by the teacher for instructional purposes, created natural boundaries between larger interactional episodes. We then identified shifts in topic (i.e., talk relating to story content, reader experiences, strategy use, etc.) and used them to partition the larger episodes into interactional units. Finally, we classified interactional units according to seven noninteractional or interactional pattern types (see the Appendix for a description of these types).

Pattern types used to code interactional units were identified using an analytic induction strategy (Goetz & LeCompte, 1984); categories used to code and quantify the data emerged directly from an analysis of the three transcripts and not from an a priori coding scheme. After identifying the pattern types, the two authors coded the transcribed lessons independently and then negotiated discrepancies in coding. Interrater agreements for interactional analysis were 97% for 1990, 86% for 1991, and 98% for 1992.

For the second analysis, we coded each transcript by utterance (defined in this study as a meaning-bearing unit of discourse, generally at the sentence level). Utterance boundaries were determined using intonation, phrasing, and pausing cues. Sentences were subdivided if their segments could be assigned different codes. Since we conducted a broad analysis of interactional patterns, this level of coding was appropriate.

We coded utterances using an interaction-tracking scheme based on existing methods for recording student-teacher interactions (i.e., Cazden, 1986; Gaskins, Anderson, Pressley, Cunicelli, & Satlow, 1993; Mehan, 1979). An utterance was classified as either an initiation or a response and then labelled with a dis-
Evolution of Transactional Strategies Instruction

Discourse codes were identified using the grounded theory method of constant comparison (Strauss & Corbin, 1990). That is, we derived and refined coding categories by comparing several second-grade SAIL lessons other than those included in this study. Then we applied these codes to the Wild Things lessons and made additional adjustments as required. When the coding scheme was completed (see the brief summary in the Appendix), we jointly categorized the 1992 transcript. Then we coded the 1990 and 1991 transcripts independently. Agreement on discourse coding of the 1990 and 1991 transcripts was 87% and 93% respectively. Coding discrepancies were discussed and subsequently resolved.

RESULTS AND DISCUSSION

The interaction-tracking and coding enabled us to conduct several quantitative analyses. We compared similarities and differences in interactional patterns, participatory roles, instructional focus, strategies instruction, and prompted versus self-regulated use of strategies by students across the 3 years.

Instruction and Use of Strategies

Similarities across lessons. Each year, students were exposed to an average of 11 strategies (see Table 1) during the Wild Things lesson. These included both comprehension and "fix-it kit" strategies. The fix-it kit strategies (i.e., guessing, rereading, skipping, using picture clues) are taught to students to help them deal with unknown words. We have used the term fix-it kit to distinguish strategies used for word recognition from strategies with the same or similar names (i.e., looking back, using picture clues, etc.) used to promote comprehension and alleviate confusion when students read larger blocks of text.

A few students in every year manifested self-regulated use of at least some strategies. Although the students were sometimes unable

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Percentage of Use by Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1990</td>
</tr>
<tr>
<td>Thinking aloud</td>
<td>23.0</td>
</tr>
<tr>
<td>Using background knowledge</td>
<td>14.0</td>
</tr>
<tr>
<td>Verifying</td>
<td>1.0</td>
</tr>
<tr>
<td>Predicting</td>
<td>14.0</td>
</tr>
<tr>
<td>Using the &quot;Fix-It&quot; Kit</td>
<td>23.0</td>
</tr>
<tr>
<td>Reading for gist/summarizing</td>
<td>6.0</td>
</tr>
<tr>
<td>Looking back</td>
<td>1.0</td>
</tr>
<tr>
<td>Problem solving</td>
<td>3.5</td>
</tr>
<tr>
<td>Monitoring</td>
<td>1.5</td>
</tr>
<tr>
<td>Visualizing</td>
<td>1.0</td>
</tr>
<tr>
<td>Clarifying</td>
<td>0.0</td>
</tr>
</tbody>
</table>
to name the strategies, they could apply them appropriately when cued by text or discussion. For example, some students used strategies to support their interpretations.

**Use Of Background Knowledge, 1990:**

Student: He was dreaming, because if it took a year for him to get to where the wild things are and a year to get back, his supper wouldn't still be hot.

**Use Of Background Knowledge And Picture Clues, 1991:**

Teacher: Why is Max doing this?
Student: Looks like he's bad because he's angry.
Teacher: What makes you say that?
Student: I'm looking at his face.
Teacher: Oh, his facial expression in the picture clues.

