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AUTHOR Dock, Stephen
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ABSTRACT

In a Program Development and Evaluation model, guidelines are presented for program directors at Delaware County Community College. Based on the premise that the process of developing programs is essentially that of evaluating programs, the model includes the following steps for both processes: (1) involve the appropriate publics; (2) identify program goals and specific objectives; (3) state objectives in measurable form; (4) develop appropriate measurement/implementation techniques; (5) implement the measurement of criteria for the achievement of objectives; (6) analyze the resulting data; (7) interpret the data relative to the specific objectives and goals; and (8) make recommendations for implementation, modification, and revision of broad goals and specific objectives, beginning the cycle again. An example of the use of a rating scale for program proposal screening concludes the model. (RT)

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PME GUIDELINES FOR PROGRAM DEVELOPMENT/EVALUATION

Stephen Dock
MSPR
Delaware County Community College
JUNE 1977

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FRAMEWORK FOR DEVELOPMENT AND EVALUATION

A critical aspect of an effective Planning/Management/Evaluation Process is the establishment of an ongoing process "to evaluate and measure the achievement of program and institutional objectives." [1]

In order to accomplish this, the Metfessel/Michael paradigm has been adapted to serve as the framework for program development and evaluation at DCCC (figure 1).

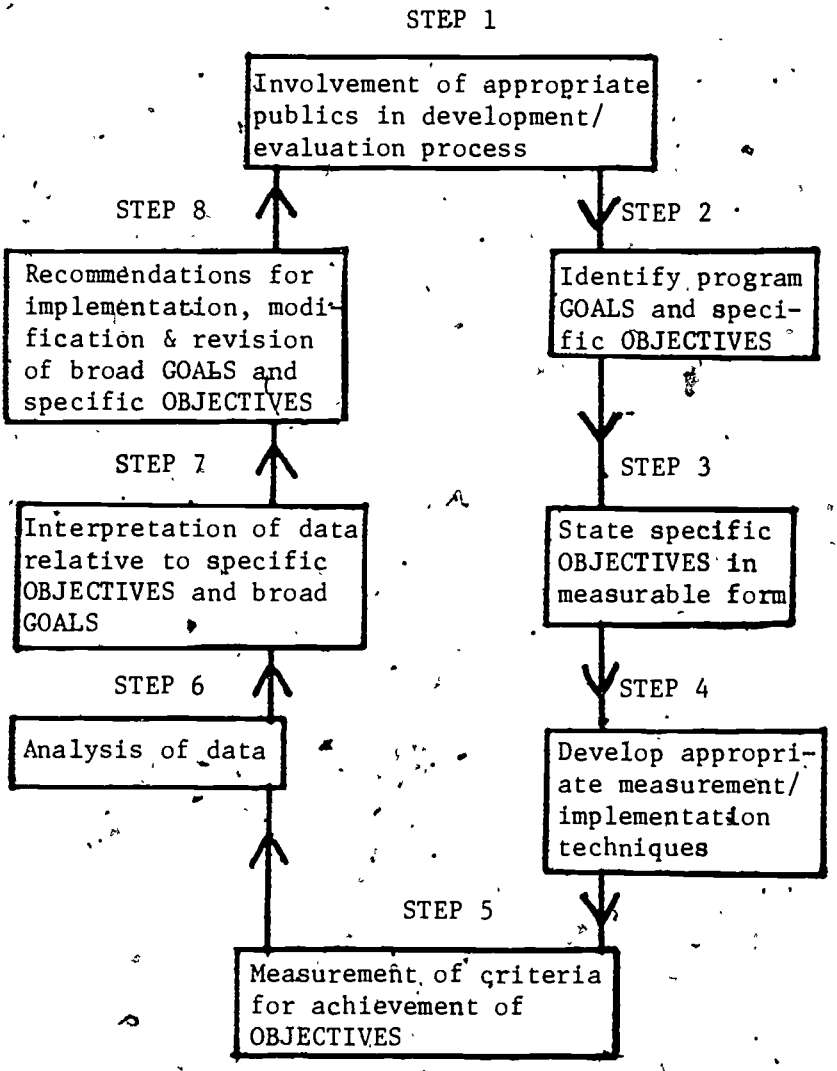
The basic premise of the PME development and evaluation process is that the process of developing programs is essentially that of evaluating programs. Both depend upon objective setting and measurement for success.

