Examples of study skills are described. Strategies for teaching are suggested, and a method for implementing a study skills program is discussed. Locating and selecting important points, remembering information through note taking and outlining, and adjusting reading rate are included as study skills. Strategies for teaching include using texts and materials students are required to read, working on skills that will alleviate immediate problems, and determining those skills each student is strong and weak in. Selecting moderately challenging materials, developing a hierarchy of skills, and teaching them in sequence are also suggested as teaching strategies. Joint reading teacher and subject teacher involvement in content subject instruction is seen as one method for improving both reading and study skills on the secondary and college levels. (RT)
Robert Karlin  
Queen College of the  
City University of New York  
Flushing, New York 11367

Study Skills for Secondary and College Students—Session

Why a concern about study skills for high school and college students? Is it because the study skills have been neglected or badly taught in the elementary school reading program? Is it because there is a real need for continuing study skills instruction with progressively difficult materials? Is it because these students fail to demonstrate proficiency in independent study? Perhaps some of each.

But there is not much doubt about the relationship between performance on specific study skills and the mastery of information through reading. Teachers are all too aware of high school students who are doing badly in their subjects. College instructors who seem less sympathetic to student weaknesses than their high school counterparts are having to face similar problems. Failures cannot be
explained by single factors, but one contributor is the students' inability to cope with the increasing reading demands that are made of them. Greater dependence upon independent activity is certainly characteristic of higher education. Students who are able to read efficiently - and a major portion of their time is spent in reading - possess the tools to complete their tasks. The study skills help to make up part of this tool kit. Confirmation of this condition can be found in the results of studies which have sought to identify relationships between reading skills and selected achievement areas and the adequacy of study techniques and its relation to school performance.

**Scope of Study Skills**

In order for high school and college students to acquire information through their own efforts, they must learn to provide the self-direction necessary to the successful completion of independent activities. They must learn efficient ways of pursuing their objectives once they have established them. They must learn to be selective as they receive quantities of information, separating ideas from each other and retaining those which are needed to complete their tasks. They must learn to make decisions, to test alternatives, to reconstruct ideas. In addition to using the skills of word recognition, comprehension and interpretation and critical evaluation which apply to all kinds of reading, students who engage in study activities must be proficient in sets of skills that have particular relevancy to study-type activities. We call these sets the study skills.
An examination of the literature on reading will reveal lack of agreement on what skills to include in them. Perhaps the recognition of the relationship between generalized reading skills and specialized study skills accounts for some of the confusion surrounding each. Unquestionably, students who engage in independent study must understand and retain what they read: recognize words and their meanings; grasp literal ideas and draw inferences; accept, reject and/or withhold judgment. In addition, they have to locate, select, organize and retain information; understand graphic representations; follow directions; adjust reading modes to purposes and materials. It is with these latter requirements that the study skills are involved.

It may be helpful to be more specific: to locate information and its sources through use of the tables of contents, indexes, library-catalogues, encyclopedias, almanacs, appendixes, reader's guides, etc.; to select information by recognizing its significance, important ideas and details; to organize and remember information through note-taking, summarizing and outlining and following organizational patterns; to understand the significance of graphic aids by reading and interpreting diagrams, charts, tables, maps, graphs, cartoons, pictures; to follow directions, both simple and complex, and see relationship between them and learners' purposes; to develop reading flexibility that is characterized by slow, careful reading and/or rereading, rapid reading, skimming and scanning.
Each of these requirements is not necessarily discrete; in fact, many are related and form a hierarchy. For example, organization depends upon selection and selection upon flexibility and location of information. A failure in one adversely influences the performance in another. But recognition of this interdependence does not suggest that they be treated in a global way; it is the perception of relationships that these associations elicit.

**Strategies for Teaching**

Time and space restrictions do not allow for a detailed representation of how to help students upgrade their proficiency in using the study skills to acquire information. Perhaps what can be done is to identify guidelines that teachers may follow and from which they might draw their teaching strategies. Certainly there have been many helpful suggestions offered teachers who strive to assist their students master the content of their subject. But one is completely dependent upon them unless he understands the base from which they are derived. Creative teaching will offer other outlets that lock-step approaches cannot match.

1. **Use the textbooks and other materials your students are required to read** to help them with their study skills. This procedure obviates any concern about transfer of learning that often fails to occur when students work with materials which have little relationship to kinds they are required to read. There are some commercial materials that reproduce varied textbook sections, and these may be used for initial presentations especially when subject teachers feel somewhat insecure about undertaking a new responsibility. Ultimately, students need to practice a given skill under the same conditions that are present when they work independently. Discriminating teachers will be able to
identify helpful procedures in commercial sources and extend them to the students' own materials. For example, exercises on skimming a chapter of a book for general impression can be applied to the students' own books after they have developed some proficiency in performing the skill.

2. **Concentrate upon study skills which help students solve current problems.** There certainly isn't as much justification for expending one's efforts to master tasks that are of little immediate use as there is on others whose relevancy is apparent. Even if college students were not questioning traditional treatments (and high school students are following suit), it would be desirable to take advantage of their motives for learning - in this case the need to solve a real problem - and stress elements that relate to it. What better opportunity does one have to teach the techniques involved in preparing written reports based upon information that must be drawn from several sources than when students understand their purposes and clamor for assistance? Learning climates as this foster active instead of passive participation. Incidentally, superior results might be expected from similar treatments whenever any skill development is the objective.

