Various aspects of the goals and processes of the evaluation of remedial programs are discussed in this paper. The first section discusses assumptions related to remedial program evaluation in California's community colleges and highlights two perspectives, based on whether the remedial programs satisfy internal and/or external criteria. Next, a review is provided of currently available information on remedial programs and the elements related to effectiveness in successful programs. The following section offers assumptions about factors contributing to the program effectiveness at the state or system level, the institutional level, the programmatic level, and with respect to students and learning in remedial programs. Next, activities are suggested contributing to program evaluation and a model is presented recommending activities and areas of investigation. Issues, problems, and priority concerns are then outlined with respect to the role of management in program evaluation. Finally, a check list of factors influencing efficiency and effectiveness is provided, covering comprehensiveness, institutional factors, and student performance. (HB)
THE EVALUATION OF REMEDIAL PROGRAMS IN THE COMMUNITY COLLEGES

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ASSUMPTIONS RELATED TO THE EVALUATION OF REMEDIAL PROGRAMS IN THE CALIFORNIA COMMUNITY COLLEGES

The current climate of the California Community Colleges is characterized by uncertainty; uncertainty about which students to serve, how to serve them, and how effective are the programs that serve them. This uncertainty is reflected in mandates for accountability in services, courses and programs. A key emerging priority is the evaluation of the remedial programs in higher education.

Effective remedial education has represented a commitment to educational opportunity that bridges the gap between underprepared students and successful college level work.

In the past decade all segments of higher education have developed remedial programs to assist the large number of underprepared students to succeed in college courses. Since the majority of the students enrolled in colleges are deficient in skills of reading, writing and math, remedial programs have become one of the fastest growing areas of curriculum.

The priority of the high risk student and how to increase his success in college is now being joined by a growing concern for remedial courses and programs and the question is emerging of how high a risk are these courses? Many issues surround this trend in higher education instruction. The issues have to be replaced with specific information.

The central question is what is the evaluation of remedial programs to accomplish? Since program evaluation serves different purposes, a rationale for the program evaluation needs to be made. Two key issues surrounding remedial programs in postsecondary education suggest one perspective - that of modifying to fit external criteria. What do programs cost? And what is the basic rationale for the investment?
A second perspective — modifying to fit internal criteria — suggests a different set of questions.

1. What are the key elements of successful remedial programs?
2. How can effective programs be identified?
3. How can ineffective programs be replaced or terminated?
4. What kind of evidence is available to identify effective or ineffective programs?
5. What kind of evidence are we to provide of the significant benefits of our courses and programs at a reasonable cost?
6. What reliable evaluation practices must be established at the institutions?

A program evaluation model based on these questions will serve three purposes: (1) it will provide information to decision makers, (2) it will provide a basis for improving existing programs, and (3) it will provide for additional success of the participants in the programs. It will allow for a balance between external and internal criteria.

INFORMATION NOW AVAILABLE:

Model remedial programs abound in the community college system and tell us the what and how about efficiency and effectiveness. For example, Friedlander in Should Remediation be Mandatory, identifies three elements of effectiveness in successful remedial programs: (1) they provide the under-prepared student with a better opportunity to improve academic achievement; (2) they enable maintenance of high academic standards by better preparing deficient students to do subsequent course work, and (3) they increase revenue due to higher retention and course enrollment.
Existing practices and information need to be incorporated into new models.

The Learning, Assessment, Retention Consortium of California, (LARC) has collected information on Learning Skills Programs in the California Community Colleges. The LARC Program Guides (1981-82 and 82-83) describe the prominent activities and trends in over twenty five college programs.

The Chancellor's Office, California Community Colleges, and the Western Association Accrediting Commission for Community and Junior Colleges have produced a series of papers resulting from a three year project to improve evaluation and planning in Community Colleges. A Project Working Paper on Measuring Community College learner Outcomes defines the language of outcome evaluation and reviews ways in which the outcome evaluation approach is currently in use.

The LARC Consortium, too, has developed a model that depicts the methods by which outcome data can be applied to administrative decisions according to Tillery (Measuring Community College Outcomes). Currently, the Consortium is developing a schematic to collect information for following up assessed students. This schematic will be disseminated in May, 1984.

