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A Model for Evaluating the Training Programs in Family-planning Medical Services as Instituted by Five Medical Schools Under the Auspices of the American College of Obstetricians and Gynecologists

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A MODEL FOR EVALUATING THE TRAINING PROGRAMS IN FAMILY-
PLANNING MEDICAL SERVICES AS INSTITUTED BY FIVE
MEDICAL SCHOOLS UNDER THE AUSPICES OF THE
AMERICAN COLLEGE OF OBSTETRICIANS
AND GYNECOLOGISTS

by

RUTH HUNT

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CHAPTER I

REVIEW OF LITERATURE

Evaluation in education is still variously defined. To the teacher in the classroom, evaluation is synonymous with grading. To the researcher probing the deficiencies of a school system, it is the summation of the total effort implied by a complex experimental design. Historically, educational evaluation has been equated with both points of view and more.

Prior to the 1930's, evaluation meant the measurement of individual achievement primarily by means of standardized tests. But the standardized tests of that time tended to focus upon examining subject-matter areas. Many educators urged that far more should be dealt with in the assessment of school learning. In the first edition of the Encyclopedia of Educational Research, Wrightstone underscored the results of such urgings in his entry on evaluation, which begins with the following:

Evaluation is a relatively new technical term, introduced to designate a more comprehensive concept of measurement than is implied in conventional tests and examinations. From the point of view of its functions it involves the identification and formulation of a comprehensive range of major objectives of a curriculum, their definition in terms of pupil behavior, and the construction of valid, reliable, and practical instruments for appraising the specified phases of pupil behavior. The instruments of

appraisal include achievement, attitude, personality, and character tests, rating scales, questionnaires, judgment scales of products, interviews, controlled observation techniques, anecdotal records, stenographic reports, and sound recordings. In addition, evaluation includes integrating and interpreting the various indexes of behavior changes into an inclusive portrait of an individual of an educational situation.

Curriculum making and evaluation are integral and interacting parts of the educative process because truly comprehensive evaluation provides evidence of the degree to which important curricular purposes are being realized. This evidence may lead to new curricular policies which may, in turn, provide new or changed objectives to be evaluated by new methods or techniques. Hence evaluation requires the cooperation of both school personnel and test technicians.¹

Thus, in this early view, school personnel and test technicians were the ones who were to undertake the task of evaluation, with curriculum betterment as the product of their labors and educational objectives as the focal point of the process. That educational objectives designed in terms of wide ranging behavior and content should provide the basis as well as the ultimate criteria of this "new evaluation" is not surprising. Coincidental with the appearance of this point of view on evaluation was the development of an equally new point of view on educational objectives. O. J. Frederick² summarized the work in this

¹J. Wrightstone. "Evaluation," Encyclopedia of Educational Research, ed. W. S. Monroe. (New York: Macmillan Co., 1941), p. 468.

²O. J. Frederick. "Curriculum Development," Encyclopedia of Educational Research, ed. W. S. Monroe. (New York: Macmillan Co., 1941), pp. 373-385.

regard in his article "Curriculum Development" in the first edition of the Encyclopedia of Educational Research, pointing in particular to the work of a Commission of the National Education Association,³ the Evaluation Staff of the Eight-Year Study sponsored by the Progressive Education Association,⁴⁻⁵ and the Educational Policies Commission of the National Education Association.⁶

In all cases the emphasis in educational objectives was on broadening the behavioral base to encompass what Bloom et al.,⁷ and Krathwohl et al.,⁸ were later to define as the "affective domain," as well as those in the "cognitive domain." But problems had appeared with respect to measuring behaviors in the affective domain. The battle won

³"Social-Economic Goals of America," Journal of the National Education Association, XXVII (Jan., 1938), pp. 8-20.

⁴"Evaluation in the Secondary School--A Symposium," California Journal of Secondary Education, XIII (March, 1938), pp. 135-165; (April), pp. 201-225.

