A college-level reading center program was adapted for use in helping a group of state employees improve their reading skills. This paper explains how the program originated and describes program procedures (including diagnosis, the determination of individual and course objectives, record keeping, class format, and class presentations) materials used, the sequence of topics, and evaluation methods. It was determined that program participants improved in reading rate, reading flexibility, and vocabulary, and that they perceived the topics, course objectives, and class format positively. (GW)
College Reading Center Approach to Improvement of Reading with State Employees

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The major purpose of this paper is to report the adaptation of a college level reading center program to the perceived and assessed needs of a group of state employees.

A secondary purpose of the paper is to offer evidence that college reading programs have a great potential in improving the reading skills of state employees by transporting the reading laboratory from the college environment closer to the work environment.

Our program started with an inquiry by state officials regarding their desire to increase the staff's reading abilities to cope more efficiently with the voluminous reading materials that they encountered in daily operations. An informal needs assessment discussion with agency representatives revealed that the major areas identified for improvement were rate, flexibility, and comprehension. Further conferences revealed that the state officials would cooperatively sponsor a reading program if it were based on specified behavioral objectives. This was easily accomplished by incorporating Livingston's (1972) behavioral objectives into a planned program. Livingston's objectives stressed understanding the reading process, developing comprehension and rate and flexibility skills. In retrospect, we note that the program we delivered to state employees also resembles Osen's (1972) WCRA systems approach model to establish accountability in college reading programs. Therefore, the reader can gain a quick review by examining
Figure I, "An Adaptation of Osen's Model to a Governmental Agency Reading Program." The various phases of needs assessment, program planning, program implementation, and program evaluation were representative of our program which in turn was based on the program in use at College of the Mainland.

Program Procedures and Materials (2.0)

After the needs of the agency were determined, the following procedures were planned and subsequently put into operation.

**Diagnosis**

The instructor surveyed the reading interests, background, and habits of the participants. The McGraw-Hill Basic Skills System Reading Test, Form A, and the Nelson-Denny Reading Test, Form C, were administered to obtain rate, flexibility, comprehension, and vocabulary information. The findings were filed in student diagnostic folders and the data was promptly used in conferences. The findings were also incorporated into formulating individual course objectives and provided information for planning group instruction.

**Individual Objectives**

During the second class session, students were asked to read through a list of 38 behavioral objectives covering perception skills, word attack skills, vocabulary skills, comprehension skills, critical reading skills, and study skills. The instructor included beneath each objective a list of materials that the participants could use to master the objective. During an individual conference each student was asked to select the objectives he felt
Assess needs

1.1 Determine students' needs & expectations

1.2 Assess expectations of agency through conferences

1.3 Review available materials, equipment, facilities, & order more

1.4 Consult professional literature for descriptions of related programs (done prior to project)

2.0 Adapt Program Based on College of the Mainland

2.1 Formulate goals & objectives (done through 1.1 & 1.2)

2.2 Develop learning options & basic design strategy

2.3 Determine evaluation procedures (done prior to & during instruction)

2.4 Order, prepare needed materials & supplies as new needs arise

3.0 Implement program

3.1 Implement according to plan

3.2 Group instruction

3.3 Assigned individual instruction

3.4 Self assigned reading tasks

4.0 Evaluate program

4.1 Evaluate according to plan

4.2 Present results of evaluations to agency for recommendations

4.3 Review program & recycle for Phase II

FIGURE I

An Adaptation of Osen's Model to a Governmental Agency Reading Program
he wanted to work toward. The instructor also gave suggestions based on diagnostic information.

Course Objectives

Behaviorally stated objectives were written for each session and were given to each student in mimeograph form at the beginning of each class meeting to specify session activities and outcomes.

Record Keeping

Students were asked to write all answers to comprehension questions on answer sheets provided for the student. Rate and comprehension scores were obtained on all timed readings. Students were also asked to maintain a record of all reading completed outside of class, a record of new vocabulary words, and a record of all attempts at completing objectives. This data was filed in the student's work folder.

Class Format

Each class meeting was composed of three time periods. The first hour usually included presentation over the skill outlined for the day; and, if the skill required practice, the class would use part of the hour to apply the skill. After an hour, a break of 15 to 20 minutes was usually suggested by the instructor. For the second hour, the class participated in timed readings from the two texts that were used for the course. Emphasis was placed on rate and comprehension skills. The participants also were able to choose the selections they wanted to read for the timings. They timed themselves with stop watches provided for their use. The last 45 minutes included individual conferences. An attempt was
made to discuss the day's progress with each student; while the other students continued timed readings, worked on individual objectives, or worked on visual perception exercises.

Class Presentations

Group instruction over specific topics were presented through an informal lecture. The instructor began each class meeting with an informal conversation with the class to establish a class environment conducive to class participation. Transparencies and tape recorders were used when appropriate. Students were encouraged to participate in discussions throughout the presentation. When the presentation called for application of the skill, the class practiced the skill. Such skills were notetaking, previewing, listening, skimming & scanning, and identifying key words, phrases and topic sentences.

Materials

The availability of materials was quickly determined during the needs assessment and new materials were promptly ordered. The following materials were transported to the class every day and unpacked and repacked for the next session:

Texts - Two textbooks were selected for the course - James Brown's Efficient Reading and Alton Raygor's Reading at Efficient Rates. Both are designed to provide practice in timed readings and comprehension checks. The Brown text was chosen because of its wide range of articles, and the Raygor text was chosen because many of its timed readings addressed themselves to techniques of improving reading ability and tended to reinforce the lectures. Students were encouraged to read the texts at home when their schedules permitted outside reading.