Definitions of key terms relating to remediation were developed in 1982 in a statewide charrette process co-sponsored by the LARC Consortium and the California Association of Community Colleges. Definitions of remediation, matriculation, and AA degree course work have been prepared by a Task Force on Academic Quality (Office of Chancellor, California Community Colleges). Statements on proficiencies in English and mathematics have been developed by the Academic Senates of the California Community Colleges, the California State University and the University of California.
ASSUMPTIONS ABOUT REMEDIAL PROGRAMS

What have the remedial programs in the California Community Colleges emphasized and what directions need to be considered? Although a thorough analysis of these questions probably will be undertaken, current research and practice suggest some assumptions about the efficiency and effectiveness of remedial programs in the community colleges. These assumptions may provide a basis for examining remedial programs.

The information about efficiency and effectiveness of programs is presented in four categories of assumptions: (1) assumptions about remedial programs in a broad system or state framework; (2) assumptions about remedial programs at an institutional level; (3) assumptions about remedial programs themselves, and (4) assumptions about students and learning in remedial programs.

I. System or state: Assumptions about Programs:

Since 1973 there has been a steady increase in proportion of colleges with successful developmental education programs (Friedlander).

The successes of community college remedial programs are not a matter of diversity or local needs.

Because of the breadth and depth of community college programs in skills development, community colleges can provide more efficient and effective learning than business or industry.

II. Institution: Assumptions About Programs:

The college needs to be perceived as a total delivery system of remediation.

Academic standards are reinforced by appropriate assessment/placement activities.

The balance between open access and academic quality can be based on three elements:
- student competencies
- learner outcome
- academic standards

Competencies will be a key institutional term. Similar vocabulary terms are performance and proficiency.
III. Program Assumptions:

- The two key elements of program evaluation are efficiency and effectiveness.
- The single remedial course is the least effective of all of the remedial efforts.
- The delivery of education is becoming more sharply prescriptive and individualized - the term individualized program is less misleading than individualized instruction.

IV. Students and Remedial Programs:

- Success in college is dependent on cognitive and effective skills.
- Successful students in remedial programs do not receive a lower quality of education.
- Applying basic skills to a problem or personal context increases learning probability. Since we do not know of a preferred hierarchy of basic skills to be learned, an appropriate focus may be on ability to improve performance in given situations.

ACTIVITIES CONTRIBUTING TO PROGRAM EVALUATION:

- Certain focuses seem more relevant than others. For example, because of the diversity of programs and college clientele, a comparison of one program to another is not useful. Based on these assumptions, the following activities might be useful and unique to the community colleges:
  - A description of effective programs with an analysis of the breadth and depth of programs that can serve emerging needs in industry.
  - A description of promising practices in remedial programs.
  - Any information on student competencies in remedial programs.
  - An analysis of how the community colleges can provide total delivery systems in remediation.
  - Alternatives to the single remedial course.
  - Cost effective practices in individualized instruction.
  - Applied remediation to personal and professional context.
In the absence of a formal set of guidelines, the California Community Colleges need to begin program evaluation activities. What can we reasonably expect a process of program evaluation to include? What factors or information need to be included to make up a strong statement of purpose and outcome in the evaluation of remedial programs? Drawn from current information, the following questions suggest a number of potential activities and areas of investigation.

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<th>QUESTIONS/ISSUES FOR THE EVALUATION OF REMEDIAL PROGRAMS IN THE COMMUNITY COLLEGES</th>
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<p>| <strong>OPERATIONAL</strong> | <strong>Program Development</strong> | <strong>WHO</strong> | <strong>WHAT</strong> | <strong>HOW</strong> |
| <strong>Course</strong> | Who does the course serve? (What are their needs?) | What coherent methodologies frame remedial instruction? | How much variation exists between same course? |</p>
<table>
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<th>OPERATIONAL Program Development Continued</th>
<th>WHO</th>
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<td>Program</td>
<td>Who sets the goals?</td>
<td>What is a program? What is the breadth and depth of program?</td>
<td>How much variation exists between courses in same program?</td>
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<td>What individualized instruction is available? What are the advantages of a total unified remedial approach versus a single course?</td>
<td>How much variation exists between course in same program?</td>
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<tr>
<th>JUDGEMENTAL Program Review Continued</th>
<th>WHO</th>
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<tr>
<td>Program</td>
<td>Do the benefits of remediation to the student justify the costs?</td>
<td>What are some promising practices in remedial programs?</td>
<td>How many students persist from course to course?</td>
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<tr>
<td></td>
<td></td>
<td>What are some promising practices in remedial programs?</td>
<td>How does college writing positively affect the development of writing abilities?</td>
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| Student                                  | Do remedial programs merely keep students in college or contribute to academic success? | What are students attitudes about what is being taught? | How students perform in other programs after they leave? |
|                                          |                                             |                                           | How can we describe the impact of remediation on the student? |

