Basic Skills: Responding to the Task with Effective Innovative Programs.

Mar 82


MF01/PC01 Plus Postage.

*Access to Education; *Basic Skills; *Bilingual Education; Community Colleges; *Developmental Studies Programs; Hispanic Americans; Interdisciplinary Approach; Open Enrollment; Program Descriptions; *Remedial Instruction; Remedial Mathematics; Science Instruction; Two Year Colleges

*Border College Consortium; *Laredo Junior College TX

Issues in community college basic skills instruction are reviewed and two model programs are outlined in this paper. First, concerns about student illiteracy, lack of academic preparation, and failure to complete courses are discussed, and public demands for educational accountability are examined. Next, the relationship between the "open door" concept and the increased need for basic skills instruction is explored, with special reference to the needs of Black and Hispanic students. After defining basic skills, the paper summarizes arguments for and against their inclusion in the community college curriculum. The paper then outlines the major characteristics of two model programs of basic skills instruction. The first is the Coordinated Bilingual Bicultural Studies Program at Laredo Junior College, an interdisciplinary program involving history, English, reading, human development, psychology and Spanish along with counseling and evaluation components. The second is the Ford Foundation sponsored Math Intervention Project for Hispanic Students, conducted by the Border College Consortium, which includes faculty, counselors, parents and peers in efforts to accultmate Hispanics to mathematics and science fields. These programs are described in terms of their curricula, objectives, activities, and program evaluation. (KL)
BASIC SKILLS: RESPONDING TO THE TASK WITH EFFECTIVE INNOVATIVE PROGRAMS

PRESENTATION AT

URBAN COMMUNITY COLLEGES IN TRANSITION
NATIONAL POLICY CONFERENCE

MARCH 7-9, 1982
DETROIT, MICHIGAN

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BASIC SKILLS: RESPONDING TO THE TASK WITH EFFECTIVE INNOVATIVE PROGRAMS

I. The Problem

"Juan cannot write a grammatically complete sentence."

"Mary is a college Freshman and reads at the fourth grade level."

"Carlos cannot pass his elementary algebra course."

Sound familiar? For those of us involved at the crux of what community college education is all about, teaching and learning, these comments tend to elicit bitter, emotional responses. In fact, they serve as persistent reminders that with all the money and time spent on curricular innovations, counseling techniques, developmental programs and the like, we somehow have not managed to escape sharp, harsh criticisms for our failure to effectively address the basic skills needs of our students. The media have been particularly critical. In the December 1975 article "Why Johnny Can't Write," Newsweek announced that..."The U.S. educational system is spawning a nation of illiterates" and cited that the problem is so pervasive, it exists even at the best universities such as Harvard and Berkely. In community colleges, it is not uncommon to find college students with low ACT and SAT scores, poor writing and speaking skills, content deficiencies, weak study habits, poor self images, diffused goals, unsuccessful learning experiences, and a dislike and fear of mathematics. (Frielander, 1979:1) Consequently student attrition rates run high. For example, in a typical community college mathematics course, attrition runs between 40 and 60 percent (Stein, 1973).

The public outcry for accountability has forced a proliferation of programs of minimum competency which require that students pass a uniform skills test. At first, these tests were required only in
public school systems, but there has been an evolution toward system-
wide competency programs at the college and university levels. Some
examples include the Testing Programs at the City University of New
York, the Public Colleges of New Jersey and the University System
of Georgia (Akst, 1978; Fisher, 1979; Lutz, 1979). However, test
critics in colleges where minorities are heavily concentrated contend
that because minorities fail tests more than whites, the test items
may be culturally biased and therefore discriminatory (Akst, 1978).

In summary, all of this concern about student illiteracy, lack
academic preparation, and failure to complete courses has brought
about a public outrage that has demanded educational accountability
through basic skills testing. Consequently, two-year colleges have
had to contend with serious issues related to the role and scope of
basic skills in relation to the two-year college open door concept.

We all know the controversial dilemma (Olivas, 1982) posed by
the two-year college open door concept. Opening the college doors
has meant increased access for the millions of non-traditional students
who stayed away from higher education on the basis of ability and
financial need. Yet, this open door has also been a revolving door,
particularly for Blacks and Hispanics, many heavily concentrated
in urban areas, who generally exhibit higher withdrawal rates than
other groups (Cohen, 1980). Urban and other two-year colleges serve
a diverse multi-cultural, multi-ethnic mixture of students ill-prepared
in basic skills: veterans, minorities, adult learners, returning women,
the handicapped, all of which would probably produce a population large
enough to support a basic skills program at any college (Crawford, 1979).