1992:

Student: I think they . . . are going to make him king because he acts like a king of the wild things and he looks like a king of the wild things. 
Teacher: Why do you say he looks like a king? 
Student: Because . . . he's just standing up for himself. . . .

**Differences across lessons.** Although the teacher taught the use of many strategies in each year, she emphasized different ones from year to year, with these differences in emphasis reflected in the *Wild Things* lessons. For example, there was a decline in the teacher's utterances focused on use of the fix-it kit from year 1 to year 3 (23% of total utterances in 1990, 13% in 1991, and 8% in 1992). In contrast, her emphasis on verification increased. Where- as verification comprised 1% of total teacher utterances in 1990, it accounted for 10% and 13% of the teacher's utterances related to strategy use and instruction in 1991 and 1992, respectively.

In addition, there were large differences in students' independent use of strategies across the 3 years (see Figure 1). In 1990, there was more self-regulated strategy use than prompted strategy use, which was largely attributable to the teacher's focus on the fix-it kit, thinking aloud, using background knowledge, and predicting — four of the most easily learned and heavily practiced strategies.

In 1991, the teacher focused less on the fix-it kit and more on other cognitive and metacognitive strategies (see Table 1). At the same time, she increased her emphasis on interpretive discussion. Her attempt to concentrate on two important instructional goals simultaneously may have overwhelmed her low-achievers and may have contributed to a marked decrease in student self-regulation (54% in 1990, 14% in 1991) and an associated increase in teacher prompting (46% in 1990, 86% in 1991).

In 1992, however, there was more self-regulated use of strategies (63%) than prompted use (37%). Moreover, student self-monitoring of comprehension increased. The following example was one of many instances in which a student requested clarification or remarked that something he or she read made no sense.

Teacher: What's going on here? 
Student: This is not the way....Wait, this is really weird, because how can he go through a year when it's only a day that he went through?
The Role of Discussion in Meaning Construction

Similarities across lessons. In all 3 years, teacher talk focused more on constructing meaning (29% in 1990, 35% in 1991, and 33% in 1992) than on discussing text details (4% in 1990, 2% in 1991, and 7% in 1992). Moreover, the teacher’s emphasis on sharing experiences, opinions, and feelings to support interpretive dialogues remained constant across the 3 years at 9% (percentage of total utterances devoted to promoting or discussing personal responses).

Differences across lessons. Two discussion-related shifts occurred with regard to the teacher’s talk. First, the teacher spent less time talking specifically about strategies (49% in 1990, 48% in 1991, and 41% in 1992). Second, more reader-based discussion (see Table 2) occurred in 1991 (44%) and 1992 (42%) than in 1990 (38%). That is, the teacher spent more time encouraging students to use their background knowledge, to make inferences, and to express their personal responses.

During year 1, less reader-based talk seemed to occur because strategy instruction was the teacher’s primary focus. For example,
Table 2. Frequency (and Percentage) of Coded Teacher and Student Utterances, by Year

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy-based</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>65 (56)</td>
<td>90 (49)</td>
<td>76 (53)</td>
<td>122 (48)</td>
<td>139 (59)</td>
<td>121 (41)</td>
</tr>
<tr>
<td>Teacher</td>
<td>6 (5)</td>
<td>7 (4)</td>
<td>4 (3)</td>
<td>5 (2)</td>
<td>15 (6)</td>
<td>20 (7)</td>
</tr>
<tr>
<td>Text-based</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reader-based:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constructing meaning</td>
<td>24 (21)</td>
<td>53 (29)</td>
<td>45 (31)</td>
<td>89 (35)</td>
<td>24 (10)</td>
<td>95 (33)</td>
</tr>
<tr>
<td>Sharing responses</td>
<td>16 (14)</td>
<td>16 (9)</td>
<td>15 (10)</td>
<td>22 (9)</td>
<td>51 (22)</td>
<td>27 (9)</td>
</tr>
<tr>
<td>Total Utterances</td>
<td>117</td>
<td>185</td>
<td>144</td>
<td>253</td>
<td>234</td>
<td>292</td>
</tr>
</tbody>
</table>

Note: Miscellaneous utterances comprise remaining percentages.

Strategy-based: Utterances relate to strategies instruction and the execution of strategies, including declarative (what they are), procedural (how to use them), and conditional (when, where, and why to use them) information.

Text-based: Utterances cue or focus on literal story content, including details about who, what, when, and why stated explicitly in the text.