⁵R. W. Tyler. "Defining and Measuring Objectives of Progressive Education," Educational Research Bulletin, XV (March, 1936), pp. 67-72.

⁶Purposes of Education in American Democracy. (Washington, D.C.: National Education Association, 1938).

⁷Taxonomy of Educational Objectives, Handbook I: Cognitive Domain, ed. B. S. Bloom (New York: David McKay Co., 1956).

⁸D. R. Krathwohl, et al., Taxonomy of Educational Objectives, Handbook II: Affective Domain. (New York: David McKay Co., 1956).

in the 1920's to replace more flexible and biased instruments with objective tests had implied that measurement demanded these new examinations, that questionnaires, rating sheets, and other instruments of appraisal that Wrightstone had listed in his article for the first edition of the Encyclopedia of Educational Research were not universally accepted as suitable tools of measurement.

Without dealing directly with the problem, Wrightstone in his article on evaluation for the second edition of the Encyclopedia of Educational Research implies a compromise, maintaining his original definition of evaluation, but adding, by way of summary, Monroe's position, saying:

Evaluation is a relatively new technical term, introduced to designate a more comprehensive concept of measurement than is implied in conventional tests and examinations. Monroe...has distinguished between measurement and evaluation by indicating that the emphasis in measurement is upon single aspects of subject-matter achievement or specific skills and abilities, but that the emphasis in evaluation is upon broad personality changes and major objectives of an educational program.⁹

In the article cited¹⁰, Monroe insists that evaluation

⁹J. W. Wrightstone, "Evaluation," Encyclopedia of Educational Research (second edition), ed. W. S. Monroe. (New York: Macmillan Co., 1950), p. 403.

¹⁰W. S. Monroe, "Educational Measurement in 1920 and in 1945," Journal of Educational Research, XXXVIII (Jan., 1945), pp. 334-340.

be equated with measurement but at the same time be put into a unique category. Measurement, he says, deals with assessing achievement by means of objective tests. In evaluation, on the other hand, "...objective tests would be supplemented by essay examinations, teachers' estimates, anecdotal records, and other means of obtaining significant information."¹¹

This new view of measurement, which Monroe calls "evaluation", became necessary because "...it is maintained in 1945 that there is need for explicit measurement of all aspects of educative growth...".¹² These aspects were, for Monroe, "...work habits, interests, attitudes, and the like."¹³

Monroe's valiant effort to define evaluation once and for all was not to be the last word on the subject. Hagen and Thorndike, in their article "Evaluation" for the third edition of the Encyclopedia of Educational Research, discard the fine distinction that Monroe had made between the two types of assessment and gave yet another meaning to evaluation as follows:

Evaluation in education signifies describing something in terms of selected attributes and judging

¹¹Ibid., p. 340.

¹²Ibid., p. 339

¹³Ibid.

the degree of acceptability or suitability of that which has been described. The "something" that is to be described and judged may be any aspect of the educational scene, but it is typically (a) a total school program, (b) a curricular procedure, or (c) an individual or a group of individuals. The process of evaluating involves three distinct aspects: (a) selecting the attributes that are important for judging the worth of the specimen to be evaluated, (b) developing and applying procedures that will describe these attributes truly and accurately, and (c) synthesizing the evidence yielded by these procedures into a final judgment of worth.¹⁴

For Hagen and Thorndike, then, evaluation is to be equated with description and judgment, a view that later researchers were also to adopt. With this view the problem of discriminating between measurement and evaluation vanishes. The difference is clear.

One other difference in evaluation had also appeared by the time this article was written in 1957. Before World War II, evaluations had been carried on by groups outside the school or system under study, although with the cooperation of those within the institutions involved. After World War II, such studies became, more and more, self-evaluations. The effect this change had on the entire process was to narrow what was evaluated, turning it once more toward the assessment of classroom learning and less toward that of the final product of the school or school system.¹⁵

¹⁴E. Hagen and R. Thorndike, "Evaluation," Encyclopedia of Educational Research, ed. C. W. Harris. (New York: Macmillan Co., 1960), p. 482.