In urban areas, the loss of population, wealth and jobs has meant
the absorption of new minorities and high-need populations into the
community colleges. Many of these students exhibit certain language experiential and psychological deficits associated with poverty and other socio-economic conditions (Gappert, 1978).

The two-year college has had limited success at retaining these student populations. Research demonstrates that the withdrawal rate for students at community colleges is greater than at four-year colleges (Garcia and Peterson, 1980; Karabel, 1972). What appears to be happening is that minorities and other high-need students: 1) are being tracked into vocational-technical programs; 2) do not transfer; 3) do not finish any program; or 4) earn an associate or a one-year certificate and go no further (Garcia and Peterson, 1978; Olivas, 1980; Karabel, 1972).

In short, increased access and equality of opportunity granted through the open door has diversified the student clientele and has increased the need for basic skills education. Particularly in urban areas, where community leaders look to two-year colleges as the means to salvage and re-direct students to become productive members of the community, it is important that educational programs be assessed for overall quality to ensure that access is matched by retention.

II. Basic Skills

A. Definition

What are basic skills? In this paper, the term basic skills refers to learning in the areas of reading, writing, speech and listening as well as computation.

B. Importance and Role in Community Colleges

The concept of basic skills is not without its critics at the community college level. Financial constraints such as reduced
state appropriations, the impact of Proposition 13 and skyrocketing college operational costs have pressured administrators to reconsider priorities and to question the role and scope of basic skills and particularly the concept the "open door" two-year college philosophy. At a time when there are already inadequate funds available to carry out other mandated college functions, can the community college really afford to continue its open door philosophy and serve all students, no matter what their needs? Is the community college fooling itself when it purports to be all things to all people? Should not two-year colleges concentrate on what colleges are really supposed to be doing, that is, instruction for transfer and development of occupational skills as opposed to remedial instruction which is the responsibility of the elementary and secondary levels? And what about academic standards? Should standards be lowered to accommodate students who are unprepared for "college-level" type work?

The other side of these issues is based on the firm principle that community colleges do have a responsibility to offer basic skills courses and should expand them as necessary. Two year colleges have traditionally had a remedial goal and represent, particularly for minorities, the first place to go to make up missing requirements before transferring to a four-year college. Given the fact that minorities are still grossly underrepresented in professions demanding a college preparation, closing the open door would pose a pernicious barrier towards advancing minorities in professional careers. The ever-increasing diversity of students from multi-cultural backgrounds, with differing abilities and needs, mandates the necessity of colleges to maintain and expand basic skills programs. The California Community
Colleges Chancellor's Advisory Committee on Basic Skills (1979:11) recommended the continuation and expansion of skills based on the following:

1. For many students being able to attend college is an important motivation to learn. (Even though students may, at first, have programs largely composed of basic skills courses, being in the college environment keeps their ultimate occupational and/or academic goals clearly in view).

2. Because of the community colleges' long involvement with basic skills programs, they are equipped to offer significant, meaningful programs with needed support services.

3. Basic skills instruction is good public policy because (a) upgrading basic skills may enable students to get better jobs, pay more taxes, generally lead more productive lives, and be better citizens, and (b) a literate citizenry is essential in a democracy; financial aid for basic skills instruction is a good investment.

4. It is incumbent upon community colleges to provide courses which meet the needs of students eligible for admission.

The arguments against basic skills may be interpreted as elitist viewpoints. However, the questions posed by these arguments are important and merit serious thought. In particular, they point to a careful organization and assessment of programs designed to address basic skills, and especially their effectiveness at providing students with the fundamentals necessary to survive in collegiate and societal surroundings. In the next section, two such programs are presented. The first is The Coordinated Bilingual Bicultural Studies Program in place at Laredo Junior College in Laredo, Texas. It features an interdisciplinary, cluster type approach combining cognitive and effective strategies. The second is The Ford Foundation funded Math Intervention Project for students in the Border College Consortium comprised of six community colleges in California, Arizona and
This comprehensive, multifaceted Math Intervention Model is a collaborative effort that involves math faculty, counselors, parents and peers in impacting the major problems of Hispanics in math and science fields. Both models can be adopted to institution-specific needs of other community colleges.