Reader-based:
- Constructing meaning: Utterances cue or focus on inferential thinking; group participants use their background knowledge in conjunction with text cues to construct interpretations.
- Sharing personal responses: Utterances cue or focus on opinions, attitudes, and feelings, self-identification with story characters, and personal and aesthetic responses to text.

In the following 1990 interaction, the discussion appeared to reinforce use of the fix-it strategy more than it elicited interpretations.

Teacher: Okay, he's at a big word and he has some problem-solving strategies that he can use.

Student 1: (The student guessed the word, which was actually rumpus.) Rumples.

Teacher: What's a rumples?

Student 1: (No response from student.)

Teacher: Why would Max be saying "and now let the rumples start?"

Student 2: Like a party.

Teacher: I think Student 2 made a very good assumption cause he still thought rumples meant the same thing as party. He could still get the meaning. And remember, getting the gist — what the story is about — is the most important thing. So that was a very good substitution.

In 1990, when students talked, they tended not to discuss their ideas as a group; instead, they often predicted or commented without reacting to or elaborating on their peers' ideas. Moreover, most of the students spoke directly to the teacher and not to each other. Consequently, there were few instances of authentic joint construction of text meaning. Even though many of the coded interactional units suggested extended discussions, the actual
verbalizations often did not reflect group collaboration, as the following example shows:

Student 1: They look like they're dancing for the moon.
Student 2: They look like they're having a party.
Teacher: Why do you think it's a party?
Student 2: They're jumping up and down and dancing; they're having a party.
Teacher: We know from our background knowledge that's what people do at a party.
Student 3: Maybe they're having a parade and marching.
Teacher: In the picture they do look like they're standing in a straight line.

Later, after further talk, the teacher returned to the same theme.

In 1991, there was an increase in reader-based remarks and questions. However, the teacher's attempts to stimulate interpretive discussion often involved extensive prompting. Although the students generated predictions about events and characters' motives and actions during discussions about specific text segments, they needed prompting to use information from the middle and end of the story to verify the predictions they made at the beginning of the story. They also had difficulty integrating relevant ideas or text clues mentioned by group members early in the lesson with what was read or said later about the story.

Consequently, in 1990 and 1991, the teacher often prompted students to make connections and, in the process, tended to move students toward one overall interpretation. When one student suggested early in the 1991 *Wild Things* lesson that Max's adventure was the result of an overactive imagination, the teacher, supporting the student's idea directed the group's discussion throughout the lesson toward verifying that interpretation.

Teacher: Student 1, what's happening here?
Student 1: The room grew into the forest.
Teacher: How?
Student 1: Imagination.
Teacher: Why would you think it might be his imagination that a room would grow into a forest?
Student 2: You can't plant seeds in the room because they couldn't grow.

Still later, after more discussion about travelling through a year and a day and how Max should not be able to fit into the same clothes, the teacher returned once again to the imagination theme. This time she promoted the theme by describing a relevant personal experience.

In the 1992 lesson, we noticed a decline in students' reader-based comments related to constructing meaning (see Table 2). At first, we were puzzled by this change because the teacher had said that one her primary instructional goals across the 3 years was to increase interpretive discussion. However, the decline
Rachel Brown & Lynne Coy-Ogan

made sense when we reviewed the assigned discourse codes, observed the increases in sharing personal responses and strategies-based talk in 1992, and reexamined the transcripts. The students in 1992 used strategies, particularly thinking aloud, as conduits to express interpretive thinking more than the students did in previous years.

In the 1992 lesson, for the first time, there were numerous instances when students interpreted text together. They listened to and elaborated on one another’s comments instead of verbalizing unconnected thoughts:

Teacher: What’s going on?
Student 1: A party is going to start.
Teacher: How did you know that a rumpus is a party?
Student 2: A rumpus is a kind of party where it’s like a party when you jump all around.
Student 3: A rumpus is a kind of party; it’s like when, um, people . . . there’s a very long party and people jump around and they get crazy and they bounce off the walls.
Teacher: So you predict they’re going to get crazy.
Student 4: . . . a rumpus is sort of a wild thing party where wild things act crazy and just start bouncing and acting really wild like wild animals.
Teacher: So you think when we turn the page we’re going to find them acting like wild animals?

And then a little later in the dialogue, another child chimed in:

Student 5: I agree with Student 4 when she said they’re going to act crazy. It’s like a party where there’s lots of partying, like a club where they’re drinking a lot and where they start acting crazy.