¹⁵Ibid.

One of the major problems in evaluation had always been the construction of educational objectives in terms that specified outcomes and that could be measured. Most evaluation teams devised their own systems for categorizing the behaviors aimed at, and many focused upon teacher rather than student behaviors. The Taxonomy of Educational Objectives, Handbooks I¹⁶ and II¹⁷, published in 1956, were intended to offer categories of all possible student behaviors that constituted learning outcomes. Moreover, these categories were operationalized so that specific behaviors subsumed within them could be measured.

By the beginning of the 1960's what had once been a movement called "evaluation" had become standard procedure in measurement. Although the final products of education were still not being assessed, immediate outcomes were being measured even by standardized tests on a more sophisticated level. The techniques and interest in evaluation became subsumed under curriculum development, however. Thus, the fourth edition of the Encyclopedia of Educational Research does not include an entry on evaluation.¹⁸

¹⁶Taxonomy of Educational Objectives: Handbook I.
op. cit.

¹⁷Krathwohl, op. cit.

¹⁸Encyclopedia of Educational Research, ed. R. L. Ebel.
(New York: Macmillan Co., 1969.)

The single most definitive statement on the subject in this volume is made by Heath¹⁹ in a subsection under "Curriculum Development." In this section, Heath does not define evaluation. Instead, he emphasizes what he calls "issues and problems." He fails to reckon with the impact that Title I of the Elementary and Secondary Education Act of 1965 was to have on the subject, calling for, as it did, school systems receiving funds under this authority to evaluate the effectiveness of the programs so supported. Yet, he cannot be faulted for that, since the latest reference in his entry is to Stake's article first published in 1966 as a mimeographed paper and during the following year in the Teachers' College Record.²⁰

There is some irony in Heath's ending his article with a reference to Stake's position, since this very position subsequently became a classic statement that provided a foundation for the new field of evaluation. At that point in time, however, Heath saw evaluation as something other than a major force in education, as the opening paragraphs of his article show.

In many respects the systematic evaluation of curricula is only beginning to emerge as a recog-

¹⁹Ibid., pp. 280-283.

²⁰R. E. Stake, "The Countenance of Educational Evaluation." Teachers' College Record, LXVIII (April, 1967.)

nizable field of educational research. Curriculum reform in recent years has grown out of attempts to (1) bring the modern conceptual and methodological status of subject-matter fields into the experience of students, (2) apply current pedagogical and psychological thinking to classroom instructions, and (3) use the educational process to achieve social-ideological goals. Typically, curriculum evaluation has followed, rather than inspired these changes.

The lack of enthusiasm for rigorous curriculum evaluation has had several sources. The instruments employed have frequently been insensitive to the most important effects of instruction. Conventional tests, rating scales, and questionnaires, have often been more convenient than relevant. Studies of curricular effects have answered questions of incidental interest, while issues of central concern have been left to informal intuitive judgment. Though educators and parents are aware of socio-economic, motivational, attitudinal, and emotional differences among students, these antecedent variables have been generally ignored in curriculum evaluation. Too often curricula have been defined in terms of texts, labels, and catch-phrases rather than detailed objective descriptions of the educational treatment. Also resistance to rigorous evaluation of instructional programs has come from curriculum innovators who have heavy personal and professional investments in their products. Finally, the agencies that sponsor nationwide curriculum developments have failed to support impartial evaluation of the programs they promote.²¹

Such disenchantment with evaluation as Heath displays was common to schoolmen -- and still is, for that matter. The development of evaluation as an educative force in the mid-sixties did not come primarily from the felt need within the schools but from a felt need from outside the insti-

²¹R. W. Heath, "Curriculum Evaluation," Encyclopedia of Educational Research, ed. R. L. Ebel. (New York: Macmillan Co., 1969), p. 280.

tutions, especially from government sources represented by Title I of the Elementary and Secondary Education Act of 1965 and from citizens groups.

