A study compared the reading instruction provided by classroom, remedial reading, and resource room teachers. Subjects, 31 classroom teachers, 7 resource room teachers and 10 remedial reading teachers from 6 upstate New York elementary schools were observed during reading instruction using a structured classroom observation procedure. Results indicated that: (1) resource/remedial teachers did not provide more intensive instruction than classroom teachers; (2) there was no difference in the proportion of time devoted to management, discipline, or reading instruction between remedial/resource teachers and classroom teachers; (3) remedial/resource teachers interacted more with individuals (and less with groups) than classroom teachers; and (4) the three groups of teachers allocated comparable time to comprehension, decoding, and indirect reading activities. (Three tables of data, one figure and 2 references are included. (RS)
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Reading Instruction by
Classroom, Remedial, and
Resource Room Teachers

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Requests for reprints should be sent to Lynn M. Gelzheiser, ED 233, State University of New York, 1400 Washington Avenue, Albany, NY 12222. Information about the observation system and program is available from Bryant Computercraft, Box 221, New Lebanon, NY 12125.
Abstract

Reading instruction provided by classroom, remedial, and resource teachers in six schools was observed, in order to determine 1) whether remedial and resource teachers provided more intensive instruction than classroom teachers; 2) whether specialist teachers had more individualized interactions than classroom teachers; and 3), whether there was congruence in the curriculum used by the three teacher groups. Data collected using a time sampling procedure provided little evidence of more intensive instruction in resource/remedial settings. Specialist and classroom teachers did not differ in the proportion of time devoted to management, discipline, or reading instruction; nor did they spend a greater proportion of time on proactive teaching techniques such as purpose setting, demonstration, or explaining how to do a reading task. Specialist teachers were found to interact more with individuals than classroom teachers, who in turn interacted more than specialists did with groups. The three teacher groups allocated comparable time to comprehension, decoding, and indirect reading activities. Several interpretations are proposed for the failure to find differences in instruction between teacher groups.
For many students experiencing difficulty in learning to read, reading instruction is provided in two settings, the classroom and a supplementary program such as remedial reading or resource room. It has been argued that such special programs are justified only if resource or remedial teachers provide a service that is special, relative to classroom instruction (Allington & McGill-Franzen, in press-b; Heller, Holtzman, & Messick, 1982). The specialist teacher is expected to capitalize on small, homogeneous instructional groups to provide instruction that is more individualized and intensely structured (Meyers, Gelzheiser, Yellich, & Gallagher, 1989) than that provided in the classroom.

Recent proposals have emphasized greater coordination of special, remedial, and regular education (Jenkins, Pious, & Peterson, 1988; Will, 1986), for the purposes of limiting segregated instruction, increasing administrative efficiency, providing more preventive programming, and reducing curricular fragmentation. If, as these authors suggest, there are strong reasons to combine special and regular class programs, one question that arises is the degree of similarity in the instruction provided by teacher of special programs and classroom teachers.

It is difficult to answer that question with precision.
Instruction provided in classroom, resource or remedial reading classes has been characterized indirectly by describing the activities of students in these classes (Allington & McGill-Franzen, in press-a; Allington, Stuetzel, Shake, & LaMarche, 1986; Gelzheiser & Meyers, 1989; Haynes & Jenkins, 1986; Ysseldyke, Thurlow, Necklenburg, & Graden, 1984). A few studies provide a relatively global comparison of teachers' instructional activities (i.e., 4 or 5 different behaviors are observed) (Allington & McGill-Franzen, in press-a; Haynes & Jenkins, 1986). Other studies provide more detailed description resource or remedial teachers' instruction, but do not compare them with classroom teachers (Quirk, Trismen, Nalin, & Weinberg, 1975; Sindelair, Smith, Harriman, Hale, & Wilson, 1986).

Several studies compared resource and classroom teachers in some detail but report different findings. Using a rating scale, Ysseldyke, Christenson, and Thurlow (1988) concluded that special education was special, as it provided students with better instructional planning and presentation, more monitoring of student understanding and feedback, and used tasks of greater relevance than did classroom instruction. Swanson (1984) studied teachers' instruction of metacognitive strategies, and found resource teachers spent more time telling students how to do a task, or demonstrating how to do a task, than did classroom teachers; classroom teachers spent more time telling information and asking students to predict outcomes than did resource
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However, neither teacher group devoted much time to strategy-based instruction, and Swanson concluded that overall, the groups varied little in teaching approach. Walter (1983) reported no differences between resource and classroom teachers in time allocated to direct instruction, management, discipline, or seatwork. Classroom teachers did spend more time testing students than resource teachers.