III. Models to Address Basic Skills

A. Interdisciplinary Cluster Model – Coordinated Bilingual Bicultural Studies, Laredo, Texas. Mr. Amaury Nora, Director

INSTRUCTIONAL COMPONENT

History 361, 362 (College-level)
- interdisciplinary approach in coordination with English and reading
- activities lab (i.e. oral tapes, readings, written exercises)
- audio/visual materials
- culturally related literature

English 401, 321, 322
English 401 - remedial English for skill acquisition
- grammar labs (peer tutoring, individualized attention, written exercises specific to problem areas)
- teacher made materials

English 321 - grammar review lab (first half of semester)
- writing lab (second half of semester)
- interdisciplinary approach
- incorporation of Chicano literature
- intensive writing approach

English 322 - intensive writing approach; short stories, poetry, research paper
- interdisciplinary approach
- research paper writing lab
COORDINATED BILINGUAL BICULTURAL STUDIES

INSTRUCTIONAL COMPONENT

HISTORY INSTRUCTOR
- 361
- 362
- 341
- 342

SPANISH INSTRUCTOR

READING INSTRUCTOR

ENGLISH INSTRUCTOR (2)
- 301
- 302
- 401
- 402
- 502

H.D. INSTRUCTOR (2)
- 303

PSYCHOLOGY INSTRUCTOR (2)

LAB

Counselors (2)

COUNSELING COMPONENT

REMEDIAL
(REMEDICATION FOR ACQUISITION OF BASIC SKILLS)

DEVELOPMENTAL
(REVIEW AND DEVELOPMENT OF BASIC SKILLS THROUGH TRANSFERABLE COURSES)
Reading 301, 302
- studies skill lab
- varied reading materials
- basic reading skills (outlining, previewing, etc.)
- coordinated interdisciplinary approach
- required exit score on final exam (Nelson-Denny Exit Score=10th grade reading level)

Human Development 303
- integrated career component (assessment, examination, investigation of career values and alternatives)
- initial contact for counseling component
- bilingual approach
- informal and affective structured format
  self perception
  values awareness
  cultural awareness
  coping skills
  affective interaction skills
- counselor taught courses

Psychology
- integrated career component (scheduled required activities)
- contact for counseling component
- bilingual approach
- application of reading and writing skills
  book reports
  films
  short stories
  surveys (student presentations)
  group presentations

Spanish 341, 342
- individualized, multi-leveled teacher made materials
- culturally related materials
- grammar skills laboratory approach
COUNSELING COMPONENT

- recruitment (Career Day, letters, phone calls, interviews)
- departmental registration
- academic advisement (intervention strategies)
- affective retreats (beginning-of-year, mid-year)
- extracurricular social functions
- integrated career component
- continuous student/instructor (counselor) interface
- bilingual approach and culturally sensitive
- unrestricted availability of counseling staff
- affective and empathetic staff (counseling and instructional)
- effective instructor - counselor interface

EVALUATION

- achievement of program objectives, i.e. (course completion rates, student grade distributions, mean hours earned)
- external evaluations by outside consultants
- internal evaluations by staff
- retention data, i.e. number of students completing the program successfully (range - 73-94% from 1976-1981)

B. Ford Foundation Math Intervention Project for Hispanic Students, Border College Consortium, Laura Rendon, Director

I. Objectives

1. To develop and/or revise in each college a minimum of one mathematics course and develop supplementary curriculum materials that will address one or more of the following elements:

(a) Increase awareness of Hispanic students on the need for math for college transfer, scientific and technical professions, non-professional occupations and careers (e.g.; carpentry, mechanics heating/cooling systems, electronics, business, etc.) and everyday life
(b) Development of problem solving skills in mathematics

(c) Encourage career aspirations in math and science related fields

(d) Reduce math anxiety and math avoidance.

