Discussed is an individualized educational approach based on a student's strengths and weaknesses. On the basis of findings from a battery of diagnostic tests, a college program is worked out which is commensurate with the student's ability and preparation. He advances at his own rate and takes comprehensive examinations when he feels ready. However, this compensatory approach does present some problems in relation to resistance from faculty, students, and parents. Other controversial areas include such administrative issues as (1) testing, placement, and evaluation, (2) curricular programming, (3) measuring and defining progress, and (4) retention and attrition. These are also external problems involved in individual pacing, i.e., Selective Service requirements, conditions imposed by various aid programs, and accreditation issues. Some solutions to these considerations are offered. (NH)
DIFFERENTIAL PACING: AN APPROACH TO COMPENSATORY EDUCATION

By King V. Cheek
I. INTRODUCTION

Any discussion of the future development and replication of the variety of compensatory education programs must consider many of the problems which are still unsolved. The success of these programs depends upon educational administrators, faculties, students and the public providing viable solutions to these problems.

Compensatory education programs vary to some degree in philosophy, objectives, structure content and in labels. The observations in this discussion are made with respect to what is typically described as a differentially paced program.

Each student who is admitted is administered a battery of diagnostic examinations, carefully designed to pinpoint his strengths and weaknesses. He is placed in the program at a level commensurate with his ability and preparation. In a real sense, this approach meets a student where he is and equips him with the tools necessary for learning. Insofar as possible, each student is permitted to advance at his own rate of speed. His progress is determined by his successful completion of comprehensive examinations which test his level of proficiency in specific skill and subject matter areas.

Within reason he is tested when he believes himself ready. When his estimate proves incorrect, it will merely be delay and not a failure.
While the average student may complete this program in four years and the superior student in less time, the student who has serious academic deficiencies must be prepared to remain longer than four years. However, each student is treated as an individual and every student has the opportunity to proceed toward graduation as swiftly or as slowly as his initiative, interest, industry, maturation and scholastic accomplishment permits.

This discussion will focus on three primary problem areas: 1) sources of resistance, 2) internal administrative hitches and 3) internally imposed program requirements.

II. THE SOURCES OF RESISTANCE

Faculty

Generalizations about faculty commitment or resistance to compensatory education programs must be made with extreme caution.

The burning desire of a faculty to teach the "bright" student and attitudes that these experimental programs do no more than provide a home for the "intellectually indigent" still persists. Doubts about a student's educability, patronizing attitudes and habits and unexamined assumptions regarding standards all serve as impediments to the success of these programs.

Resistance in cases where such attitudes exist may be traced to a lack of understanding of the problem and of the role which colleges and universities must play in the development of human capital and resources.

The confusion which often results from the debate over standards
can be traced to failure of a faculty to set forth in precise and measurable terms the specific characteristics, attitudes, knowledge and skills which it considers essential for success in college. Faculties must themselves understand what it is that students should know.

To the extent that faculties are tradition bound, enslaved by the classroom as the only means of instruction, by the credit hour and grade point syndrome and are reluctant to think in terms of behavioral objectives instead of chronological sequences lasting four years, resistance is imminent.

Many of these vested interests in long established traditions and techniques may be due in part to isolation from the mainstream of current developments. Curriculum institutes and workshops which employ outside expertise are a partial solution to the problem. Faculty effectiveness is significantly enhanced if they are made knowledgeable and sensitive to the problems and are involved in the planning and development of programs designed to remedy them.

Students

Whenever students lack an appropriate awareness and understanding of their role as learners and of their own academic deficiencies, some resistance to their participation in remedial or compensatory programs is expected.

Important factors contributing to this resistance include: 1) method of recruitment, 2) orientation, 3) length of program, 4) amount of credit awarded and 5) official labels or classifications.

Students are influenced by their own understanding of the traditional college. Most of them expect to enter a four year college program in which their progress toward a degree is measured in terms of the accumulation of credit and grade points. The sudden impact of discovering that his college education may extend beyond four years may have profound effects upon the
student.