This study seeks to extend these findings of similarities and differences in the reading instruction provided by classroom, resource, and remedial reading teachers. To do this, reading instruction provided in remedial reading, resource room and regular classrooms was observed and compared using a structured classroom observation procedure, a revision of the Student-Level Observation of Beginning Reading (Leinhardt & Seewald, 1988).

In order to provide information about specific teacher behaviors, the SUBR's teacher codes were revised. Data were collected as to the relative emphasis teachers placed on instructional techniques including: setting a purpose for a reading activity, demonstrating a reading skill, explaining to students how to do a reading activity, telling students information needed for a reading task, getting participation in reading activities, giving feedback, and checking student work. Time spent on non-reading activities such as management or discipline was also recorded. It was hypothesized that if resource and remedial programs were providing more intensive
instruction, specialist teachers would be found to devote a greater proportion of time than classroom teachers to reading instruction, and less time to non-reading activities. Similarly, it was expected that specialist teachers would be more apt to emphasize the "pro-active" (Roehler & Duffy, 1984) components of reading instruction: purpose setting, demonstration, and explanation.

Also assessed was the proportion of reading time that teachers spent engaging groups of students versus individuals. Because of their smaller instructional groups, it was hypothesized that specialist teachers would spend a greater proportion of their time engaging individuals than would classroom teachers, as had been found in previous studies (Christenson & Ysseldyke, 1986; Haynes & Jenkins, 1986; Walter, 1983; Ysseldyke et al., 1984).

The SOBR also allowed a examination of another concern, the congruence in curriculum across the classroom and pullout settings. The proportion of time specialist and classroom teachers devoted to comprehension instruction, to oral reading or decoding activities, and to support activities such as vocabulary and workbooks was observed and compared. It was expected that a child's two reading teachers might well have different views of reading instruction, and allocate time differently to these activities, as they have had different training, hold different certification, and are provided with few opportunities for collaborative planning. Studies that have compared a given day's
reading tasks in the classroom and supplementary setting have documented a lack of congruence between classroom and remedial reading or resource reading programs (Allington and McGill-Franzen, in press-a; Allington & McGill-Franzen, in press-b).

Method

Subjects

The teachers of 71 target students, all receiving either remedial reading or resource room instruction were the subjects of this investigation. These teachers taught in six elementary schools in six school districts, two urban, two suburban, and two rural, all in the greater Capital District of New York State. There were 31 classroom teachers, 9 who taught grade 2, 10 who taught grade 3, 7 who taught grade 4, and 4 who taught grade 5. Seven teachers taught resource room, 1 per school for 5 schools, and a primary and an intermediate resource teacher in one school. Ten teachers taught remedial reading. One school had no participating remedial teachers, four schools each had a primary and an intermediate remedial teacher, and 1 school had 2 participating remedial teachers who were considered teacher assistants. Classroom teachers had, on average, 16 years of teaching experience, resource teachers averaged 10 years experience, and remedial teachers 16 years.

Instrumentation

The observation schedule was the present authors' modification
of the Student-Level Observation of Beginning Reading (SOBR) system developed by Leinhardt and Seewald (1988). The codes used are summarized in Figure 1. A computer program (Bryant, Gelzheiser, & Meyers, 1987) was written to display coding options, to time observation and coding intervals, and to record the codes that were selected. All observers used Zenith 181 laptop computers to record observations.

The coding system was an interval recording procedure. A teacher was observed for 18 seconds and his/her activity then coded. The coding interval was as long as required by the coder, but was a multiple of 5 seconds. In the event that a teacher did more than one activity in an interval, the teacher’s first codable behavior was recorded.

The observer first recorded with whom the teacher was interacting (the whole class, a reading group, a target student, another individual, or no student contact). The teacher was coded as interacting with an individual when they called on the student before asking a question, i.e., "John, why does the bear feel sad?" The teacher was coded as working with a group if the question was posed to the group as a whole, then an individual was identified to answer the question, i.e., "Why did the bear feel sad, John?"
A next decision was the content of the interaction: discipline (providing praise for positive behavior or punishment for negative behavior), management (which included preparatory activities such as giving directions and passing out worksheets), other academic subject (spelling or social studies) or reading instruction. If discipline was selected, it was further coded as positive or negative.