Merwin²² in his article written in 1967 (and published in 1968) for the Sixty-eighth Yearbook of the National Society for the Study of Education states that

This new (or renewed) trend of concern with curriculum evaluation was given considerable impetus by the requirement of evaluation for Title I and Title III projects under the 1966 extension of the National Defense Education Act. As this yearbook was being prepared, the lay public and their legislative representatives, were raising increasing numbers of questions about the value of various curricular approaches and instructional materials for which funds have been appropriated. These demands for evidence of quality in educational production have been instrumental in directing efforts in evaluation toward the evaluation of groups and educational programs.²³

Tyler also notes in the same volume "...the demand being made by influential groups of citizens for appraisals that will furnish sound data to guide educational improvement,"²⁴ and cites in particular a statement to this effect

²²J. C. Merwin, "Historical Review of Changing Concepts of Evaluation," Educational Evaluation: New Roles, New Means, Sixty-eighth Yearbook of the National Society for the Study of Education, Part II (Chicago: The National Society for the Study of Education, 1969), pp. 6-25.

²³Ibid., p. 19.

²⁴R. W. Tyler, "Introduction," Educational Evaluation: New Roles, New Means, Sixty-eighth Yearbook of the National Society for the Study of Education, Part II (Chicago: The National Society for the Study of Education, 1969), p. 2.

As both authors point out, not only was evaluation of education being demanded by those who support the schools with their tax dollars, but, further, the evaluation called for was not merely of individual classrooms and curriculums but of whole educational programs and schools. Such demands led to a new look in evaluation and to some extent, to further confusion in definition.

One essential in the definition of evaluation, however, was agreed upon by early workers in the field of evaluating school programs: evaluation ultimately implies judgment as to worth. Thus, the position taken by Hagen and Thorndike in this regard became interwoven into the fabric of what was to become the specialty of evaluation.

It was not Hagen and Thorndike but Stake who dealt at this time with the problems that such a definition suggested. In his early article "The Countenance of Educational Evaluation," Stake says

Both description and judgment are essential -- in fact, they are the two basic acts of evaluation. Any individual evaluator may attempt to refrain from judging or from collecting the judgments of others. Any individual evaluator may seek only to bring to light the worth of the program. But their evaluations are incomplete. To be fully understood, the educational programs must be fully described and fully judged.²⁵

In explaining what "description" meant, Stake cited both the

²⁵Stake, op. cit., p. 525.

goals of the Eight-Year Study of the Progressive Education Association and those suggested by Cronbach in an article "Course Improvement Through Evaluation."²⁶ The goals of the Eight-Year Study had stressed assessment of such variables as attitudes and motivation as well as of knowledge and skills. Cronbach added to these variables those that constitute quality teaching. In this article Cronbach also broadened the definition of evaluation, seeing it as "...the collection and use of information to make decisions about an educational system."²⁷

Stake also, in his early article "The Countenance of Educational Evaluation," provided a model for evaluation, a model that caused some furor, primarily that part dealing with the teacher's and school's goals.²⁸ In his paper, Stake suggests that "goals," "objectives," and "intents," are synonymous terms in education since, he notes, "goals," and "objectives" had come to mean to many educators "intended student outcomes." Stake prefers, for this reason, to use "intents" defining them as "...the planned-for environmental conditions, the planned-for demonstrations, the planned-for coverage of certain subject matter, etc., as

²⁶L. Cronbach, "Course Improvement Through Evaluation," Teachers' College Record, LXIV, (May, 1963), pp. 672-683.

²⁷Ibid., p. 672.

