This report describes the development of the Thirteen-College Curriculum Program that was designed to deal with the special problems of students in predominantly black colleges. The goals of this program are: (1) to produce a learning environment that takes advantage of the nature and background of these black students and that results in lower dropout rates and intellectual achievement levels at least equal to or possibly greater than those gained by students enrolled in traditional classes; (2) to produce the kind of educational leadership that creates within the institution a climate of self-analysis and evaluation that will bring about meaningful academic change; and (3) to develop teachers' attitudes so that curriculum changes will be made and sustained. (Author/CS)
INSTITUTIONAL METHODS FOR DEVELOPING TALENT IN BLACK COLLEGE STUDENTS:

THE THIRTEEN-COLLEGE CURRICULUM PROGRAM

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The Thirteen-College Curriculum Program (TCCP) is, perhaps the largest single higher educational experimental program in existence today. The program has grown from 13 colleges, with a combined force of 128 faculty members and administrators, and 1,250 students in 1967, to 28 colleges with over 500 faculty members and administrators, and over 9,000 students in 1971. The success of this program, which to us should no longer be considered experimental, but should be accepted as an effective entry level program for freshmen and sophomores, is best understood by examining the goals the program set out to accomplish and the strategy used to accomplish these goals:

Initially, the goals of the TCCP were:

1. To produce a learning environment which took advantage of the nature and background of the students in the predominantly Black college and which would result in (a) lower attrition rates; and (b) intellectual achievement levels which would be at least equal to or possibly greater than those gained by students enrolled in traditional classes.

2. To produce the kind of educational leadership which creates within the institution a climate of self analysis and evaluation which will bring about meaningful academic change.

3. To develop attitudes within teachers such that curriculum changes will be made and sustained.
Thus, from its inception, the program was not only one which attempted to create an educational program built upon new materials and teaching style, but was one which sought methods which would allow the program to produce institutional change. With regard to this latter activity, the TCCP represented a marked departure from normal curriculum development efforts. This fact is easily discerned when one studies the history of curriculum programs. Most programs of curriculum development have as their primary objective, just educational outputs. The fact of whether a successful program is utilized or not, is left to persons other than the educational researchers. For the 36 colleges and universities involved in the TCCP, the objective of educational change is mandatory. Given the exigencies of the time, Black colleges neither in 1967 nor in 1971, have had the pleasure of participating in activities solely for their intellectual value. The program had to produce tangible and functional results. Perhaps an explanation is needed to accentuate this point. This is best given by a cursory summary of the educational history of the 60's, especially as it relates to Black colleges. The decade of the 60's was marked with a question of educational relevance not only on Black college campuses but throughout the nation. The educational programs of the universities for the most part had degenerated to information giving exercises which had no meaning for nor relationship to the major problems of society. Further, faculty and administrators neither took a stand nor expressed any concerns for the major problems that affected the general population. An isolationist attitude had developed in educational institutions.

Students entering these universities were frustrated by this educational myopia. The gulf that existed between their perceived educational experiences within the confines of the university and the reality of the social, political, economic world appeared to be too broad to bridge through the utilization of rational arguments and reasonable confrontation. Hence, the 60's were marked by confrontations that exacerbated the dilemma facing higher education. That dilemma
was expressly; how could one make the expressed moral and social conviction of education more in tune with realities of the society?

Black colleges not only had to deal with the broader issues raised by the upsurge of student demonstrations and the normal questioning of the 60's but also had to face the harsh negative criticism raised in such noted publications as the Harvard Educational Review, the Reisman and Jenks Article, the McGrath Report and the Coleman Report. What the astute observers of higher education recommended was that if Black institutions were to be viable, they had to become more like white institutions. That is, they would have to obtain more credentialed faculties, raise admission standards, and increase their final base. The colleges themselves, after reflecting upon their history, concurred in that analysis. Therefore, it was not unusual to see written statements which called for the same kind of curriculum, faculties and student bodies in major institutions and a demand for more money to emulate the same kind of activities.

Against this background, the Institute for Services to Education argued in 1966 that Black institutions did themselves an injustice and that what was needed to make the colleges more effective was to stop looking to the East and to the West, but to themselves. ISE argued that the problems of education at Black colleges were different from the problems at major white institutions. Given that perspective, one could not look for answers to the Black colleges' educational problems to come out of the standard educational milieu. Hence, the notion was born that Black colleges were the best sources of answers to their problems. Especially since Black colleges had always had to face the problem of making their programs more in tune with the expressed social/moral values of their times.
The combination of the new awareness that Black colleges have historically solved their own problems and the expressed commitment to making education more socially responsible was felt to be the mechanism by which these institutions could be catapulted into the main stream of higher education. Given the philosophical foundation, a strong motivator had to be found which would enable this form of new action and new thought to become real. The TCCP became that new mechanism.

