There has been a significant increase in the numbers of underprepared students entering colleges and universities. At Schoolcraft College, in Michigan, data consistently indicate that large percentages of students score below college level in reading, writing, and mathematics skills. Classroom techniques that can help faculty better meet the needs of underprepared students include "uncovering" the curriculum by providing students with clear outlines of concepts or chapters to be covered, teaching students how to generate questions, and using collaborative learning activities. Schoolcraft College implemented strategies for underprepared students that focused on cognitive strategies, including the pairing of a developmental reading course with a psychology course to help students apply reading, study, and test taking strategies learned in the reading course to the psychology course. For comparison, a control group was established of students in the same reading range taking the same psychology course without the paired class. Results indicated that the paired group had significantly higher final course grades and a 14% lower withdrawal rate than the control group. Paired students also demonstrated an increase in motivation and use of learning strategies. The college also implemented a college success course providing learning to learn strategies and workshops for faculty to share teaching techniques. Recommendations for department chairs interested in addressing underprepared students' needs are included. (HAA)
Underprepared Students: Challenges Facing College Faculty

by

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UNDERPREPARED STUDENTS: CHALLENGES FACING COLLEGE FACULTY

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Abstract
Specific classroom strategies can be effective in increasing success rates of at-risk students while maintaining high academic standards. Positive results of activities focusing on students learning how to learn can be demonstrated. Specific recommendations for chairpersons to meet the challenges of underprepared students will be offered.

Introduction
There has been a significant increase in the numbers of underprepared students entering colleges and universities. More than one third to one half of all newly enrolled students can be identified as being "at risk" (Roueche and Roueche, 1993). At Schoolcraft College, a community college in suburban Detroit, all new students have mandatory testing in reading, writing, and math skills using ASSET (ACT). Data consistently indicate that large percentages of students score below college level in the three basic skills: reading 42%, writing 75%, and math 60%. These percentages are comparable to national data (ACT Entering Student Descriptive Report, 1991). In addition to academic difficulties, many of these students are facing financial, social, and personal problems which present a challenge to college faculty. Nonetheless, all are entering college with an intent to succeed.

As a result of the increase in underprepared students, colleges need to more closely review the progress of students. Appropriate intervention strategies can be provided in the classroom in order to meet desired student outcomes (see Figure 1). It is imperative for faculty and chairpersons to become more aware of specific classroom strategies to increase success rates of underprepared students.

Figure 1. Process Model for Improving Student Performance (Jeffress, 1992).
Objectives

The objectives of this presentation are three-fold:
1. To provide techniques for faculty on how to better meet the needs of underprepared students.
2. To share results of activities which integrate learning-to-learn techniques.
3. To offer specific recommendations for chairpersons to meet the challenges of underprepared students.

Classroom Techniques

Uncovering the Curriculum

The major role of the faculty member is to facilitate learning and to assist in the art of discovery. Instead of "covering" the curriculum, faculty need to focus more on "uncovering" it (Rice, 1993). Students, especially those at-risk, need direction in how to study particular subjects and become more self-directed. New information often appears to be of equal value. Students need to learn how to learn. According to Weinstein (1991), students must understand which learning strategies to select and use and then to "orchestrate their cognitive resources." Since faculty are the experts, faculty need to share the secrets of the curriculum with students. Some suggestions include:

- Outline the concept or chapter for students to fill in.
- Provide limited outline of lecture and lab.
- Give sample answers to test questions.
- Relate facts clearly and explain subordinate parts; correct and organize information.
- Verbalize thinking when solving a problem or answering a question.
- Provide clear feedback on a regular basis, daily if possible.
- Require students to explain choice of answers and offer credit for the explanation.
- Discuss prior knowledge needed for new subject.