²⁸Stake, op. cit., p. 530.

well as the planned-for behavior."²⁹ Later, he suggests that "To evaluate an educational program we must examine what teaching, as well as what learning is intended."³⁰ He further suggests that

How intentions are worded is not a criterion for inclusion. Intents can be the global goals of the Educational Policies Commission or the detailed goals of the programmer. Taxonomic, mechanistic, humanistic, even scriptural -- any mixture of goal statements are acceptable as part of the evaluation picture.³¹

Having disposed of the extent and types of intents to be included, Stake next turns to the most controversial aspect of this thesis: the standards against which the judgment of the evaluation are to be made. Stake calls for standards that are absolute rather than relative and this includes far more than just meeting the educational objectives.³²

In this regard he is in agreement with the position that Scriven takes in "The Methodology of Evaluation,"³³ first circulated as a mimeographed paper in 1965 and later

²⁹Ibid., p. 530.

³⁰Ibid., p. 531.

³¹Ibid.

³²Ibid., p. 538

³³M. Scriven, "The Methodology of Evaluation," Perspectives of Curriculum Evaluation, AERA Monograph Series on Curriculum Evaluation, No. 1. (Chicago: Rand McNally, 1967), pp. 39-83.

refined and published in the first volume of an AERA monograph series on curriculum evaluation. Scriven's main interest here is in methodology. Of particular interest in view of later developments in the specialty of evaluation is Scriven's separation of the process into two parts: formative and summative evaluation.

Summative evaluation is that which was done after the fact -- as a culminating activity. But formative evaluation is to be done, as well, according to Scriven. Such evaluation is to be done as the process of education is taking place so that the administrator can be alerted to problems that arise and that would prevent an intent or goal or objective from being met. Scriven sees the two types of evaluation as being carried out by two different evaluators, moreover.

Here, then, is the implication that one of the functions of evaluation is to prevent unforeseen difficulties obviating the achievement of goals, or at least, if the goals themselves have become the problem, of preventing unrealistic intents from destroying a program. Also implied is that evaluation must serve decision makers, for it does little good to determine that problems exist unless the fact is communicated to someone who can decide how to deal with them. Such a position reflects Cronbach's suggestion that evaluation is "...the collection and use of information to

make decisions about an educational system."³⁴

One problem had yet to be dealt with. If evaluation was best defined as a process that ultimately led to judgment as to worth, who was to make such judgments? Stake admitted that the evaluator is not always the best person to undertake the task, especially if absolute standards are to be the criteria. Stake went so far as to suggest that a team of subject specialists, including a social anthropologist, be called upon for this purpose.³⁵

To this suggestion and to others put forth by both Scriven and Stake, there was a reaction. Sorenson epitomized the dissatisfaction that some found with this view of evaluation in his article "A New Role in Education: The Evaluator,"³⁶ in which he compared the articles by Stake and Scriven, point for point, and then suggested alternatives. Finally, in his conclusion, Sorenson states his main concern.

Public school people do not need more critics -- critics abound. What these educators do need is someone to help them find and test alternative solutions to the complex problems they face daily. For the most part, university personnel who have the

³⁴Cronbach, loc. cit.

³⁵Stake, op. cit., p. 538.

³⁶G. Sorenson, "A New Role in Education: The Evaluator," UCLA Evaluation Comment, Center for the Study Evaluation of Instructional Programs, I, (Jan., 1968), pp. 1-4.

knowledge to perform the kinds of evaluation functions described above have not been taking their knowledge to the schools. They have been publishing their findings in professional journals but they have failed to make explicit to teachers the relevance of those findings for the teachers' work. Hopefully, the research and development evaluator will bridge the gap between the laboratory and the field.³⁷

In Sorenson's view, then, the evaluator is a critic when he should be a teacher of teachers. Moreover, the evaluator lives in another world from that of the teacher. This view is reminiscent of that expressed by Heath in the fourth edition of the Encyclopedia of Educational Research.³⁸

If schoolmen were less than enthusiastic about evaluation, as it had developed by the late 1960's, some researchers in the field were even more concerned. Tyler in his article "Changing Concepts of Educational Evaluation," describes the main problem which he saw arising and calls for some hard thinking and reform in the entire field of evaluation.