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<tr>
<th>COMPETENCY Effectiveness</th>
<th>WHO</th>
<th>WHAT</th>
<th>HOW</th>
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<tbody>
<tr>
<td>Course</td>
<td>Who are the successful students? What are measures of effectiveness? What norms (internal and external) will be used to measure performance to?</td>
<td>How many students drop out? How many complete successfully? How does the course improve academic achievement?</td>
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| Program                                  | What definition of outcome will be used: e.g., large scale findings: impact; productivity? | |
|                                          | |

| Student                                  | At what level do students read and write? What tests can be used to provide information to measure student progress along an ability continuum? | |
|                                          | |
The central questions to be considered in the evaluation of remedial programs are how and what. The primary issue is that remediation increasingly is entangled in questions of institutional mission and purpose rather than learning and teaching. As a result, state level offices have become impatient and intrusive in this process. The basic assumption that has not been underscored effectively in that we have been conducting evaluation of remedial programs with documented results in adjustments of remedial programs. Courses have been dropped or adjusted; new courses have been added; delivery systems adjusted, support services added. Some observers, including Donald K. Smith (Marcus, 1983) believe that the greatest safeguard against an increased state role is for the institutions themselves to strengthen their own evaluation activities.

WHAT IS THE EVALUATION TO ACCOMPLISH?

At a recent conference for postsecondary education in California the consensus of the representatives from all segments was that the evaluation of remedial programs will be to improve programs; to adjust, not to reduce or diminish. Current information and research suggests three reasons why colleges cannot reduce remedial programs:

1. The literacy problems of students involve a majority of all colleges.
2. The typical profile of the community college students reflects a wide range of missing academic skills.
3. The growing demands for the acquisition of higher skills competencies.
A recent national study by Dr. John Roueche, University of Texas, provides specific information:

The literacy skills of graduating high school students is continuing to decline. No state competencies exam in the nation requires a graduating demonstrated competency above 9th grade reading.

All post secondary institutional types from the graduate research institution to the community college provide remedial assistance in some form to students in the same proportion -- around 50%.

The community college student typically earned C grades or lower in high school. Few have had geometry, second year algebra, English composition, a foreign language, or a year of science.

The gap in needed literacy skills is increasing. By the 1990's anyone who doesn't have at least a 12th grade reading, writing and calculating level will be absolutely lost.

(Dorothy Shields, Director of Education, AFL-CIO)

(Roueche, 1984)

HOW TO EVALUATE REMEDIAL PROGRAMS:

Remedial/developmental programs are the fastest growing area of curriculum in colleges and universities. The question of how to conduct the evaluation of remedial programs is a concern.

At a recent conference on The Evaluation of Remedial Programs in Post Secondary Education held at Asilomar, California, in February, 1984, the California Community Colleges delineated some issues and implications of the evaluation of remedial programs. Some of these issues and implications are summarized as follows:

I. REVIEW OF ISSUES:

1. Respect for diversity of community colleges
2. Purposes of evaluation are questionable
3. Manner in which evaluation results would be used
4. Purpose of program evaluation will be to improve programs, not to add or delete.
5. Our responsibility will be collectively to guide the external criteria.
6. Need balance between external and internal criteria. We will start with a bottom up approach to evaluation.
7. There is continuing interest in remediation, and no notion that we will give up this function. Expect no diminishing of this role or function.
8. Impatience of state level groups
9. Questions of who-what-how. Who will be involved?
10. What is a program?
11. What data do we collect?
II. EMERGING PROBLEMS:

- Legislature may invest more dollars in remediation, not less, if we can prove benefits to the state.
- Possible new legislation on matriculation and mandatory placement test.
- Negative impact of statewide evaluation system (resources, etc.)

