

of state certification requirements from respondents within some of the states, a follow-up survey of State Departments of Education is now underway to gain more definite information on current certification requirements.

#### AREAS OF PROGRAM CONTENT

##### Results

Respondents were requested to account for 100% of their class time by indicating the percent of course time devoted to each of five program areas and a sixth designated as "Other." Mean percentages, in rank order are:

Improving secondary student content-related vocabulary and comprehension of text materials	39%
Improving secondary student study skills	18%
Other	17%
Assessing secondary student reading skills	13%
Assessing textbooks for readability and related features	11%
Improving reading efficiency of undergraduate college students in respondents' classrooms	5%

Since 17% of the responses were in the "Other" category, an analysis of these responses was conducted and four major categories of responses emerged. The category with the most responses (14) was designated as "conveying knowledge about reading" and included time indicated as devoted to theory, process, background, rationale for content reading, reading programs, causes of reading difficulty, issues in reading, and reading and relevant literature.

The second highest number of "Other" responses (7) dealt with time devoted to motivation for content area reading. The two additional "Other" categories which emerged (6 responses each) were (1) recognizing and meeting individual reading needs of secondary students relevant to their content courses and (2) time devoted to carrying out content area courses or lessons, including the development or modification of materials.

##### Discussion

Since the major goal of reading secondary content area materials is student comprehension, it is not surprising that respondents reported devoting the highest percent of class time to improving secondary student vocabulary and comprehension of text materials. The relatively high response to time devoted to concerns other than those designated on the questionnaire indicates four additional program areas to which institutions tend to devote a considerable amount of content area reading course time: knowledge about reading, motivation for content reading, individualizing instruction, and implementation of strategies by the teacher-in-training.

#### COMPONENTS WITHIN COURSE AREAS

In addition to being interested in the percent of institutional class time devoted to the five designated areas, we also wanted

### A NATIONAL ASSESSMENT OF UNDERGRADUATE SECONDARY CONTENT AREA READING COURSES: COMPONENTS AND CHARACTERISTICS

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In an attempt to gain current information about the nature and content of undergraduate courses in secondary content area reading for teachers-in-training, we developed a questionnaire, had it scrutinized by objective analysts connected with our Institutional Research Department, and modified it accordingly. The questionnaire was then mailed to persons identified as heads of units in which Reading was located at the 304 institutions in the forty-eight continental United States identified as having graduate programs in reading (Blomenburg, 1981). A total of 130 institutions responded, a return rate of 41%.

Results indicated that 68% of those institutions responding offered one secondary content area reading course; 17% offered more than one course; and 8% included secondary area reading as a component in a course. Indications were that all courses were accorded academic credit, varying in amount, but usually 2 or 3 semester credit hours. Respondents were asked to indicate whether there were state certification requirements requiring content area reading for prospective secondary teachers. Responses from respondents indicated that more than half of the continental United States have some content reading requirement for *all* prospective teachers. Since there were inconsistencies concerning the existence and nature

information as to what components and strategies were included in each area.

On the questionnaire, components/strategies were delineated for the five designated areas and respondents were asked to check those included. Opportunity was also given to list other components/strategies not specifically designated. The number of institutions including the various components for each area and observations relative to the results are reported in the sections which follow.

### Vocabulary/Comprehension Components

As previously mentioned, vocabulary/comprehension has the highest percent of institutional course time devoted to it. On the questionnaire, the activities included in this area were subdivided into pre-reading, during reading, and post-reading activities.

*Pre-Reading Results.* The four pre-reading vocabulary/comprehension strategies designated on the questionnaire were: (1) structured overview and/or mapping; (2) word association strategies such as brainstorming or categorizing; (3) direct teaching and reinforcement of vocabulary, and (4) "Other."

The structured overview and/or mapping pre-reading activity was included in the largest number of institutions (81) followed by direct teaching and reinforcing of vocabulary (74) and word association strategies (54).

In the "Other" category for pre-reading, there were two groups of responses.

Eleven respondents mentioned including prediction and motivation strategies such as anticipation guides and attitude inventories in their courses. The second group of 10 responses mentioned using vocabulary or concept strategies to help develop secondary readers' backgrounds.

*Pre-Reading Discussion.* It is interesting to note that structured overviews and/or mapping outranked the direct teaching of vocabulary in undergraduate content area reading courses. An explanation of this finding might be that through using a structured overview or mapping, secondary teachers are not only teaching the new vocabulary/concepts but they are also teaching the hierarchy or interrelationships among the concepts, whereas when simply teaching vocabulary alone, relationships of a word to others new concepts or ideas may not be brought out. Content teachers may see this type of presentation as more integrated with what they perceive as their central instructional role.