He summarizes the problem in this way:

The accelerating development of research in the area of educational evaluation has created a collection of concepts, facts, generalizations, and research instruments and methods that represent many inconsistencies and contradictions because new prob-

³⁷Ibid., p. 4.

³⁸Heath, loc. cit.

lems, new conditions, and new assumptions are introduced without reviewing the changes they create in the relevance and logic of the older structure.³⁹

To support his thesis, Tyler gives many examples. Primarily he suggests that if older criteria, such as success in schools that are traditional in nature, are no longer adequate, then neither are the instruments that were created to measure achievement against such criteria. Thus he is calling for a realization that new needs (new criteria) demand new measurement and evaluation procedures, "Before the mixed vegetation becomes a jungle...".⁴⁰

Such was the state of the art at the close of the 1960's, and statements such as Tyler's which capsulized the problems in evaluation, were not likely to ease the frustrations of schoolmen any more than they were likely to smooth the way for the evaluator. What was implied was that each evaluation would have to be approached in a unique fashion, for what would be done -- what would be described and judged -- would determine the instruments, the processes, the personnel, etc., that were needed. It could very well be that no measuring instruments existed to do the specific job. If the program under scrutiny were designed

³⁹R. Tyler, "Changing Concepts of Educational Evaluation," Perspectives of Curriculum Evaluation, AERO Monograph Series on Curriculum Evaluation, No. 1 (Chicago: Rand McNally, 1967), pp. 13-18.

⁴⁰Ibid., p. 18

to raise the level of comprehension of mathematics in all children to a specific level, for example, then standardized tests created to rank students and thus "fail" 15 to 20 percent of them were not suitable instruments.

Provus describes the plight of the evaluator whose task it was to assess an ESEA program in a large city school system, namely Pittsburgh.⁴¹

Those of us from university research backgrounds who started out in September of 1965 to implement the congressional mandate to evaluate ESEA programs did so with good cheer: "At last," we said, "curriculum evaluation has come into its own." We began our work by oversimplifying the problem -- by attempting to determine whether new programs were better than the ones they replaced. We did not then realize that our first problem was to find out what in fact, constituted a new program. We continued our work by applying the quasi-experimental designs that had served us well in research settings. We soon found that these designs were inapplicable. And finally we settled down to grapple with the formulation of better statements of program objectives and the design of new instruments to measure these objectives -- largely ignoring the constrictive influence our activity was having on people responsible for making new programs work.⁴²

What finally had to be done constituted first creating a model for evaluation that transcended anything originally thought necessary and then engaging in various types

⁴¹M. Provus, "Evaluation of Ongoing Programs in the Public School System," Educational Evaluation: New Roles, New Means, Sixty-eighth Yearbook of the National Society for the Study of Education, Part II. (Chicago: The National Society for the Study of Education, 1969), pp. 242-285.

⁴²Ibid., p. 243.

of investigation, some of which was quasi-experimental but most of which constituted observing processes of education as they were conducted and received by the people involved. In summary and from the experience he gained, Provus reviews the state and future of educational evaluation as follows:

There is a need for administrators to better understand that the installation of school programs, whether innovative or not, involves high risk of failure. There is a need for evaluators to better understand the kind of information administrators need if the cost of these risks is to be reduced. Both administrators and researchers must see evaluation as a continuous information-management process which serves program-improvement as well as program-assessment purposes. The complexity and concomitant high cost of effective evaluation must be recognized as a necessary management expense somewhat similar to high insurance premiums. Everyone concerned with public education must be willing to spend much larger sums for evaluation if we are to have an adequate management system for protecting federal investments under the present reform strategy of the Office of Education.

Those involved in public school reform through new program development must recognize:

1. The natural developmental stages of any new program
2. The evaluation activity that is appropriate to each stage
3. The dependence of administrators on information obtained through evaluation if they are to make sound, defensible decisions.