III. PRIORITY CONCERNS:

- Use diversity to develop effective evaluation models.
- Purpose = program improvement.
- To define some common goals or criteria to establish comparability.
- Involve all institutional family in participation in both planning and implementation.
- Resources to do program evaluation.

Representatives at this conference proposed that these issues will be reviewed by the Community Colleges of California in a series of activities that includes the following:

1. Regional conferences, carefully planned.
2. Appointment of State Level Task Force to coordinate activities.
3. Survey of current practices—identify existing evaluation activities in community colleges.
4. Encourage on-site college visits to look at model activities.
5. Use of outside consultant.
6. Participation in a Fall Conference (Model, guidelines will be established).
7. Implementation of Pilot evaluation strategies to test feasibility.

While these issues are being addressed collectively, college administration need to develop an institutional agenda of activities. This agenda will include two types of activities: (1) the involvement of the total college in evaluation process; whether to utilize existing college committees, LARC College Teams or to form a new committee will be institutional choices. However, the purpose should be to organize for collective efforts not to fragment and compartmentalize; (2) the collection of information.

The focus on the purpose of evaluation as a means for decision making has become universally accepted. Research notes that the primary purpose of evaluating an education as training program is to provide information for decisions about programs. Such decisions should be useful for program improvement as well as for program termination. Useful information can be extracted for decisions regarding (1) program duplication; (2) underproductive programs as well as to ensure that program goals are being worked toward in the most efficient and effective manner.
Based on recent research and activities, the collection of information on remedial programs has included three types of information: (1) information related to programs and college goals, (2) related to the content of programs, and (3) information on the effectiveness of courses and programs.

When designing and evaluating such programs, administrators and faculty should consider the following: Studies indicate that successful learning skills programs are broadly described as having two dimensions: comprehensiveness and institutionalization and that the general expected payoff is increased GPA and retention.

The check list below describes factors in the two dimensions that influence efficiency and effectiveness. These factors suggest the types of activities and information involved in program evaluation review.

EVALUATION OF REMEDIAL PROGRAMS

CHECK LIST

FACTORS INFLUENCING EFFICIENCY AND EFFECTIVENESS:

COMPREHENSIVENESS:
- Testing information that measures student progress along ability continuum.
- Services currently available.
- Testing programs (screening, placement, and diagnostic).
- Academic areas (reading, writing, mathematics, and language skills) covered in developmental and basic skills programs.
- Use of learning laboratories and audio/visual support.
- Availability of advisory services and staff development for faculty.
- The number of students in developmental versus basic skills programs.

INSTITUTIONALIZATION:
- Institutional commitment to remediation.
- Policies currently states.
- Linkage of remediation to institutional mission to total college programs.
- Statements on competencies.
- Statements on outcomes, long or short duration emphasis.
- Instructional expertise in adult learning.
- Institutional mission.
- Faculty attitudes toward these students.
- Relationship with other tutorial and counseling services.
RETENTION:
.Persistence rate of students.
.Information available on retention.
.Amount of time spent in developmental studies or basic skills
courses before enrolling in college-level curriculum.
The attrition rate among these students compared to the rest of
the freshman class.

PERFORMANCE:
.Information on student performance in courses after taking develop-
mental education.
.Comparisons of these students with similar students who chose not
to take developmental courses.
.Of those students identified, the number who performed poorly in
the first-year courses.
The number of identified students who also were referred to
counseling center or other support services.

CONCLUSION:
The present and future most urgent need will continue to be
the improvement of instruction. However, as we consider what
constitutes improved instruction, it is important to note that the
improvement of instruction is not just an issue for remedial educa-
tion. Remedial programs already are heavily evaluated. What we
are to consider is learning improvement in all of the programs. We
must look for the same elements of efficiency and effectiveness in
the traditional academic disciplines and in the vocational instruc-
tion as in the remedial programs. For improvement of programs means
"We need to all do well equally."

DB:ts
BIBLIOGRAPHY