We think joint interpretation of text occurred more frequently in the 1992 lesson because of four changes in the teacher’s instructional practices. First, she inundated students with explicit strategies instruction and guided practice at the beginning of the year in the belief that intensive instruction would facilitate student use of strategies to support interpretive discussion later in the year. Second, she made changes in her reading program that encouraged peer-to-peer interaction during discussions about text. Third, she adopted the view that she was just another active participant in the reading group and not its leader. Fourth, she accepted any interpretive response as long as a student supported his or her claims with text- or reader-based information.

In the 1992 lesson we also identified three student behaviors that were virtually nonexistent in the 1990 and 1991 lessons, which we characterized as integrating, connecting, and persuading.

Integrating. Unlike prior years, students in 1992 constantly integrated old topics into new interactional units. That is, they related ideas and text clues raised at the beginning of the lesson to story information or interpretations discussed later in the lesson. Early in the 1992 Wild Things lesson, a number of students introduced predictions or interpretations about the story that, at the time they were presented, enriched conversation about events or characters’ actions. When attention shifted to the next text segment, these predictions and interpretations were dropped. Toward the end of the
lesson, however, some students reintroduced these early interpretations.

For example, in the beginning of the story, one student claimed that Max was dreaming, another suggested that Max was wishing or daydreaming, and still another predicted that Max was having a nightmare. Each topic was proposed, discussed at some length, and often verified by using text, picture, background knowledge, or personal experience clues.

Student 1: I think he's dreaming.
Teacher: Can you verify that? Why do you think he's dreaming?
Student 1: I think he's dreaming he's going to this place where the wild things are.
Teacher: So Student 8 said, "Hmm. It looks like the forest is growing from his room". . . Student 8 keep reading. . .

Following reading, the discussion continued:

Student 2: This sounds like a fairytale because how can a room turn into a forest?
Student 1: That's what I was saying. He was dreaming that's what happened.
Teacher: Anybody else have any ideas? Student 3?
Student 3: I think he's dreaming too.
Student 4: I think he's wishing.
Teacher: Why do you think that he's wishing? How's wishing a little different from dreaming? . . .
Student 4: I think he wants to be there.

The discussion proceeds until a student suggests a new possibility:

Student 5: Maybe he has a nightmare because those beasts are really mean.
Teacher: Oh, a nightmare. Have you ever had a nightmare about mean beasts?
Student 5: No.
Teacher: No. But you have? (referring to others who are shaking their heads in affirmation).
Student 3: Maybe he's like picturing it in his mind.
Teacher: Oh, you mean he's visualizing it in his mind what it would be like.
Student 2: I think he's like daydreaming.
Teacher: So you don't think he's even dreaming at night like these guys said. You think maybe he's daydreaming or wishing, like Student 4 said?
Student 2: Yeah, cause like, here his eyes are closed and here his eyes are open and now I think he's daydreaming because his eyes are awake. He thinks he's in a daydream.

Then, toward the end of the story, we observed integrating in action:

Teacher: What do you think is going on here, Student 3?
Student 3: I think he's going (for) another year back.
Teacher: Okay, so you think he's going back that other year when he came.

After some additional comments, the teacher continued.

Teacher: What do you think about his going back in time?
Student 7: I don't think he's going back in time because he's going back through a year.
Teacher: What does that mean to go through a year . . .
In the foregoing sequence, students expressed several ideas that appeared to be undeveloped. However, many of these ideas were introduced by students at the beginning of the lesson when they were discussed at greater length. So, in one short section, the students not only generated multiple interpretations, they also integrated topics that were introduced earlier.

In 1992, the group did not concur on or adopt one interpretation at the end of the lesson; instead, they agreed to disagree. Nor did the teacher attempt to guide students toward a single statement of gist or promote one student-generated interpretation. Instead of limiting the range of student responses, she initiated a process that stimulated rich interpretive discussion.

**Connecting.** In the 1992 lesson, students made many more connections across the text without teaching prompting. That is, they used background knowledge, personal experiences, or details to draw inferences and perceive relationships on their own. In some cases, students made predictions early in the story and verified them later. Or else, they recognized that details presented at the beginning of the story helped them construct interpretations later on. Although connecting occurred with one student in the 1991 lesson, it happened repeatedly with others in 1992. Students were often pleased by the realization that they could verify their predictions and build connections across text events.