Further, the classification of pre-baccalaureate, pre-college or non-matriculated may stigmatize the student and reinforce his feelings of inferiority and hostility. This problem is compounded when he enters a system which recognizes a distinction between non-credit and credit courses.

No panacea is offered for the many and varied problems which confronts the student. However, the following suggestions may alleviate some of the difficulty:

First, in the recruitment and orientation of students for these programs, recruiters and student personnel officers must be candid and honest about what the prospective student is to expect. If there is a possibility that he will spend longer than four years in college, then he should be so informed before he arrives on campus. The probable length of his tenure may not be known until he arrives and is measured by the appropriate instruments. But, he should know that he is entering a system which is different from what he might traditionally expect.

Second, unless there are overriding considerations, colleges which operate a differentially paced program should abolish any distinction between credit and non-credit courses. Actually, credit in this type program serves no useful purpose since the progress of the student is presumably measured in terms of his completion of proficiency requirements in a prescribed program.

Third, all students should be fully matriculated and unlabeled. If a student is admitted on the basis of a judgment that he has the potential
but is deficient in certain basic skills, classifying him as a sub-freshman, etc., serves no useful end. Once he understands that the program in which he is enrolled seeks to meet him where he is and permit him to advance at his own rate, he can more readily accept the level of his placement. It would be healthy for him to know and believe that in spite of his background and deficiencies he is given the opportunity to be "in college" and to succeed.

Parents

Many of the concerns expressed by and on behalf of students are also shared by parents. For most parents, a college education represents a four year chronological sequence of study at the end of which their son or daughter is awarded a degree.

Unless there is some articulation between the parent and the college, the former is likely to be infuriated upon learning for the first time that his son may be in college longer than four years. This is especially true when the parent lacks any conception or understanding of his son's deficiencies or aptitudes. Further, the burden of financing a greater than four-year program aggravates the problem.

Adequate communication between the college and the parent regarding the academic readiness of the student is needed. Clear expression of the program objectives and characteristics prior to or at the time of the student's admission is also necessary.

III. ADMINISTRATIVE CONCERNS

In addition to what is referred to as sources of resistance, there
are administrative problems which must be resolved to ensure program success. Only a few of these are discussed in the following categories: 1) Testing, placement and evaluation, 2) Curricular programming, 3) Measuring and defining progress and 4) Retention and attrition.

The Numbers Game: Testing and Evaluation

Educational institutions committed to developmental education must seriously assess the resources needed to operate diagnostic programs which will evaluate the entering student's state of development and subsequently determine his readiness to move on.

The choice of the measuring instruments and the level of cut-off scores must not be arbitrarily made. Testing centers must maintain dialogue and communication with the other centers of research which seek to resolve many of the questions concerning placement, etc. There may be limitations to the validity studies and use of linear prediction equations. However, such studies are a beginning in the analysis of the predictive validity of the variables used for admission and placement.

Colleges must be very careful about playing the "numbers game" and making conclusive judgments about a student's potential on the basis of standardized test results alone. Profiles reflecting the economic, social and cultural conditions from which entering students come would be relevant and valuable. It would be helpful to know student attitudes upon admission and at various intervals in their academic careers. The development of innovative techniques which identify the factors of student success in college would greatly enhance the evaluation and future success of compensatory
programs.

Curricular Programming

The area of curricular programming is one of the most important in developmental education. As such, it demands the most rigorous examination and self evaluation.

The old "take it or leave it" classroom method of instruction and the separate "remedial" course must be discarded in favor of multimedia programs which combine the classroom with extensive group seminar activity, conference tutorial and programmed book and machine instruction. The curricular concept must, therefore, be broadened to encompass all of the variety of activities and experiences calculated to motivate, inspire and promote learning.

In addition, the programs themselves should be periodically reviewed to ensure that they are designed to accomplish the objectives set forth for the student. It is a common error to define the skills and knowledge necessary for success on one hand and then to develop sophisticated programs which are incapable of developing those skills.