Creating New Teachers and New Authors

The initiating step in creating the new posture of leadership for these institutions was to get the faculty involved in the creation of new curriculum materials and new teaching styles.

The traditional processes used to devise curriculum and teaching materials is one which is limited. A small community of "recognized" professors-educators, either singly or in groups, carried the burden and received the accolades for developing the materials used by the broader post secondary educational community. Therefore, it becomes inherent in these processes than unacclaimed faculty in untouted universities are less apt to be credited with membership in the community of curriculum developers.

The TCCP, through ISE, consciously rejected the traditional processes and adapted a method of active involvement of the teachers. It is ISE's contention that only through such involvement would there be a strong possibility to sustain the curriculum innovation. Therefore, in its role of working with the colleges through the teachers, ISE served as a model of a particular teaching style, and as generators of creative materials. However, ISE adamantly refused to develop all of the methods and materials.
Instead, ISE took a stance which reflected a fundamental belief in the fact that, with one-half an opportunity, teachers working with students could develop materials which would inherently have the best approach to creating effective educational returns for their students.

The Process

Teachers need to test ideas, see what happens, get feedback from other teachers, make revisions, and try again. In the process, the ideas get embedded in new instructional materials for students and teachers, new instructional practices, and new classroom formats.

A year constitutes the natural cycle for this work invention during the Summer and testing in the classroom during the academic year. After several years work, the new materials are ready for dissemination outside the program via publication and "live" demonstrations by experienced teachers.

A good-sized group of teachers is needed to achieve the initial impetus to start a project and to sustain it through the hard work that develops as the program moves outside the initial development areas and the materials are made generally available through publication.

This process has produced materials which have been viewed and reviewed by many of those educators from that small community of curriculum developers, by educational materials publishing houses, by teachers not using program methods, and by reputable persons working with educational theories and practices. All of them agree that this material represents a new, exciting and substantive deviation from the more traditional content matter.
More important, however, is the fact that this interest has produced a marked effect upon the new authors. The involved teachers have developed a strongly positive attitude towards their merit as teachers and educators and towards their capabilities to perform a far reaching service. No longer will they accept the notions that their contributions to higher education can only serve a temporary function and that their role must always be miniscule.

Therefore, this, the TCCP, will not be either their last or only effort to keep education alive and functioning on the local and national level. Moreover, the upward trend in the number of speaking and method demonstrations invitations received by TCCP teachers from traditionally emulated universities indicates that they create a national resource which can no longer remain undiscovered or untapped -- a resource which will not be totally spent with over use.
The Educational Challenge

Socio-Economic Background of Students

One of the amazing facts about Black youth who enter Black colleges is that they have survived the educational and psychological maiming of a public school system which, historically and presently, is the antithesis of equal opportunity. However, even as survivors there is little comparability between these students and their counterparts who enter the predominantly white institutions of higher education. Consider the following socio-economic facts surrounding these students:

1. Students come from extremely poor families.
   - 18% come from families with less than $2000 per year income
   - 34% come from families with less than $3000 per year income
   - 51% come from families with less than $4000 per year income
   - 65% come from families with less than $5200 per year income
   - 78% come from families with less than $6200 per year income

   (The average family income for college youth nationwide is slightly more than $10,000 per year).

2. Their parent's occupations are generally of lower status:
   - 47% of students responding (2181) have mothers that work as domestics.
   - 48% of students responding (2384) have fathers that work as laborers or semi-skilled workers

3. Their families are generally large:
   - The average student has three younger children still at home and at least one other relative living with the family.
4. An unusually large proportion of students were raised by the mother only or by grandparents (32%).

5. Students generally come from rural or small communities:

50% come from communities of less than 25,000
75% come from communities of less than 100,000

6. Their parent's educational background is limited:

51% of the mothers have less than a high school diploma
55% of the fathers have less than a high school diploma
(30% of the fathers have only some grade school education)

These background characteristics when combined with the inadequacy of public schooling for Blacks in the south have created an educational dilemma. College is very important to these students:

If for some reason their ability to continue in college was threatened, 82% of the students would try to continue or do almost anything to stay in school,

and their parents:

65% of the students felt their parents expected them definitely to attend college;

59% of the students felt that their parents expected them to finish college as one of the best in their class;

63% of the students felt their parents would be very disappointed or upset if they flunked out of college.