If reading instruction was selected, the teacher's activity was further coded. A first group of choices included setting a purpose for the lesson (telling students why they were learning or doing something), demonstration (for example, the teacher reads aloud, does the first workbook example, or shows students how she would answer a comprehension question), telling how to do a reading task (prior to the task, explaining the steps involved), telling information needed to do a task (i.e., facts needed to understand a story, the "silent e" rule), and getting student participation. For any of these choices, the rater also coded the nature of the curriculum involved: that is, whether the instruction was directed toward developing students' comprehension; toward an oral reading or decoding task; or an indirect reading task such as a workbook activity, oral drill, or vocabulary development.

Other choices for reading activities included giving feedback, (occurring after a student response, and further coded as positive, negative or neutral, and with or without explanation), checking
work (where the nature of the feedback the teacher was giving the student could not be determined) and "listen/wait/watch" where the teacher was with students, listening to a response or closely observing student work.

After the teacher's behavior was coded, if an aide were present they were observed and the same teaching behaviors coded. Up to three students could then be observed; the student codes and findings are described in Gelzheiser and Meyers, 1988. This observation cycle was repeated for the entire reading period.

Procedure

Observations were conducted by six pairs of graduate assistants. For any given observation, one observer used the SOBR coding system, while the other kept a running record of classroom activities (this data is not reported here). The second observer was available to discuss coding decisions in case of uncertainty. Observers alternated roles.

Observers first received training in eight group meetings. They were provided with an explanation of the coding system, then coded reading activities presented in paper and pencil simulation examples. Observers practiced in pairs coding video tapes of reading instruction and in classrooms not involved in this study. During this time they met weekly with the authors to resolve ambiguities in the coding system. Training was continued until a pair achieved interrater agreement of at least 90% for the average of teacher and student codes. During actual data collection, 4 to
6 (monthly) checks were conducted for each pair to monitor reliability, and inter-rater reliability for teacher codes averaged 88% agreement.

Results obtained for the entire coding interval were used to compute reliability. That is, if a pair agreed upon whom the teacher was engaging, and all subsequent codes, this was counted as a single agreement, although it involved 2 to 5 coding decisions. If reliability of coding decisions had been computed, reliability would have been higher than that reported here.

Target students were observed four times for reading instruction in both their classroom and pullout setting; teachers were observed at the same time. The number of times a teacher was observed depended upon the number of target students they taught, whether these students were scheduled for instruction together or not, and student attendance; the number of times a teacher was observed ranged from 4 to 33. Because most of the specialist teachers taught more of the target students, they were typically observed more often than classroom teachers. Typically, classroom teachers were observed once a month, and specialist teachers over shorter intervals.

The observation began when the classroom clock displayed the scheduled (as conveyed to the observers by the teacher) starting time for reading instruction, and ended when the classroom clock displayed the scheduled ending time. The computer recorded the time that the observation began and ended.
Data Analysis

Approach

The observations made of each teacher were averaged to produce a mean amount of time spent on each teaching activity, and converted to percentage by dividing by the length of the observation.

The basic SOBR codes (as listed in Figure 1) were also combined in ways designed to help answer the research questions. These additional variables are defined as needed in the results section. For these variables some of the basic codes were used more than once, so that these variables correlated, and the time allocated to these variables does not sum to 100%.

Preliminary Analyses

The computer program reported the time each code was recorded. Because each coding decision lasted until a coding decision was made, it was necessary to determine whether any of the basic SOBR codes (as defined in Figure 1) took especially little time to code (and were therefore over-represented) or took especially long to record (and thus were under-represented). The mean time required to record each code was computed and differences in the length of time required to code the various teacher activities were found to be minimal. No adjustments for length of coding interval were made.

Results
Table 1 reports the percentage of time that the three teacher groups, classroom, remedial, and resource, devoted to various instructional activities. A series of t-tests were computed to determine whether classroom and specialist teachers differed on these variables. Contrary to expectation, classroom and specialist teachers did not differ in time spent on management and discipline. Also contrary to expectation, classroom and specialist teachers did not differ in time spent on reading instruction, or in time allocated to the proactive teaching techniques of purpose setting, modelling, and explaining how to do something. In fact, as a group classroom and specialist teachers appeared to allocate instructional time in a remarkably similar fashion. The one activity that distinguished the groups was getting participation, which was used more frequently by classroom teachers, probably as a result of their larger classes.