2. Develop and implement math-related professional development activities to enable Border College Consortium math and science faculty to enhance their knowledge of the following areas:

(a) Reducing math stress, anxiety and avoidance and improving attitudes toward math

(b) Developing problem solving skills in mathematics

(c) Increasing awareness of math requirements in college, careers and use of math in everyday life

(d) Exploring math-based fields of work and encouraging math-related career aspirations

(e) Determining, through individual faculty research projects, the current math participation and career aspirations of Hispanic students within their institutions

(f) Developing awareness of the cultural background and characteristics of Hispanic students related to math performance and attitudes

(g) Identifying instructional strategies and approaches for teaching math to Hispanic students

(h) Updating knowledge of recent developments in the field of math and math-related sciences in math teaching strategies

3. Design and conduct professional development activities for Consortium counseling staff to further enhance knowledge related to:

(a) Current employment opportunities in math and science related fields at the local, regional and national levels

(b) Effective strategies for encouraging Hispanic students to take more math and science courses (beyond minimum required for graduation)

(c) Strategies for dealing with math anxiety of Hispanic students
(d) Strategies for the identification and encouragement of Hispanic students with high potential for math and science

4. Design and implement a mathematics tutorial program addressing Hispanic student needs. Such a program will include the development and field testing of a Consortium-wide Self-Contained Math Tutorial Training Package.

5. Design and implement a Parent Information/Involvement program within Border College Consortium institutions. The program, depending on institutional needs, may involve one or more of the following strategies to increase parental interest and understanding of the importance of math for their child's academic and career opportunities:

(a) Parent newsletter

(b) Parent meetings

(c) Parent participation in field trips to scientific laboratories and industries

(d) Evening programs

(e) Information dissemination through local media.

In addition, a pilot project will be designed and conducted collaboratively between a Border College Consortium institution and a local school district to inform and involve parents of children at the high school, mid school and elementary school levels.

6. Design and implement Peer Information/Involvement Program. The Program may involve one or more of the following approaches:

(a) Strategies for informing Hispanic students and peers on importance of math, and science and technology through college media publications (e.g., student newspaper)

(b) Scheduling of films, speakers and conferences for Hispanic and other students addressing math-related topics

(c) Field trips to medical and scientific laboratories and industrial work settings

(d) Organization of student math and science clubs of interest to Hispanic students
(e) Development of student science fairs

(f) Provision of internships and "hands-on" experience in math-related work settings

(g) Development of extra-curricular math-related offerings

II. Activities Planned for Each College

1. Southwestern College
   a. Set up math tutorial program
   b. Reorganize basic math courses

2. Imperial Valley College
   a. Develop mini-course on career opportunities in math, science and engineering fields
   b. Develop testing programs to properly screen math students for appropriate classes according to peer abilities
   c. Improve mathematics tutorial program
   d. Develop math anxiety course
   e. Math Festival

3. Cochise College
   a. Develop Certificate Training program for tutors
   b. Hold math anxiety workshops for instructors and tutors
   c. Develop math placement test

4. Arizona Western College
   a. Develop modules in Geometry and Measurement
   b. Develop course for students majoring in elementary education and for currently employed elementary and junior high teachers in area dealing with innovative means of teaching mathematics
   c. Hold workshops for math and science faculty in local schools and college on math anxiety and problem solving
   d. Hire additional tutors

5. Laredo Junior College
   a. Develop modules on careers in math and science
   b. Develop mini-courses in the area of the hand-held calculators and the microcomputer
   c. Disseminate information on math-related careers through local and campus media
   d. Disseminate information on the importance of math to parents of elementary school children
   e. Hold workshops on techniques for teaching problem solving for math teachers
   f. Offer mini-courses on problem solving on a regular basis to students and the community
   g. Hold workshops on techniques for reducing math anxiety
   h. Form a Mathematics Council to discuss goals of the math program and problems encountered at the various educational fields
1. Compare curricula and content of local high schools and junior college math programs, with courses of study at the Mexican tecnologicos

j. Survey elementary school teachers as to their own deficiencies

k. Plan in-service sessions for elementary school teachers

l. Develop a college credit course for elementary school teachers.

6. Texas Southmost College

a. Develop Math Placement Test

b. Develop a well-staffed Math Lab directed by math instructors and assisted by student tutors

c. Develop individualized computer assisted math courses.

7. Pilot Project - Texas Southmost College/Brownsville Independent School District

a. Survey parents of district students regarding present beliefs, interests and knowledge about math, course requirements and math-related careers

b. Develop parent newsletter

c. Use TV programming to advertise programs in math and science

d. Conduct a math anxiety course for college and public school math teachers.