Moreover, these students come to college for the best of reasons:

35% of the students feel that the most important aspect reason for going to college is to gain training necessary to help people;

13% in addition to the above number see college as a means to become a better person;

9% feel college will provide them a better chance to change the world.
However, their chances for survival in college would seem, on the face of it, very slim for both achievement and psychological reasons. The college entrance examination scores of most of these students (in this case the American College Testing Program) average a complete standard deviation below the national norms for entering college students and the heterogeneity (degree of individual differences) between these students is greater than would be expected at most colleges. Compounding this problem are certain psychological attitudes and traits the students bring with them. If the entire academic problem confronting the colleges was simply achievement level, the colleges could perhaps adjust the level of their teaching or provide remedial programs. But, many of the students bring with them feelings of academic inferiority which lessen the chances of any traditional program having a large impact:

42% of the students feel that sometimes they just can not learn or are unsure of their learning ability;

33% of the students are unsure or agree that they will stop;

70% of the students are unsure or agree that they would get better school results if the teachers went slower;

43% of the students are unsure or agree that people like themselves have more problems succeeding.

With respect to general academic self-concepts, the students see themselves as average to above average on such attributes as intelligence, school achievement, school ability, creativity, and dependability in completing assignments and tasks. When questioned on specific academic self-concepts, students tend to rate themselves lower than on the general academic characteristics. The tendency to rate themselves below average is particularly true in science and
mathematics, where between 25 and 30% rate themselves below average. On the other hand, the students tend to rate themselves average or above average in English and Social Science.

The combination of all the factors surrounding the students provides the rationale for establishing an introductory college experience in the mold of the Thirteen-College Curriculum Program. The students do have a drive to succeed. They have survived high school and their grade performance in high school (70% of the students had a B average or better) indicates their willingness to attempt to meet proscribed standards of learning. They are not psychologically aberrant, but they do reflect the effect of a history of unequal opportunity and discrimination. Thus, as they enter and proceed through college, programmatically it makes sense to capitalize on these exhibited strengths rather than reinforce weaknesses for which they have no responsibilities.

These, then, are the complexities with which the Thirteen-College Curriculum Program is confronted. The student backgrounds, abilities, feelings, and attitudes can not possible be overcome in the typical, sterile environment of the traditional college classroom. This is most clearly represented by the high attrition rate in the predominantly Black colleges (65% to 70% over four years as compared to the national college average of about 50% over four years.) While attrition losses in any college seem largely unnecessary, it is particularly tragic in these colleges which for years have been the only resource in the Black community for moving back the boundaries of ignorance and providing professional manpower for services to that community as well as the nation.
Thirteen-College Curriculum Program (TCCP)

The educational development efforts of the TCCP have been aimed at (1) developing course content in English, mathematics, social science, physical science, biology, humanities, and philosophy that would be more topical and germane to the student's experience than those materials traditionally in use; (2) defining current problems in the teaching of these courses, along with the ramifications of and possible solutions to those problems; (3) deriving a philosophy of education that would stimulate teachers enough to think of the need for altering their attitudes toward their role in the classroom and their students' academic problems and basic needs; and (4) developing methodologies and techniques that would stimulate and improve students' learning processes, and motivate students to assume an active role in their own learning.

The materials and techniques that have been developed are based upon three assumptions. The first, and probably most important assumption is that students can be more effectively motivated to learn and to become involved in the learning process when they are placed in a student-centered academic environment in which pedagogy and curriculum materials combine to ignite their intellectual curiosity; encourage a free exchange and expression of their own life styles, ideas, reflections, private insights and experiences; and build more positive self-images. The second assumption is that optimum learning conditions are more apt to occur if teachers assume roles as student guides and curriculum innovators, then when they assume the stance of classroom arbiters and, presumably, sources of all worthwhile knowledge. The
final assumption is that teachers, when freed from the structures of syllabi and rigid course content, become more creative and responsive to student's needs and, thereby, make their teaching more pertinent to the students and more enjoyable for themselves.

With these aims and assumptions as guides, the teachers of the T CCP, along with the ISE staff, have developed the kind of curricular materials and teaching strategies that promote the desired classroom atmosphere and academic results. The material core of the new curriculums is as follows:

A. English ( 4 Themes )
   1. Choice
   2. Responsibility
   3. Love
   4. Self and Alienation

B. Social Science ( Sequences )
   1. The Basis of Community and Society
   2. The Structure of Community Control
   3. The Black Experience

C. Mathematics ( Units )
   1. Topics in Mathematics
   2. Tools and Concepts
   3. Functions
   4. Similarity and Theory of Trigonometry of Triangles
   5. Consumer Mathematics
   6. Sets and Logic
   7. It's a Computerized World
   8. Number Systems
   9. Probability and Statistics

D. Biology ( Units )
   1. Nature of Science
   2. Evolution
   3. The Cell
   4. Metabolism and Regulatory Mechanism
   5. Reproduction, Growth and Development
   6. Nature of Living Things
   7. Genetics
   8. Ecology
   9. Laboratory Activities
E. Physical Science (Units)