Table 2 illustrates that as predicted, classroom teacher spent more time than specialist teachers in engaging groups of students. Engaging groups was defined as the sum of the teachers interactions with the whole class and groups 1, 2, and 3. As predicted, specialist teachers spent more time than classroom teachers in engaging individual students, where engaging individuals was defined as time spent with target students A, B,
C, or other individuals.

Insert Table 2 about here

Curriculum

In this sample, classroom, resource, and remedial teachers did not differ in the proportion of time allocated to different aspects of the reading curriculum. The three teacher groups did not differ in time spent on comprehension, oral reading/decoding, and indirect reading activities (see Table 3). Comprehension included all times coded as set purpose, tell how to, model, tell information, or get participation that were further coded as comprehension related; oral reading/decoding and indirect reading were defined in analogous fashion.

Insert Table 3 about here

Discussion

The major finding of this study was minimal differences in the way that classroom and specialist teachers allocated time to different aspects of instruction. This finding is consistent with the results of two previous studies (Swanson, 1984; Walter, 1983) where teachers were observed using other time sampling procedures. The few differences that were found between classroom and specialist teachers also replicated the findings of previous
studies (Christenson & Ysseldyke, 1986; Walter, 1983; Ysseldyke et al., 1984), that classroom teachers engaged groups more and specialist teachers engaged individuals more. Replication in findings suggests that the conclusions are robust across observational systems.

The minimal differences in instruction obtained in this study were not found by Ysseldyke, Christenson, and Thurlow (1988), who instead concluded that special education teachers were more effective than classroom teachers. However, because this study used time sampling and Ysseldyke et al. used a qualitative rating scale, it is possible that the findings are not contradictory. That is, it may be that teacher groups differ when qualitative features are examined, but do not differ in the way that they allocate time to different teaching activities. Differences in findings may also be due to differences in sample or the teaching activities coded.

Several approaches can be taken to explaining why the teaching employed by specialist teachers resembles that of classroom teachers. It may be that both teacher groups are responding in a similar way to heterogeneous groups that include low achieving students. Classroom teachers surveyed by Ysseldyke, Thurlow, Wotruba, and Nania, 1988 reported that when teaching groups that included resource students, they most often employed structured, direct instruction, motivated at least in part by the needs of these students. Allington and McGill-Franzen (in press-a) have
suggested that resource teachers may face management demands equal to or exceeding those of classroom teachers because resource students are so heterogeneous.

Another possible explanation for a uniform teaching style is that many teachers fall into teaching routines, rather than responding to the needs of individual students (Allington & McGill-Franzen, in press-b). If that teaching routine resembles the way in which the teacher was taught, then classroom and specialist teachers would indeed structure their lessons in a similar fashion.

On a more optimistic note, classroom and specialist teachers were found to provide comparable emphasis on comprehension, phonics, and indirect reading activities. This evidence of curricular congruence differs from the findings of Allington and McGill-Franzen (in press-a, in press-b), who examined daily reading activities. It may be that classroom and pullout programs are not well coordinated on a daily basis, but appear to share a common emphasis if a broader view is taken.

Findings of similarity in the instruction and curriculum employed by classroom and specialist teachers raise the question of whether the glass is half empty or half full. On the one hand, one finds little evidence that instruction in special and remedial programs is more intensive, structured, or proactive, in spite of the expense and stigma that may be attached to these programs. On the other hand, similarities of instruction and curriculum should
facilitate efforts to integrate special and remedial programs (Jenkins et al., 1988), or pullout and classroom programs (Will, 1986).
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References


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### Table 1
Percentage of Time Devoted to Particular Teaching Techniques