For instance, at the beginning of the book, Max’s mother sent him to bed without supper because he was misbehaving. Later, when the wild things misbehaved, Max punished them in the same way. However, the connection between the events was never stated explicitly in the story; students had to infer the link between the two text segments by themselves.

**Persuading.** In the 1992 lesson, students frequently attempted to convince other group members to accept their ideas. In the process, they used text information strategically, employing background knowledge and personal
Table 3. Interactional Patterns, by Year

<table>
<thead>
<tr>
<th>Interactional Patterns</th>
<th>1990</th>
<th>1991</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-interactional: T(eacher) or S(tudent) comments</td>
<td>19.0</td>
<td>3.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Interactions and Extended Patterns:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S initiates, T or S responds + additional exchanges</td>
<td>30.0</td>
<td>11.0</td>
<td>36.0</td>
</tr>
<tr>
<td>T initiates, T or S responds + additional exchanges</td>
<td>27.0</td>
<td>68.0</td>
<td>32.0</td>
</tr>
<tr>
<td>T initiates, S responds, and T evaluates</td>
<td>11.0</td>
<td>3.5</td>
<td>13.0</td>
</tr>
<tr>
<td>T initiates, S responds</td>
<td>0.0</td>
<td>7.0</td>
<td>9.0</td>
</tr>
<tr>
<td>T initiates, S responds, S evaluates + additional exchanges</td>
<td>8.0</td>
<td>3.5</td>
<td>6.0</td>
</tr>
<tr>
<td>S initiates, T or S responds</td>
<td>5.0</td>
<td>3.5</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Note. Expressed in percentage of total interaction units. Total interaction units: 37, 1990; 28, 1991; 47, 1992

experiences to garner support for their interpretations. Moreover, unlike students in 1990 and 1991, many students in 1992 stated and defended their interpretations with confidence. In fact, a number of students were so tenacious that they often interrupted ongoing, unrelated discussions to advance their interpretations. It is possible that students were more talkative (see Table 2) and participated more actively in the 1992 discussions because they promoted their own, rather than the teacher's, interpretations.

Student 1: I think they're tricking him because they just want him to leave.
Student 2: Student 1 says they want him to leave. But here it says "We love you so." Most of the people who say that, they don't want someone to leave.
Student 1: But look at their faces.
Teacher: So you guys have conflicting interpretations.

In this example, Student 2 used information in the text and from his background knowledge to dispute Student 1's interpretation. In response, Student 1 cited text evidence in the form of picture clues to refute Student 2's argument. This interaction exhibited the kind of sophisticated responses low-achieving second graders can make when provided with the proper tools and with opportunities to interpret text together.

Participation of Reading Group Member

Similarities across lessons. At least five kinds of interaction patterns (defined in the Appendix) were observed in each lesson (see Table 3). Across the 3 years, there were more teacher-initiated than student-initiated interactions. Nevertheless, students actively participated in all 3 years (see Tables 2 and 3), so that the teacher did not talk exclusively while
the students simply listened. At the end of each 45-minute lesson, the students wished to continue; they did not want the session to end.

**Differences across lessons.** The lessons became more interactive from 1990 to 1992 (see Table 3). The percentage of total lesson discourse classified as interactive was 81% in 1990, 96.5% in 1991, and 98% in 1992. We suspect that the increase in interactive talk from 1990 to 1991 was due to the teacher's increasing emphasis on reader-based discussion. The teacher's utterances related to constructing meaning increased from 29% in 1990 to 35% in 1991 while her strategies-based talk remained about the same (see Table 2). By 1992, the teacher provided less explicit instruction and moved students toward a particular interpretation less frequently. Instead, she most often restated students' answers and provided nonevaluative feedback to their comments. In this way, she encouraged students to take risks and elaborate on their interpretations.

In addition, students became more active discussants. Student talk increased from 117 utterances in 1990 to 144 in 1991 to 234 in 1992. There were also proportionally more student-initiated interaction patterns in 1992 than in either of the 2 previous years. Although the teacher still spoke more than her students in 1992, the gap between them was closing.

**Limitations**

Since we were unable to match students with a standardized measure across the three years, the observed results may have been associated with differences among individuals who comprised the groups. Transactional strategies instruction emphasizes the collaborative aspect of interpretive group discussions. Although the teacher facilitates the process of constructing meaning, the social context within which an interpretive discussion occurs influences and is influenced by group members. Therefore, the unique dynamic that is created when individuals construct meaning together may explain the differences between groups. For example, even though students appeared to be comparable on the reading measures we had available at the time, some students in years 1 and 2 may have been less verbal or confident than students in year 3, which could have affected the observed outcomes.