The following guidelines are presented as a framework for use by program directors in actual development and evaluation activities.

[1] AIDP Final Plan - College Effectiveness Objective

PME DEVELOPMENT/EVALUATION PROCESS

Figure 1



DEVELOPMENT OF NEW PROGRAMS

STEP 1 - Involve Appropriate Publics

Proposals for development of new programs may be initiated from many sources. In order to begin the PROCESS of developing the proposal:

* The proposal must be presented to the appropriate program director/coordinator.

* The program director along with the person(s) presenting the program proposal must perform a preliminary screening by carefully considering the following questions:

  - Can this program be successful?

  - Is the proposal related to DCCC's mission?

  - Does the institution have adequate resources to support the program?

  - Will the program duplicate programs at other area educational institutions?

* The program director and proposal presenter(s) will answer the questions in Table 1 in order to determine if the proposal merits further development. Each proposal will require individualized analysis of the answers to Table 1. However, in general, if any of the answers (p.16) receive numerical ratings of "0", the proposal should not receive further consideration. Promising proposals should receive at least four numerical ratings of 2 or greater among the criteria. For those program proposals which pass the preliminary screening, the program director must IDENTIFY and INVOLVE representatives of appropriate publics, i.e., faculty, target groups, employers, and the general public in the remaining steps of the process.

NOTE: A formal Community Needs Assessment may serve to represent the general public.

EVALUATION OF EXISTING PROGRAMS

STEP 1 - Involve Appropriate Publics

The process of evaluating an existing program should begin with the responsible program director IDENTIFYING and INVOLVING representatives of appropriate publics in the evaluation process. Appropriate publics include faculty, students, employers, and the general public.

An evaluation team must be broadly representative of various viewpoints but not so large as to be ineffective. Five to seven active members should be appropriate.

DEVELOPMENT OF NEW PROGRAMS

STEP 2 - Identify Program Goals and Objectives

The responsible program director and representatives of appropriate publics must next:

* Develop rough program ideas into a finished program concept.

* The program concept includes estimates of program demand. The need for the program must be related to specific community and student needs. Estimates of potential enrollment for the first two years of program implementation must be developed and documented.

* The program concepts also includes statements of program objectives. The program objectives should include a hierarchy of curriculum and college competencies, curriculum outline, and desired outcomes of the program. (see Figure 2)

NOTE: All program objectives should be consistent with College objectives.

EVALUATION OF EXISTING PROGRAMS

STEP 2 - Identify Program Goals and Objectives

The program director and evaluation team must next:

* Determine the program goals and objectives. Program goals are broad statements of long term purpose. Program objectives are specific statements of intended outcomes. If developed, should include curriculum and college competencies in these objectives.

* Program objectives should state how the curriculum and instructional modes utilized interact to produce desired student outcomes.

DEVELOPMENT OF NEW PROGRAMS

STEP 3 - State Specific Objectives in Measurable Form

To complete this step, the responsible program director must:

* Specify objectives which are results-oriented, specify a timeframe, are quantitative and qualitative. Refer to "An Approach to MBO Literature" distributed by Dean Evans.

  EXAMPLES: In 1981, 60% of the graduates of X program will transfer to four-year colleges in a program related to their field of study at DCCC.

  During the first year of implementation, 75% of the students entering X program will complete the first year.

* Include objectives related to a broad range of educational outcomes. Refer to NCHEMS "Program Measures" and DCCC College Competencies.

* Consult with MSPR for assistance in identifying measurable outcomes.

Presentation of Program Proposal for Concept Approval

At this point, the documentation developed in Steps 1-3 is summarized and presented to the appropriate group(s) for approval of the program concept.

NOTE: Approval of the concept is necessary before proceeding to Step 4.

EVALUATION OF EXISTING PROGRAMS

STEP 3 - State Specific Objectives in Measurable Form

To complete this step, the program director and evaluation team must:

* Refine the program objectives and restate them in measurable form. Only be developing measurable objectives can the program be evaluated.