<table>
<thead>
<tr>
<th></th>
<th>Classroom</th>
<th>Remedial</th>
<th>Resource</th>
<th>( t )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-Reading</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discipline</td>
<td>2 (2)</td>
<td>1 (1)</td>
<td>1 (1)</td>
<td>-1.94</td>
</tr>
<tr>
<td>Management</td>
<td>19 (9)</td>
<td>18 (9)</td>
<td>24 (8)</td>
<td>.84</td>
</tr>
<tr>
<td>Academic Other</td>
<td>1 (2)</td>
<td>2 (5)</td>
<td>5 (8)</td>
<td>1.76</td>
</tr>
<tr>
<td>Uncertain</td>
<td>2 (2)</td>
<td>2 (3)</td>
<td>1 (1)</td>
<td>-.35</td>
</tr>
<tr>
<td><strong>Reading</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Get Purpose</td>
<td>1 (1)</td>
<td>2 (2)</td>
<td>1 (1)</td>
<td>.70</td>
</tr>
<tr>
<td>Modelling</td>
<td>7 (5)</td>
<td>8 (4)</td>
<td>7 (5)</td>
<td>.55</td>
</tr>
<tr>
<td>Tell How To</td>
<td>3 (2)</td>
<td>4 (2)</td>
<td>2 (2)</td>
<td>.84</td>
</tr>
<tr>
<td>Tell Information</td>
<td>6 (5)</td>
<td>7 (4)</td>
<td>5 (5)</td>
<td>-.31</td>
</tr>
<tr>
<td>Get Participation</td>
<td>27 (8)</td>
<td>20 (8)</td>
<td>21 (7)</td>
<td>-2.75 **</td>
</tr>
<tr>
<td>Checkwork</td>
<td>3 (3)</td>
<td>5 (5)</td>
<td>3 (3)</td>
<td>1.64</td>
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<tr>
<td>Feedback</td>
<td>13 (6)</td>
<td>14 (8)</td>
<td>15 (8)</td>
<td>.47</td>
</tr>
<tr>
<td>with explanation</td>
<td>10 (6)</td>
<td>10 (6)</td>
<td>11 (7)</td>
<td>.19</td>
</tr>
<tr>
<td>without explanation</td>
<td>4 (3)</td>
<td>5 (3)</td>
<td>5 (3)</td>
<td>.66</td>
</tr>
<tr>
<td>Listen/Wait/Watch</td>
<td>9 (5)</td>
<td>10 (6)</td>
<td>8 (4)</td>
<td>.06</td>
</tr>
</tbody>
</table>

**Note:** All numbers are percentages; numbers in parentheses are standard deviations. \( t \)-tests compared classroom teachers with resource and remedial teachers combined. ** \( p < .01 \).
<table>
<thead>
<tr>
<th></th>
<th>Classroom</th>
<th>Remedial</th>
<th>Resource</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>47 (17)</td>
<td>27 (18)</td>
<td>40 (22)</td>
<td>-2.73**</td>
</tr>
<tr>
<td>Individual</td>
<td>45 (15)</td>
<td>66 (20)</td>
<td>54 (20)</td>
<td>3.06**</td>
</tr>
</tbody>
</table>

Note: All numbers are percentages; numbers in parentheses are standard deviations. T-tests compared classroom teachers with resource and remedial teachers combined. ** p < .01.
Table 3
Percentage of Time Allocated to Different Aspects of the Curriculum

<table>
<thead>
<tr>
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<th>Remedial</th>
<th>Resource</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect Reading</td>
<td>13 (7)</td>
<td>12 (5)</td>
<td>10 (6)</td>
<td>-0.86</td>
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<tr>
<td>Comprehension</td>
<td>14 (9)</td>
<td>12 (11)</td>
<td>8 (7)</td>
<td>-1.44</td>
</tr>
<tr>
<td>Oral Reading or Decoding</td>
<td>17 (9)</td>
<td>17 (8)</td>
<td>19 (5)</td>
<td>0.23</td>
</tr>
</tbody>
</table>

Note: All numbers are percentages; numbers in parentheses are standard deviations. T-tests compared classroom teachers with resource and remedial teachers combined.
Figure 1
Teacher Codes from Modified SOBR Coding System
Teacher Codes With Coding Priorities

Student

(1) A

(2) B

(3) C

Student

(4) Student

(5) Other

(6) Group

(7) Group

(8) Group

(9) Whole

(10) No

Class Contact

A

B

C

Student

Individual

I

2

3

Group

I

1

2

3

Group

Whole

No

Contact

(target child first priority; if more than 1 choose first; if more than 1 group pick first)

Reading

Academic Other

(2)

Management

(4)

Uncertain

(5)

Set

Purpose

How to

Model

Tell

Information

Participation

Wait/Watch

Work

Feedback

Positive

(1)

Negative

(2)

Comprehension

Meaning

(1)

Oral Reading

Decode

(2)

Indirect Reading

Explanation

(1)

No Explanation

(2)

No Explanation

(3)