Faculties and administrators must also answer the difficult questions relating to the most appropriate course mix or combination. Suppose a student is placed in a lower level English, mathematics and reading program. Should he also enroll in regular social science, humanities or natural science programs? If his academic readiness has been judged as low, can he be expected to master the more complex subject matter commonly found in these courses?
Is it correct to assume that a separate program such as English, which is primarily prescriptive, can alone promote the development of communication skills? One might argue that the teaching of written and oral communication is not a sole function of an English program offered in a student's first or second year. If every teacher were a teacher of English and the development of communication skills were a function, among others, of all subject matter programs, the educational process would no doubt be more effective and exciting.

Programs which give a student the same old mathematics and English which he found so dull in his pre-college years have their limitations. The students intellectual experiences in college must be varied and stimulating. His enrollment in humanities, social sciences, etc. may have the effect of giving him the feeling of actually "being in" college and thus may promote and enhance his success.

**Defining and Measuring Progress**

Programs which permit a student to progress at his own pace must solve the problem of measuring and defining progress and establishing criteria for retention. Is it enough that the student has a pattern of improvement and all of his profile factors suggest he may one day succeed?

In addition to periodic evaluations by the student's teacher, his progress may be measured by his performance on both national standardized and locally devised instruments. If the standardized test is used as an exclusive basis for measurement, such test may determine the nature and content of the program and result in a kind of cram course. This tendency
may be promoted by administrative attitudes which consider performance on these tests as adequate reflectors of teacher success and competence.

If, on the other hand, the national standardized test is used to measure progress and the subject matter tested has not been taught, arguments to justify their use are difficult to formulate.

Once the method of measuring progress has been established, there remains the problem of devising a retention policy and philosophy. How long will the student be permitted to remain in the program if his progress is slow? In other words, what is the minimally accepted "rate" of progress? These and other questions have to be answered by each administration and faculty.

One approach is to develop a system with specific and objective criteria for retention which gives a student a maximum and extended period of time to complete a specific number of programs or courses.

An alternative procedure would be to evaluate each student's total record and profile. Each student would be treated as an individual. A judgment would be made regarding whether he is progressing satisfactorily and appears to have the potential for success. In addition to his academic performance such factors as interest, motivation and attitudes might be relevant.

It is important that the student understands and knows that there is a "day of judgment." If he believes he will be retained in a program indefinitely or as long as he continues to show minimal improvement, he may tend to apply himself less vigorously. This tendency could be counteracted by the use of less permissive and more rigorous guidance controls. In a
real sense, every teacher is a counselor and has the responsibility, in addition to tutoring and motivating students, to see to it that they have available to them and that they use, under informed guidance, all of the university resources, human and material, necessary to their progress. The specific kind of system used to determine retention and measure progress is a decision for each institution since program characteristics and institutional objectives and philosophies vary.

A system which establishes for the student a definable and measurable level and rate of achievement as a condition for his retention may be preferred by some administrators to one which requires individual judgments about each case.

Since institutional program characteristics, objectives and philosophies vary, it is difficult to recommend one system instead of the other. This decision obviously has to be made by each institution in the light of its own needs and objectives.

**EXTERNALLY IMPOSED PROGRAM REQUIREMENTS**

Any educational program which deviates from the traditional faces the often difficult task of interpreting its objectives to all of the outside organizations and systems to which the institution or the students are related.

**Selective Service**

It is traditional to consider four years as a normal period within
which to get a college degree. The Selective Service System is no exception with respect to its understanding of college. It evaluates and interprets a student's standing on the basis of credit accumulation and number of years completed. The chronological rather than the program sequence is the officially recognized system.

Programs which 1) permit a student to progress at his own rate, 2) permit a student to extend his education beyond four years, 3) do not award course credit and 4) do not use the traditional standards to determine a student's standing may create some obvious problems for selective service administration.

Student deferments would accordingly have to be extended to enable the student to complete his program of study.

Veterans Administration and Government Aid Program

Many students qualify for financial assistance under aid programs administered by the veterans association, federal work-study, etc. Here, too, it is assumed that the student will move from freshman to sophomore to junior - senior in the traditional four years. If the academic program has both credit and non-credit courses, the student may be in a disadvantaged position since his eligibility for full benefits depend upon his full-time enrollment. Thus, students partially enrolled in non-credit courses may be penalized.