3. **Determine before instruction in which skills areas and their components students are strong and/or weak.** The importance of evaluating study skills has been stressed in a recent IRA publication intended for secondary school teachers of content subjects.¹

It isn't likely all students in high school and college are equally deficient in the study skills; nor is it likely that everyone requires the same concentration of effort. The intent here is to offer relevant guidance in lieu of "shotgun" instruction. One group of students might require a light treatment or no treatment at all in differentiating between major and secondary details while another might profit from heavy doses of help and practice.

How might this evaluation be made? Through the use of standardized tests, teacher-made tests, observations of how students perform and discussions with students themselves. Observers have noted the limitations of standardized tests although they do provide some information, however gross, about students' performances. The latter devices, when used in combination, yield a more accurate analysis of behavior. Naturally, the quality of one's own instruments and observations determine the validity and reliability of the results they produce.

A brief word about the last device. Students can and do have some insights into their own hangups which they verbalize for sympathetic listeners. They will respond to probing questions about the ways in which they face reading assignments and how well they perform. Take advantage of a primary source: get it from the performers themselves. Tests and observations can confirm and refine where necessary.
4. Select materials whose content does not offer too great a challenge. Interference with learning will occur if students have to struggle with the content in order to understand it. Under such conditions they will expend all their energies trying to cope with meaning and will have nothing left for their immediate purposes. Suitable learning climates are particularly crucial at initial stages of development; once students have shown some proficiency, then can they be challenged. Imagine trying to learn how to take meaningful notes of content whose vocabulary, concepts and sentence structure are beyond the readers' scope. There is no reason why this failure should be courted. One way to reduce such possibilities is to introduce materials which have been read for other purposes. Another is to analyze the content for difficulties and treat them before proceeding with the skill development.

5. Develop a hierarchy of skills and teach them in sequence. This principle serves as a major underpinning in the development of programmed materials, and their advocates credit along with immediate reinforcement the successes that have been achieved through them. In order to develop some sequence, a basic question might be asked: Of what smaller skills does a gross skill consist? Once the former have been identified, then it becomes feasible to place them in some order. Another question to promote sequence: Upon what skill or skills does the mastery of another skill depend? The answer to this question will help also determine sequence. Incidentally, it will contribute to readiness too.
A couple of examples should clarify these notions. In order to use an index of a book efficiently, a reader must first be able to "enter" the index. Entry involves topic determination which can create problems of its own in cases where alternates must be considered; then location of topics and subtopics through knowledge of alphabetization; interpretation of symbols that identify page references; skimming and/or scanning for information sought. Here are a number of tasks, any one of which might be analyzed further for components.

The separation of important ideas from lesser ones is a basic study skill. A main idea may be stated clearly at the very beginning of a passage; or it may be hidden among other information; or it may be necessary to combine ideas to formulate it; or it may have to be inferred. For students who need help with main ideas, what order of treatment should be followed to facilitate mastery? Deal with inferred ideas before treating explicitly stated ones? Hardly. A reasonable sequence might follow an order in which one proceeds from the obvious to the less apparent.

Analyses of skills provide teachers with direction. They also can be put to another use. Earlier, note was taken of the importance of evaluation that preceded instruction. Recognition of hierarchy among skills can be translated into a series of sub-tests which identify strengths and/or weaknesses along the continuum. Thus, one's efforts need not be dissipated in covering familiar ground but concentrated upon areas that sub-tests have identified as requiring some attention.
Implementation of Program

For too long there have been discussions and debates over the role of high school teachers vis-à-vis reading improvement. In spite of the fact that there are convincing reasons why they should join with others in a common effort, very meager progress indeed has been observed. Where systems shared dynamic leadership among subject teachers, supervisors and administrators, good results have occurred. But there are too few schools that attack the study skills problem where it will do the most good—right in the subject classes. And hardly a dent is being made at higher levels, although with the burgeoning growth of college populations, assumption of responsibility for helping students read better is not uncommon. Unfortunately, most reading-study skills programs are separate from normal reading requirements.

Is there any way to achieve a partial breakthrough? Possibly. Subject teachers have been urged to become familiar with reading skills and their disposition, but failure is more apparent than success. What about turning the tables, i.e., the reading teacher accepting subject involvement? Most high school reading teachers are certified not in reading but a subject discipline. If they were to feel insecure, they could limit their efforts to their own areas. Thus students might receive study skills instruction in a given subject that they were taking and was tied to current demands. Some reading teachers who had a working knowledge of more than one subject might expand their concentrations. Ideally, this program would occur in the regular subject classes. Reading and subject teacher could plan and work together.
project of this sort were not realistic, then students would be programmed for study skills work on a subject basis. Underlying this effort is the assumption that reading personnel is available. If none were, then sincere efforts to train willing subject teachers to undertake the responsibility would be made. College staffs could operate in much the same ways. Hopefully, there might come a time when subject teachers would gain sufficient confidence to take over, if only in part, by extending what reading teachers have initiated.

In summary, the time for implementing 'paper' programs in study skills is long past due. There can be variations that peculiar circumstances dictate. But in the final analysis, what students get out of any program is what they and their mentors put into it. There is no reason why expenditures of effort by teachers cannot count more than they have. The students are bound to show the effects of vigorous and relevant reading instruction.