* The program objectives must be results-oriented, specify a timeframe, and be qualitative and quantitative. Refer to "An Approach to MBO Literature" distributed by Dean Evans.

* Develop a set of objectives which cover the broad range of educational outcomes. Refer to NCHEMS "Program Measures" and DCCC College Competencies.

* Consult with MSPR for assistance in identifying measurable outcomes.

EXAMPLE: Within one year of commencement, 60% of the graduates of X program will have transferred to a four year institution in a curriculum related to their DCCC major field of study.

Within two years of commencement, 75% of the employers of the graduates of Y program will report that their DCCC employees are competent in three of four technical skill areas.

DEVELOPMENT OF NEW PROGRAMS

STEP 4 - Develop Appropriate Implementation/Measurement Techniques

To complete this step, the responsible program director must:

* Develop an implementation plan. The plan must specify a beginning date which allows for recruitment of students, hiring needed staff, procurement of supplies, etc.

* The plan must include an estimated program budget for the first two years of implementation.

* The plan must specify numbers of students to be served and projected retention-completion rates for the first two years of the implementation.

* The plan must identify existing DCCC resources to be used as well as additional resources required, space, personnel, equipment, etc.

* Develop an evaluation plan. The program proposal must specify how the success of the program will be determined at the end of the fist semester, first year, second year, etc.

Presentation of the Program Proposal for Implementation

At this point, the documentation developed through Steps 1-4 is summarized and presented with supporting materials for implementation approval by appropriate decision-makers.

NOTE: Consult with MSPR for assistance in utilizing measures from institutional outcomes assessment and development of measures specific to the program being evaluated.

EVALUATION OF EXISTING PROGRAMS

STEP 4 - Develop Appropriate Measurement Techniques

To complete this step, the program director and evaluation team must:

* Consult with MSPR for assistance in utilizing existing measures from institutional outcomes assessments and coordination of additional measures specific to the program.

* The measurement techniques to be used should be based on behaviors, tests, short and long term measures of "career success", and preferably include competency assessments.

* Develop a measurement plan which specifies when and how measurements will be conducted.

EVALUATION OF EXISTING & NEWLY IMPLEMENTED PROGRAMS

STEP 5 - Measurement of Criteria for Achievement of Objectives

The evaluation team must next implement the planned measurements systematically and with enough lead time to provide data for institutional decision-making processes.

It is anticipated that most measurements will be conducted with the assistance of the staff of MSPR.

NOTE: Steps 5 - 8 are identical for existing programs and program proposals which have been newly implemented.

EVALUATION OF EXISTING & NEWLY IMPLEMENTED PROGRAMS

STEP 6 - Analysis of Data

The evaluation team next will consult with the staff of MSBR for assistance in the technical analysis of data.

EVALUATION OF EXISTING & NEWLY IMPLEMENTED PROGRAMS

STEP 7 - Interpretation of Data

The evaluation team must then relate the results of the measurements to state objectives and determine the degree of success relative to each objective.