*During-Reading Results.* The during reading strategies which we listed on the questionnaire included (1) study guides involving group interaction such as 3-level study guides (Herber, 1978), individual reading guides, such as Guide-O-Rama, (Cunningham and Shablak, 1975), (3) traditional directed reading activities (DRA's); (4) modified DRA's emphasizing active student involvement such as the Directed Reading/Thinking Activity (Stauffer, 1969), and an "Other" category.

Results indicated study guides involving group interaction were used in the highest number of institutions (70) followed by the modified directed reading activity (64), the traditional DRA (61), the individual reading guide (57) and the "Other" category included 7 instances of ReQuest (Manzo, 1969) and a 4 citings of a study strategy such as SQ3R (Robinson, 1961) or REAP (Eanet & Manzo, 1976).

*During-Reading Discussions.* Respondents seem to favor teaching their students to use during-reading strategies that require active involvement by secondary students rather than those which are more teacher directed. It would seem that faculty in the institutions surveyed are aware of the need to encourage secondary students to be active readers and learners.

*Post-Reading Results.* Post-reading strategies indicated on the questionnaire included (1) mapping, (2) summarizing techniques, (3) enrichment or extension activities, (4) vocabulary manipulation activities such as the post structured overview (Graham & Robinson, 1984), and (5) an "Other" category.

Summarizing strategies were most often indicated as included (74 citings), with enrichment or extension following closely with 72 inclusions. Vocabulary manipulation was reported as included in 64 institutions and mapping 63. The "Other" category had 10 citings with a discussion of recitation strategies (4 inclusions) and some type of study guides (3).

*Post-Reading Discussion.* The post-reading results seemed to indicate that comprehension oriented activities (summarizing and extension) were more often included in content reading courses than more specifically vocabulary oriented activities (manipulation and mapping).

### Improving Secondary Student Study Skills

*Results.* As noted previously, the second highest percent of institutional class time on the questionnaire was 18% devoted to improving secondary student study skills. We further subdivided this area into six components: sensing the author's organization; note-taking; exam preparation and taking; library and dictionary skills; summarizing; and "Other."

Results showed sensing the author's organization with the highest citings (75), followed by a two-way tie between note-taking and summarizing with 66 inclusions each. Exam preparation and taking was third with 58, while library and dictionary skills had 50 inclusions and 13.

The strategy with the highest number of citings in the "Other" category was SQ3R or a similar strategy (7), followed by giving help with graphic aids (5).

*Discussion.* Sensing the author's organizational patterns seems to be the study skills strategy most frequently included in content courses in responding institutions. These results would agree with the ideas of Robinson (1978) and others that sensing the author's organization is very important for overall reader comprehension. Also, many other authors of college texts on content area reading advocate using pattern study guides based on organizational patterns of material to enable readers to comprehend material (Vacca, 1981; Herber, 1978).

### Assessing Secondary Student Reading Skills

*Results.* On the questionnaire, assessing secondary students reading skills was the fourth place in overall classtime devoted to strategies. This area was subdivided into four components: group informal content reading inventories, cloze procedures, standardized tests, and "Other."

The techniques with the highest number of citings were group informal content reading inventories and cloze procedures with 76 institutions reporting inclusion for each. Next came standardized tests with 51, and "Other" with 20.

The highest citings in the "Other" category include text bas-

ed tests such as the Maze technique (Guthrie, 1974) with 5, with word recognition or assessment tests with 4.

*Discussion.* As far as assessing secondary student reading skills is concerned, the results of this section of the questionnaire bear out that more of the respondents advocate using teacher-made content area text-based instruments such as the cloze and group informal content reading inventories in content area classroom rather than the results of standardized tests to measure secondary students' reading skills.

Since both the cloze and the reading inventories are based upon content area material that students are using as texts in their secondary classrooms, these instruments should yield an estimate of how hard or how easy reading this material is for pupils. Such information can be very useful to content area teachers, for example giving them an idea of who will need supplementary materials to read, who will need the most readiness or the least, etc.

*It seemed somewhat surprising that standardized tests were included as often as they were in content reading courses since they do not give an estimate of how hard or how easy doing the reading in a particular content area will be for students since they're not based on content material as the cloze and the inventory are.*

*Therefore, respondents seem to favor informal content area based instruments to assess secondary student reading skills, rather than to use the results of standardized tests.*

#### Assessing Textbooks

*Results.* As far as the overall percent of institutional class time devoted to it, assessing textbooks for readability and related features rated fifth with an average of 11% of class time devoted, as previously mentioned.

On the questionnaire, textbook assessment was broken down into four components: readability formulas; checklists of text traits; analysis of text features; and "Other."

The category with the highest number of citations was readability formulas with 81; followed by analysis of text features (74); then checklist of text traits with 53; and "Other" with 9.

The largest number of citations in the "Other" category with 4 citations each were (1) assessing textbook concept load and (2) assessing student background needs and skills.