1. Nature of Physical Science
2. Conservation Laws - Momentum and Energy
3. Gas Laws and Kinetic Theory
4. Optics
5. Chemistry, Part I - A Microscopic View
6. Chemistry, Part II - A Microscopic View
7. Chemistry, Part III - An Introduction to Organic Chemistry

F. Humanities

1. African and Afro-American Writings
2. Dance and Drama in the Classroom
3. Looking at the Visual Arts
4. Looking at Music
5. The Stances of Men

G. Philosophy

1. Epistemology
2. Social and Political Philosophy
3. Philosophy of Religion
4. African World-View

Within each of the themes or units, a number of techniques have been developed for engendering in students a positive self-concept which is coupled with a hearty thirst for knowledge, and critical thinking stemming from processes of association necessary for making connections between life in general, one's own experiences in particular, and the works one reads or creates; and a more positive attitude toward writing, stemming from a desire to communicate one's creative thoughts with respect to science, mathematics, and humanities.
In our efforts to develop pertinent and effective curriculum materials across the broad areas of the TCCP, we attempted to construct an educational program which was in no manner remedial in its approach to the educational problems of the entering students. What we set out to do was simply to make the first and second year of college much more effective than they were. The record on remediation is quite clear. The basic use of remedial training has not been very effective in dealing with educational problems of under achieving and mis-educated students. One apparent reason for the failure of remediation in English can be understood from an appreciation of a student's judgement of his capabilities. Most Black students feel they know grammar, can write, and can communicate. Remedial English tells him the opposite. The confrontation of the student's self concept and the message of remediation usually results in students failing to improve on the underdeveloped skills. On the other hand, it is quite clear that students have a lack of confidence about their ability to do science and mathematics. Yet, the entering freshman program of most colleges require them to take courses in General Chemistry, General Biology, Calculus or College Algebra and trigonometry. Taking these courses as presently constructed, tends to convince students that they were not meant to be mathematicians and scientists. Thus, traditionally, one finds that colleges and universities do not pay any attention to the self perceived weaknesses and strengths of students. In this regard, we differ with that traditional approach. The achievement scores of students expressly tell us that students do not have certain standard developed skills. In any educational program this cannot be ignored. The problem then becomes how to deal
with the deficit of standard skills and, at the same time, react to and built upon the positive strengths of the students. Our approach in social science, English, humanities and philosophy has been to draw on materials in which there is a relationship to the experience of the students. For Black students this means use of Black materials. This does not mean that one does not get into expository writing, social science concepts, standard literature or standard philosophical principles. The very difficult task for the program and for the teacher is the decision of how to take these new materials and extract from them the general principles of each of these 4 areas. The benefits of this approach rest with the attitudes that are developed in students. Repeatedly, within the last 5 years, the logic of this approach has resulted in a unanimous appraisal that students who participate in this program read more and learn more (students who participated in the program tend to have higher academic averages and a greater persistence rate than the regular college students). The one criticism that is often leveled against the program is that one cannot find a one to one correspondence between the content materials of the program and that of the traditional textbook used in the above listed courses. There is no way that we can or will counter this charge, because it is true. If one realistically appraises what a student carries away from a traditional course in terms of retention of basic information taught, one knows that there is very little retained. Consequently, one asks the question, "What is important then about standard materials if it is soon to be forgotten before the 4 years of college is completed?"

In our approach we stress the importance of the curriculum material developing in a student an appreciation and understanding of concepts and in-
creasing his mental acumen. The choice of the materials gives us the best opportunity of achieving these goals. Science and mathematics differ somewhat from the social sciences. Recognizing the problem stated above, our science and math courses take the position that the program must prove to the students that science and mathematics are within the range of their capabilities and that it does not require mental giants. Therefore, the science and math courses are built around conceptual units on topics in which great care has been taken to demonstrate how scientists and mathematicians do the business of science and mathematics.

The curriculum materials developed than primarily cover a single topic which is developed to a very sophisticated level. Though the science course can be criticized in much the same fashion as the social science courses, they do go beyond the normal level of content found in the regular college science and mathematics textbooks for those topics for which we have developed curriculum materials.

Thus, in summary, the educational guts of the TCCP have been developed in such a way that we have paid attention to enhancing the perceived strengths of students rather than validating the historical experience of their life in a racist society. Perhaps the most significant achievement of the program is that for the first time in the history of the colleges, a sub-set of students have remained in college at a rate competitive with the national norms and have made choices of careers fairly reflective of the needs of the society at large. A second noteworthy achievement of the program has been that the first graduating class of the program produced scientists at a percentage rate equal to the national norm. Previously the colleges produced scientists and mathematicians at about 1/2 of the percentage rate of the national norms. The total end results
of this program in terms of academic achievements and the positive self
development of students indicate that the TCCP has found beginning answers
to many of the plagued problems of higher education and in particular
certainly represents a more positive response to the educational problems
of the alienated and poor Black kids of this country.