III. Program Evaluation

I. General Evaluation Approach

A. Emphasis on joint decision making and close collaboration at the consortium level and with the administration and faculty of The BCC institutions.

B. Resource Consultants work with Math Intervention Planning Committee to guide and monitor the evaluation plans, activities, data acquisition, analysis and documentation.

II. Evaluation Design

A. Major types of evaluative data

1. Math Intervention Program Objectives - Data will be collected for all programs objectives to assure the assessment of outcomes related to each objective.

2. Student, Faculty and Institutional Impact - Data will be collected to assess the primary and secondary level effects on students and the institution as a whole.
B. Comprehensive Set of Evaluation Specifications
1. Identification of areas of impact to be assessed
2. Selection of evaluation criteria
3. Specification of categories of data to be collected

C. Information placed in Evaluation Specification Matrices
1. Objectives
2. Goal Implementation/Activities
3. Data Requirements
4. Data Source

D. Special instruments developed
1. For quantitative data
2. For qualitative data

E. Accurate, timely data required
1. To facilitate formative and summative evaluation
2. For preparation of quarterly and final reports
3. To provide "self-correcting" mechanism
4. To assess progress in attaining pre-specified objectives

F. Finalization of data acquisition plan (SEE EXAMPLE)
1. To specify time-lines for collection and compilation of data categories
2. To provide all evaluative data for interim and final reports
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<tr>
<th>Objective</th>
<th>Implementation Strategies</th>
<th>Target Completion Date</th>
<th>Evaluation</th>
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<td>1.0</td>
<td>Identification of peer interests and attitudes toward math-related courses</td>
<td>September 30, 1981</td>
<td>Survey forms, interview data</td>
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<td>Specification of objectives for peer information/involvement program</td>
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<td>Completed specifications</td>
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<td>3.0</td>
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</table>
BASIC SKILLS POLICY AREAS

I. College Mission
   A. Role of basic skills
   B. Priority
   C. Commitment

II. Admissions
   A. Access
      1. Everyone - open door
      2. Selective
   B. Recruitment
      1. Minorities
      2. Adult learners
      3. Senior citizens
      4. Foreign students
      5. Working students
      6. Handicapped

III. Placement
   A. By student choice
   B. By instructor
   C. By counselor
   D. Organized testing in writing, English and Math
   E. Testing
      1. By college
      2. By state
   F. Tracking

IV. Educational Program
   A. Remedial courses
      1. Computational
      2. Speech/listening
      3. Speech therapist
      4. Reading
      5. Writing
      6. Other?
   B. Developmental Courses
      1. How different from remedial?
      2. Which courses?
      3. Labs
   C. Bilingual Education
   D. Computer Literacy
E. Requirements for Progress
1. Mandatory attendance
2. Course completion
3. GPA requirements
4. Other

F. Credit for Remedial courses
1. For AA?
2. For transfer?
3. For elective?
4. Only for General Ed. requirements?
5. Other?

V. Student Services
A. Who should counsel?
1. Minorities
2. Faculty Advisors
3. Peers
4. Other

B. Which services?
1. Career Education
2. Study labs
3. Human Potential courses
4. Extra-curricular activities

VI. Staffing
A. Faculty
1. Ethnicity - sensitivity towards minorities and the underprivileged
2. Training Required - Specialists in
   a. Basic writing and speech
   b. Basic math skills
   c. Other

B. Counselors
1. Ethnicity
2. Training Required

C. Administrators - Special skills needed?

D. Paraprofessionals

E. Tutors

F. Peer Tutors

VII. Program Financing
A. What priority - How much funds?

B. How raise money
1. Partnerships with business community
2. Foundations
3. Other
VIII. Program Organization
   A. Separate department
   B. Integrated with other college departments

IX. External Inputs
   A. Parents
   B. Community
   C. High school - college linkage
   D. State assistance
   E. Federal assistance (Title III)
   F. Foundation assistance
   G. Partnerships with community - industry

X. Program Evaluation
   A. Student course grades
   B. Competency testing
   C. Proficiency requirements
   D. Course completion
   E. Teacher evaluations
   F. External evaluators
   G. Internal evaluators
   H. Research
      1. Student Follow-ups
      2. Retention success
BIBLIOGRAPHY