Accreditation

Some concerns are raised regarding accreditation problems facing colleges with flexible admission and retention policies. The issue is
primarily related to standards. The criticism is that the admission of a large number of high risk students for developmental education and retention of these students for periods longer than the traditional may result in a lowering of standards for the total college community.

The error in this comment lies in a misapprehension of the meaning and relevance of standards. Actually, programs which seek to remedy deficiencies in rudimentary skills and improve the academic readiness of students will result in a raising of standards in the college. The reasoning is that students, after these programs, will be much more able to grasp the more complex subject matter in upper level major college programs. The major course offerings could be upgraded and made more sophisticated and rigorous.

The only meaning and relevance which standards have in this context are those of exit rather than entry and retention. Colleges are better remembered for the quality of their graduates rather than for their entering classes. It is much more important to render a service to the educationally disadvantaged by providing him an opportunity to increase his productive capacity than to pay homage to an outmoded and meaningless concept of standards. The common good is better served.

There is also some anxiety about the doctoral percentage requirements for the faculty imposed by regional accrediting associations. The ratio of Ph.D's to total faculty is currently used as one basis for evaluation of the overall quality of an educational institution.

In spite of the desire to meet this requirement, colleges recognize that the better teachers may not be research minded Ph.D's whose real desire is to teach pre-graduate school courses. Additionally, the problem is complicated by the necessity of maintaining lower teacher ratios in compensatory programs.
The following solution is suggested. In computing the Ph.D percentage for regional accreditation, separate the faculty into two groups: those who teach in the developmental programs and those who teach primarily in the upper level major programs. Compute the Ph.D percentage of the faculty on the basis of the latter group. For example, in a faculty of one hundred, suppose twenty-five teachers are used exclusively in compensatory programs; the base for computing the Ph.D percentage requirement would be seventy-five.

This approach would ease the strain placed upon educational institutions which seek to devote some of their resources to compensatory education.

**Teacher Education Accreditation**

Those institutions which prepare students for elementary and secondary school teaching, and which also have programs with flexible standards, must articulate to state teacher accreditation boards.

In instances where these boards require minimum cumulative grade point averages for admission into teacher education, considerable debate takes place. The rationale for the minimum cumulative average requirement is that the potential teacher's overall performance in college reflects his capacity to teach.

This assumption is subject to considerable debate and conflicts with the underlying educational philosophy of a differentially paced program. When a student in this system receives an "F" evaluation, it may be considered a delay instead of a failure. The important criterion for progress is his attainment of proficiency levels or mastery of bodies of knowledge.
Therefore, the only relevant consideration is whether in a given point in time he has met the exit standards of the program; not whether he "failed" X number of times enroute to his objective.

The student may be a late bloomer whose initial performances are not very high. He may, however, come alive after his first or second semester. His cumulative average reflects his previous shortcomings but distorts and provides no adequate and precise picture of the current level of his abilities. Actually, the use of the cumulative average in this case penalizes the student for his delays and such penalties are inconsistent with the objectives of a differentially paced program.

IV. CONCLUSION

Differential pacing is only one of a variety of approaches to compensatory education. It is not recommended as a panacea for all problems and all situations. Basically, colleges must respond to their own unique problems and devise those programs and approaches which best meet their needs.

It appears clear, however, that any approach or program adopted will have to respond to many of the problems outlined in this discussion.

The need is so great that a set of courses alone will be inadequate to meet it. The total learning environment into which students are invited must be revitalized into a kind of "academic hothouse" in which no experience provided for the student is without specific meaning and objective.

When educational objectives are stated in behavioral terms and education itself is viewed as a process which may require longer than the traditional four years, realistic solutions are in sight.

Further, colleges must reappraise their roles in the development of
and investment in human capital. Adherence to many of the traditional standards and concepts may be inappropriate in an attempt to meet an acute national need. The aim of acquiring and maintaining prestige in the educational world is not sacrificed when resources are devoted to the education of the disadvantaged. Actually, prestige is enhanced when success in this endeavor is achieved.

King V. Cheek