Another limitation of this study was our inability to obtain common standardized pre- and post-measures for students across the 3 years. As a result, we could not determine whether the reading comprehension of students in 1992 showed a greater increase from the beginning to the end of the year than that of students in 1990 or 1991. Moreover, we could not assess in this study whether transactional strategies instruction improved reading comprehension in general. However, in a quasi-experimental study conducted in 1991-1992 by the second author, low-achieving readers in 5 SAIL classes were matched with comparable students in 5 non-SAIL classes. Without exception, the SAIL classes outperformed the non-SAIL classes on the Stanford Achievement reading comprehension posttest (Brown, 1994).

**CONCLUSION**

Changes occurred in the instruction and use of strategies, the role of interpretive discussion, and the participation of group members during the second author's years as a SAIL instructor.
Some of the observed changes across years may reflect differences between the groups and their members. However, converging evidence from lesson transcripts, quantitative analyses, and observations conducted by program developers and other researchers (Brown, 1994; El-Dinary, 1993; Pressley, El-Dinary, et al., 1992) suggests that the differences observed may relate, at least partly, to changes in the teacher’s practice, instructional focus, and program structure.

Year 1 (1989-1990)

During Year 1, the teacher attempted to approximate as closely as possible the SAIL model as presented by its developers (see Bergman & Schuder, 1992, for a description of early, prototypical SAIL practice). Each 30- to 45-minute lesson began with the teacher modeling SAIL strategies. In addition, she held a daily, 15-minute read-aloud session that provided her other opportunities to model and reinforce SAIL strategies. Students also participated in a 15-minute DEAR (Drop Everything and Read) period three times a week.

By introducing one strategy at a time the first year, the teacher and her students became familiar with each strategy. By the year’s end, students often self-regulated and talked about their use of strategies — particularly strategies associated with the fix-it kit. In addition to highlighting problem solving, the teacher concentrated on a small set of strategies — predicting, using background knowledge, thinking aloud and reading for gist.

Interpretive discussion took second place to strategies instruction in 1989-1990 (see Table 2, reader-based utterances versus strategies-based utterances). Although the teacher attempted to elicit interpretive comments by asking many reader-based questions, students often responded with unelaborated answers. Despite the teacher’s efforts to stimulate conversation among group members, discussion tended to occur between the teacher and individual students.

Year 2 (1990-1991)

As the teacher gained confidence, she experimented with SAIL instruction while keeping the structure of her reading program intact. In Year 2, she introduced strategies in a more holistic fashion; they were taught as a complete set of tools good readers use (see Appendix B in Schuder, 1993). The teacher also concentrated more on comprehension-fostering and monitoring strategies (i.e. reading for gist, summarizing, predicting, using background knowledge) and less on the fix-it kit.

As she became adept at teaching strategies, the teacher increasingly emphasized the construction and evaluation of text interpretations, an integral part of the SAIL program. During this year, students’ interpretive talk increased; however, they still tended to converse directly with the teacher and not with each other. Moreover, the teacher’s attempt to promote strategies use and interpretive discussion simultaneously throughout the year may have affected her students’ ability to self-regulate their use of strategies.

Students also appeared to have had difficulty generating and verifying multiple interpretations of text. When this occurred, the teacher guided students toward a single interpretation of a story by eliciting text- and reader-based
support for a particular construction - one she felt best reflected the author's intent. While fulfilling the SAIL goal of reading for gist, this approach limited the lively discussions that were possible when students produced their own interpretations.

Year 3 (1991-1992)

In Year 3, the teacher implemented a number of instructional changes. She saturated students with strategy instruction during the first part of the year; she exposed students to considerable metacognitive information, modeling, coaching, explaining, and practice, not only in reading group but across the curriculum. She also concentrated on teaching students to apply strategies and independently evaluate their use of them. In this way, students became more autonomous in their use of strategies earlier in the year. As a result, the teacher did not have to devote as much time to explicit strategy instruction in the spring semester; instead, she provided more opportunities for interpretive discussion.

Thus, the teacher used strategy instruction not as an end in itself but as a tool to support interpretive thinking. She wanted students not to talk about what good readers do but to do what good readers do. To this end, she stressed verifying, thinking aloud, predicting, and using background knowledge - strategies particularly well-suited for supporting interpretive discussion.