*Discussion.* Despite the controversy over the use of readability formulas to accurately measure textbook difficulty (Cullinan and Fitzgerald, 1984), the results of this section of the questionnaire show their use being advocated since they ranked first in the number of citations. The almost as high inclusion of analysis of text features may indicate an awareness of the limitation of readability formulas used in isolation.

An explanation of these results might be that readability formulas were most often included because many of them are well known and they are fairly easy to compute as compared with text analysis which can be very time consuming because an individual may have to estimate the text's concept load, style, and many other factors, a process that can take hours as opposed to the minutes that a readability formula can take to compute.

#### Improving Reading Efficiency of Prospective Secondary Teachers

*Results.* As mentioned previously, improving reading efficiency of prospective secondary teachers had the lowest percent of institutional time devoted to it (5%).

When directly asked on the questionnaire if their programs included such a factor, 75% answered "no" and 25%, "yes." Of the 25% answering "yes," numerical results showed skimming and scanning with the highest number of citations (20); followed by comprehension (19); flexibility (18); vocabulary (16); and "Other" (8).

In the "Other" category there was no consistency in the citations.

*Discussion.* Since the main thrust of instruction in most undergraduate content area courses or course components would seem to be teaching students how to help their prospective secondary pupils with their content area reading, it certainly isn't surprising that only one fourth of the respondents devote class time to improving their own college students' reading efficiency.

Of those that do devote instructional time to developing reading efficiency, skimming and scanning might have been expected to be first, since learning to use these strategies has been found to lead to efficient reading.

#### OTHER SURVEY RESULTS

##### Students Spending Time in Secondary Schools

*Results.* We were interested in ascertaining if the undergraduates in the course or course component spent time in secondary schools as part of their content reading course requirements. Fifty-two percent of the respondents responded "no" and 48% answered "yes." In responding to more specific items about the type of involvement, 87% of the "yes" respondents reported that their students participated in teaching or assisting with content area reading strategies. Time spent observing school content reading strategies was reported by 81% of the respondents who reported school involvement, and 76% of this group reported that their students tutored secondary students.

*Discussion.* Since the importance of student practicums or field placements in enhancing students' skills is often emphasized in the literature, the high percentage of respondents reporting prospective teachers spending time in secondary schools is heartening. Also, it is important to note that school involvement more often includes participation rather than just observation.

##### Thrust of Course or Course Component

*Results.* Respondents were asked whether the thrust of their course or course component was (1) improving secondary students' text reading and learning or (2) improving their reading skills in general. A category for "Other" was also provided. Textbook reading was indicated as the focus of 75% of the program respondents; 17% reported a reading skills focus, and the 12% checking "Other" indicated a dual thrust.

*Discussion.* Since many current college texts on content area reading focus on strategies to enhance secondary student comprehension of content area materials, these results might have been expected.

### College Content Area Texts

*Results.* Of the 37 texts that the respondents listed using, the one with the highest percent (27%) was Vacca's *Content Area Reading*, followed by 11% citing Roe, Stoodt, and Burns' *Reading Instruction in the Secondary School*. Of the other 35 texts reported, no one text was listed by more than 5% of the respondents.

### SUMMARY AND OBSERVATIONS

From the findings of this survey, a very tentative profile of the "typical" content area reading program for prospective secondary content teachers can be drawn.

1. The "typical program is offered in a course format, separate from general methods courses, devoted entirely to secondary reading, primarily content reading. Credit is given, usually equivalent to two or three semester hours.
2. More than half of the course time in this "typical course" would be devoted to activities closely related to textbook understanding: vocabulary/comprehension and study skills.
3. Strategies included within the comprehension/vocabulary section for pre, during, and post reading component would generally be those that deal with vocabulary and text comprehension in an integrated manner.
4. Time spent on study skills would include attention to the benefits of identifying organizational patterns used by the author.
5. Assessment would rely on informal testing using classroom materials.
6. Readability formulas would be included, but so would other indicators such as analysis of text features and checklists of text traits.

This profile would seem to indicate that content reading teachers are well aware of recent developments emphasizing comprehension and student involvement in reading/learning. Also, they would seem to have some awareness that readability formulas should not be the only means by which textbook assessment is approached.

In interpreting results, however, a number of cautions are in order:

1. The distribution sample used was not a random sample of all institutions but rather the "population" of institutions having graduate programs in reading. The reasons for this choice — availability of names and addresses for contact, local institutional needs favoring information from institutions having graduate programs in reading, the recognition that institutions having reading graduate programs would also be apt to have reading programs for undergraduates, and financial limitations — seemed to justify the decision about the sample. Nonetheless, the results cannot be generalized to the same extent that they could had a random sample been used.
2. Some respondents did not answer all items; therefore, the number of responses varied from section to section.
3. Information about program content was, of course, what respondents reported, rather than based on observation of what really went on in the classrooms.

Despite these limitations, results seem sufficient to indicate that secondary content reading courses throughout the nation

have many similar features, perhaps influenced by writers of textbooks being used, but they have some unique features as well.

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