Supplementary Texts - Several supplementary texts were
used to enable participants to better achieve their individual objectives. Students had access to five vocabulary texts, five study skill texts, three comprehension texts, and 20 rate texts. Students were encouraged to practice at home.

Equipment - One EDL controlled reader machine and ten SRA pacing machines were available for use for practicing speed. Ten stop watches were available for timed readings in class and at home.

Supplementary Materials - A selection of 75 paperbacks were available for use by the participants. Newspapers, journal articles, and job-related materials were used for specific sessions in practicing skills. Students were encouraged to bring any materials they wished or needed to read.

Implementation of the Program (3.0)

The preceding section described the plan made and adhered to during implementation. The original plan called for 11 sessions over a 11 week period. Agency needs dictated that the course be compressed into five and one half sessions which meant two sessions per week. The following sequence of topics represent the overall course organization and implementation:

Session I - Pre-Test and Overview of the Course
Session II - Description of the Reading Process
Session III - Perceiving the Writer's Structure
Session IV - How Can You Remember What You Read? SQ3R Notetaking and Listening Skills
Session V - Skimming & Scanning
Session VI - Vocabulary Improvement
Session VII & VIII - Critical Reading Skills
Session IX - Adapting Reading Purpose to Different Reading Materials: Job-Related Readings -- Newspapers and Journals
Session X - Posttesting
Session XI - Application of Acquired Reading Skills to Fiction and Non-Fiction Books and Where Do We Go From Here?
Evaluation (4.0)

Evaluation was determined by the following objectives:
1. Participants would improve their rate of reading as measured by the McGraw-Hill Basic Skills System Reading Test and the Nelson-Denny Reading Test.
2. Participants would improve their flexibility of rate as measured by the McGraw-Hill Basic Skill System Reading Test and timed readings in Efficient Reading.
3. Participants would improve their comprehension scores as measured by the McGraw-Hill Basic Skill System Reading Test and the Nelson-Denny Reading Test.
4. Participants would improve their vocabulary scores as measured by the Nelson-Denny Reading Test.
5. Participants would enjoy the course and evaluate it as being helpful.
6. Participants would achieve individual objectives they had set for themselves during the second class session.

A comparison of McGraw-Hill and Nelson-Denny Pre- and Posttests (Table 1) reveals that the differences between mean scores were statistically significant in seven of the 11 comparisons. Rate of reading and flexibility gains were impressive. From a utilitarian job-related standpoint, these gains should help employees to read faster and read more at the same level of comprehension that they had when they entered the course. The comparison of comprehension revealed a mean difference of five points on the Nelson-Denny test, which was significant at the .10 level but not at the .05 level. The importance of this finding is that comprehension did not diminish and adds practical significance to the rate of reading and flexibility.
### TABLE 1

A Comparison of McGraw-Hill and Nelson-Denny Pre- and Posttests

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Pre</th>
<th>Post</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>S.D.</td>
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<tr>
<td>McGraw-Hill:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate I</td>
<td>16</td>
<td>239.94</td>
<td>67.56</td>
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<tr>
<td>Rate II</td>
<td>15</td>
<td>188.27</td>
<td>38.61</td>
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<tr>
<td>Flexibility</td>
<td>15</td>
<td>45.27</td>
<td>25.53</td>
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<tr>
<td>Retention</td>
<td>16</td>
<td>12.31</td>
<td>4.33</td>
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<tr>
<td>Skimming &amp; Scanning</td>
<td>16</td>
<td>16.94</td>
<td>4.36</td>
</tr>
<tr>
<td>Comprehension</td>
<td>16</td>
<td>23.06</td>
<td>3.84</td>
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<tr>
<td>Total</td>
<td>16</td>
<td>52.94</td>
<td>11.92</td>
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<tr>
<td>Nelson-Denny:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocabulary</td>
<td>18</td>
<td>44.96</td>
<td>20.95</td>
</tr>
<tr>
<td>Comprehension</td>
<td>18</td>
<td>32.22</td>
<td>14.60</td>
</tr>
<tr>
<td>Rate</td>
<td>18</td>
<td>307.33</td>
<td>116.56</td>
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<tr>
<td>Total</td>
<td>18</td>
<td>74.78</td>
<td>34.80</td>
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</table>

The following scores were found to be statistically significant: Rate I, Rate II, Flexibility, Skimming & Scanning, Vocabulary, Rate, and Total Reading.
gains.

We speculate that if the course could have been conducted in 11 weeks as originally planned, more emphasis, time, and practice would have influenced comprehension gains more favorably. It is interesting to note that vocabulary gains were also impressive and should contribute to future improvement of comprehension. External reading flexibility also improved notably. This is another skill that has great work applicability in finding significant passages for closer contemplative reading. The above gains were based on 70 percent class attendance.

Both formative and summative evaluations during the course revealed that the students perceived the topics as relevant and interesting. Comments were also of a very positive nature concerning the course objectives and the class format.

In retrospect, the instructor felt that the gains exceeded similar programs at the college level. The following recommendations were made for Phase II, the next group of this program:

1. Provide more practice time for students in class.

2. Organize lectures better so that they can be condensed without leaving out content; thus, more time would be available for application of the theory.

3. Provide more time and attention to individual needs of students.

4. Create and use more job-related materials with students.

5. In providing services for future courses, it would be better to schedule courses once a week rather than twice a week. The extra time between sessions would give the students an opportunity to practice mastering skills introduced in class.
REFERENCES