During this third year, the teacher also resisted moving students toward one interpretation of a story. By refraining from imposing her own interpretations, supporting one interpretation over another, or providing evaluative feedback, she encouraged students to generate multiple interpretations. When the teacher volunteered her own interpretation, she expressed it as just one more idea to be considered by the group - not one that had any more merit than the others.

In addition, the teacher introduced a number of reading program innovations. In December, after intensive, explicit strategy instruction, she initiated student-managed reading groups. She dropped DEAR time and replaced it with paired reading activities. Three times a week, students read in teams for 20 minutes, using their strategies and discussing their interpretations of text without teacher intervention. After paired reading, students met for an additional 10 minutes with the rest of their reading group. A student group leader was assigned to ask members to raise any problems or present interpretations to the rest of the group. On alternate days, reading group lessons were conducted as typical SAIL lessons.

Then in February 1992, the teacher eliminated the paired reading format and replaced it with reading group meetings run independently by student members. A rotating group leader was assigned to manage turn-taking, solicit reader interpretations, and control disputes. The teacher moved from group to group, periodically interjecting her interpretations as just another group member. She served as a resource if students, after having applied their strategies, were still unable to comprehend.

These changes may have fostered independent use of strategies and enhanced interpretive discussion among group members. There appeared to be a transfer from these peer-managed groups to the SAIL lessons. The 1992 transcript showed that students could use a
repertoire of strategies independently, without teacher prompting. Students also more readily initiated conversations, introduced topics, disputed with their peers, offered interpretations, and verified them with text- or reader-based information. Of greatest consequence, the 1992 lesson, in contrast with the previous ones, reflected the rich, multilevel interpretations characteristic of effective transactional strategies instruction.

The teacher’s experience with transactional strategies instruction instantiated three patterns of learning. First, her evolution paralleled a simplified version of the Concerns-Based Adoption Model of teacher change (Hall & Hord, 1987). She followed a typical implementation pattern for any innovative practice: stage 1, mechanical use; stage 2, experimentation; and stage 3, internalization and personalization.

Second, the teacher’s experiences supported studies that learning to become an effective strategies-based teacher is not easy. In those studies, teachers required at least 3 years of practice before they emerged as expert strategies-based instructors (Brown, 1994; Pressley, et al., 1991; Pressley, Schuder, SAIL Teachers, Bergman, & El-Dinary, 1992). Skillful teaching was so challenging because teachers simultaneously had to coordinate: (a) the teaching of strategic and interpretive processing, (b) the use of direct explanation methods (i.e. explicit explanations, mental modeling, coaching), (c) the fostering of readers’ responses to literature, and (d) the promoting of active group participation.

Third, en route to becoming an effective strategies instructor, the teacher progressed through the same phases of development that her students did as they learned to self-regulate their use of strategies (see Model for Explicit Instruction, Bergman, 1992). That is, strategic processing was first modeled and explicitly explained to the teacher. With practice and feedback, she assimilated knowledge about why, when, and where to use strategies as well as how to convey that information to her students. Over time, she gained confidence and expertise. However, not until the third year did the teacher internalize SAIL instruction, realize its full potential, and make changes in instruction that enhanced students’ strategy use, interpretive abilities, and reading group participation.

REFERENCES
(Eds.), Handbook of reading research (pp. 395-422). New York: Longman.
Evolution of Transactional Strategies Instruction


APPENDIX

Description of Interactional Pattern Types

The following scheme was used to characterize interactional sequences (as well as noninteractions) between reading group participants. An interaction was defined as a communicative exchange between at least two reading group participants.

Non-Interactional Pattern

Independent teacher or student comment or question, not counted as an interaction.

Interactional Patterns

Basic Patterns

Teacher initiates with comment or question; student responds.

Student initiates with comment or question; teacher or student responds.

Teacher initiates; student responds; teacher evaluates, questions, or comments.

Extended Patterns

Teacher initiates; student responds; teacher evaluates, questions, or comments. This sequence is followed by one or more student-teacher, teacher-student, or student-student interactions.

Student initiates; teacher or student responds. This sequence is followed by one or more student-teacher, teacher-student, or student-student interactions.

Teacher initiates; student responds; another student evaluates, questions or comments. This sequence is followed by one or more student-teacher, teacher-student, or student-student interactions.