Questioning

Students need to be taught how to generate questions. Underprepared students do not realize that they do not understand a concept or problem. Some techniques to teach questioning include:

- Students create questions for the test followed by discussion of relationship of ideas.
- Students identify test questions they wish instructor had asked.
- Instructor demonstrates how to turn text headings into questions.
- Students predict test questions from text or lecture and evaluate questions.

Collaborative Learning

In addition to learning from the text and instructor, students learn from each other. Suggestions for collaborative learning activities may include:

- Student facilitated study groups.
- In-class small group discussions regarding what was read, lecture notes, meaning of content to their lives, how class information connects to other courses.
- Oral quizzes on concepts by pairs of students questioning each other.
- Small group application of content.

Results of Activities

A variety of classroom techniques focusing on cognitive strategies were implemented with underprepared students at Schoolcraft College in an effort to identify an effective approach to improving student learning.

Paired Class

A developmental reading course was paired with an introductory psychology course; students had to register for both classes although the reading credit did not count toward graduation. Students applied reading, study, and test taking strategies taught in the reading class to psychology content. Specific activities included organizational skills (mapping, charting, concept cards, etc.) and elaboration strategies with guided practice. As a comparison, a control group was identified as those students in the same reading range taking psychology with the same instructor, but receiving no reading instruction. There were no differences in beginning cumulative GPA and age between the control group and the paired class group. Results indicated that the paired group was significantly higher in mean final grade than the control group (See Table 1). The paired group also showed a 14% lower withdrawal rate than the control group (3% versus 17% respectively). Additionally, students in the paired group demonstrated an increase in motivation and use of learning strategies on a pre/post survey.

Table 1. Differences in Psychology Final Grade and Semester GPA.

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Control Group (N=24)</th>
<th>Experimental Group (N=29)</th>
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<tr>
<td>Psych final grade</td>
<td>m = 2.01 SD = 1.7</td>
<td>m = 2.77 SD = 1.4</td>
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<td>Semester GPA</td>
<td>m = 2.19 SD = 1.29</td>
<td>m = 2.80 SD = 1.18</td>
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* p < .05

College Success Course

Learning-to-learn strategies were also successfully offered through a generic college success course, Collegiate Skills 101, which focused on both affective and cognitive components. The course was taught by a counselor and a study skills instructor, with day and evening sections. A four semester study was conducted to determine the effect of Collegiate Skills 101 on student success and retention. Results indicate that the cumulative GPA's of Collegiate Skills students (mean = 2.6) were not
different from the GPA's of the College population as a whole (mean = 2.7). However, first-semester students who enrolled in Collegiate Skills 101 were retained into the next major semester at a higher rate (83%) than the College average for first-semester students (62%).

Faculty Workshops

Faculty from a variety of disciplines worked with the study skills faculty to increase students' learning strategies within the content area classroom. Workshops which shared teaching techniques for underprepared students were presented jointly by content and study skills faculty to all College instructors. These workshops will continue through the next academic year.

Recommendations for Chairpersons

As a result of the emphasis on teaching students to become independent learners, faculty are sharing effective teaching techniques within their departments, across disciplines, and with other colleges. It is recommended that academic chairpersons at other institutions:

- Maintain high standards.
- Encourage faculty to share one or two teaching strategies at department meetings.
- Allow time for discussion on teaching how to learn at department meetings.
- Define clear departmental exit criteria.
- Standardize appropriate collegiate student behaviors (classroom, homework, attendance).
- Require reading, writing and critical thinking to supplement lectures.
- Encourage student study groups.

In sum, colleges must provide appropriate learning structures for underprepared students in order to enhance success and reduce attrition. An integrated approach to teaching cognitive strategies is essential for programs to be effective.

References


Jeffress, C. (1992, August). *Assessment issues at Schoolcraft College.* Presentation at Schoolcraft College faculty development meeting, Livonia, MI.

Rice, E. (1993, March). *From inspiration to perspiration . . . and back again.* Presentation at a faculty development seminar at the University of Michigan, Dearborn.


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