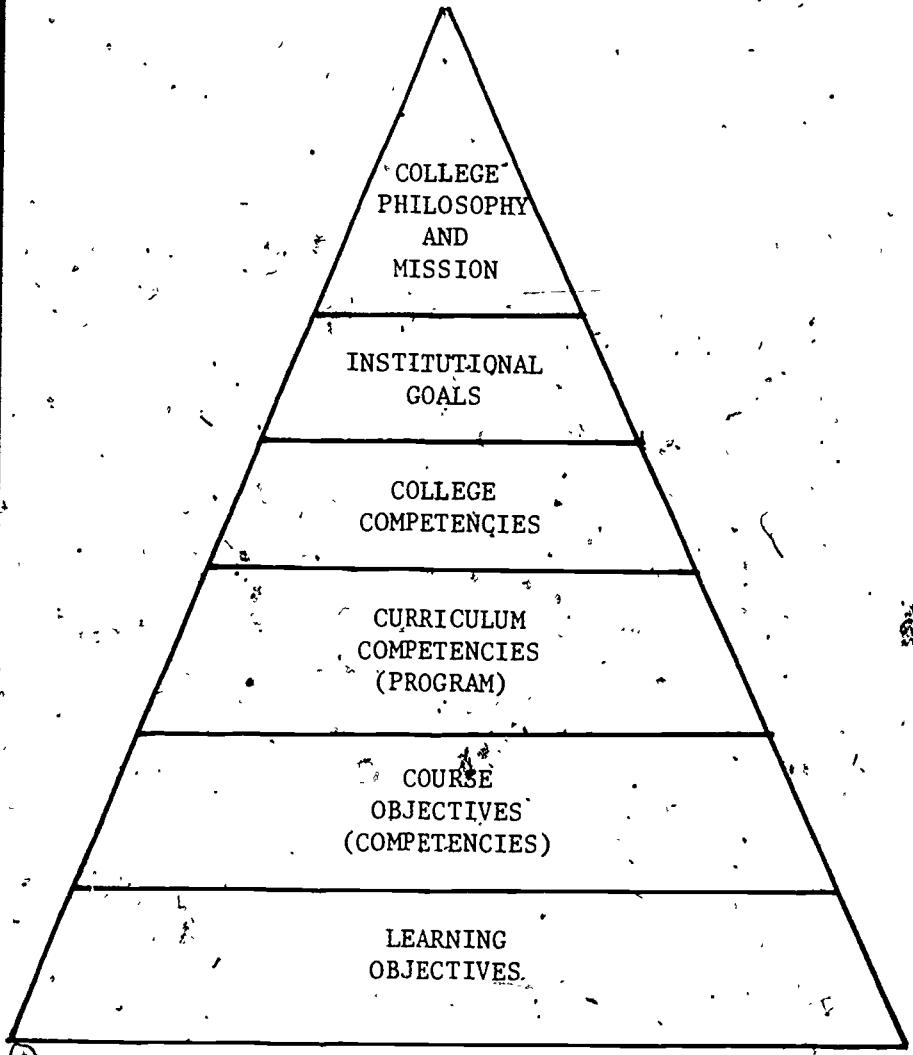
After sufficient measures are accumulated, the team must interpret the overall success of the program.

EVALUATION OF EXISTING & NEWLY IMPLEMENTED PROGRAMS

STEP 8 - Recommendations for Revision of Goals and Objectives

The cycle ends and begins anew when the program director reports the results of the evaluation to DCCC decision-makers with recommendations for modifications to the next year's program goals and objectives.

Figure 2


COLLEGE PHILOSOPHY AND MISSION
INSTITUTIONAL GOALS
COLLEGE COMPETENCIES
CURRICULUM COMPETENCIES (PROGRAM)
COURSE OBJECTIVES (COMPETENCIES)
LEARNING OBJECTIVES

PROGRAM PROPOSAL SCREENING CRITERIA

Table 1

CRITERIA	QUESTIONS	ANSWER CATAGORIES	NUMERICAL RATINGS
Mission Compata-bility	How does the proposed program fit with the stated goals of DCCC?	Does not fit.	0
		Is appropriate.	1
		Is essential to fulfill mission.	2
		Has been identified as priority development areas.	3
Need	What is the demand for the program in terms of enrollment and career opportunities for graduates?	No demonstrated demand.	0
		Evidence of student interest.	1
		Documented demand from 30 or more potential students.	2
		Documented demand for career opportunities.	3
	How long can the student demand for the program be expected to last?	No evidence to estimate.	0
		Estimate 1-3 years.	1
		Estimate 3-6 years.	2
		Estimate over 6 years.	3
	How long can career opportunities be expected to last?	No evidence to estimate.	0
		Estimate 1-3 years.	1
		Estimate 3-6 years.	2
		Estimate over 6 years.	3

Resources	How much can the program be expected to cost?	Expense greater than income.	0
		Expense equal to income.	1
		Expense less than income.	2
	Are additional resources required to implement the program?	Major physical plant addition or alteration.	0
		Laboratory facility or specialized equipment.	1
		Additional personnel.	2
		Instructional supplies.	3
Duplication	Will the program unnecessarily duplicate comparable program opportunities at other area institutions?	Program openings exist at one or more Del. Co. institutions	0
		Program openings exist at one or more "high cost" Del. Co. institutions.	1
		Program exists but openings limited at one or more Del. Co. institutions.	2
		No comparable programs exist in Del. Co.	3

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