If a new brand of evaluation can be developed and supported in the years ahead, school programs and evaluation reports are going to look very different than they do today. Our national interest will eventually demand nothing less.⁴³

⁴³Ibid., p. 283.

Thus Provus implies that educational evaluation is not a matter for the professional evaluator alone but for the administrator working with the evaluator. Moreover, he points out the necessity of taking a realistic view of costs, since formal and professional evaluation is a complex process.

Theoreticians had spoken of the evaluator as though he were to work only with those of his own kind, but Provus and others who had come to grips with the realities of evaluating large school systems had other views that culminated in yet another definition of evaluation. Stufflebeam, Guba, Foley, Gephart, Hammond, Merriman, and Provus, who comprised the PDK Committee to write a book⁴⁴ on the subject, now offered the following as a definition of evaluation: "Evaluation is the process of delineating, obtaining, and providing useful information for judging decision alternatives."⁴⁵

This definition is reminiscent of that of Hagen and Thorndike which stated that evaluation implies judgment, and that of Stake which stated that evaluation implies description in addition to judgment. Cronbach's point of view is seen in the purpose of "...providing useful information for

⁴⁴PDK National Study Committee on Evaluation, Educational Evaluation and Decision Making. (Itasca, Ill.: F. E. Peacock, 1971.)

⁴⁵Ibid., p. xxv.

judging decision alternatives."

Heath's and Sorenson's objections, while not specifically dealt with, seem by the definition to be at least kept in mind, for while the decision alternatives are to be constructed by the evaluators, the judgment itself is to be made by the decision makers in the school system under scrutiny. These decision makers are schoolmen. The authors of this new point of view explain that

Increasingly, the practitioner is becoming tired of being criticized by his supporters and his public because he cannot provide evidence that what he has chosen to do is reasonable and workable, and by the professional evaluator because he did not start his evaluation soon enough or conduct it "rigorously" enough. Or because he did not ask the "right" questions, measure the "right" variables, or use the "right" instruments. He is tired most of all because he is trying to do a job and is not getting the help he needs and has a right to expect.

The authors of this book are attempting to meet the problem of providing that help. Evaluation can be improved in ways that are responsive to the needs of practitioners. Professional evaluators can no longer afford to give the practitioner the cavalier, arrogant, and condescending treatment that has so often characterized their relationships in the past.

Evaluation is, to choose a metaphor, seized with a great illness. Just as the patient cannot seek a cure until he admits his illness, so the "ills" of evaluation cannot be cured until they are acknowledged.⁴⁶

Following this statement, the authors evaluate the present state of evaluation and find it wanting in, among

⁴⁶Ibid., p. 4.

other things, a lack of guidelines (on the part of the agencies administering federal funds). The book attempts to remedy the situation by providing not only guidelines, but models for evaluation and approaches to it as well.

Throughout the book, the authors stress both the needs of schoolmen and the necessity of obtaining a realistic and detailed view of the system as it actually is. The delineating, obtaining, and providing of information suggested by the definition is not done through one level only, therefore, as is the case with more traditional approaches. Most of these approaches offer summative evaluation of the product, and while the information so gained is useful, it often shows what was "wrong" with the program after it is too late to affect changes necessary for meeting the original goals of instruction.

The model offered by Stufflebeam, et al., called the C.I.P.P. Model (and originally structured by Stufflebeam himself), does evaluate the product, but, in addition, offers formative evaluation at three other levels. Thus, what is offered provides for three basic evaluation activities at four levels. In other words, it offers the delineating, obtaining, and providing of information at context, input, process, and product levels as shown in Figure 1.

Each of the four levels actually is an evaluation in and of itself and is specific in its function. Context evaluation ultimately produces a rationale upon which the

Figure 1.--Structure of the C.I.P.P. Model

Purpose of Information	Areas of Evaluation			
	Context	Input	Process	Product
1. Delineating				
2. Obtaining				
3. Providing				

objectives for the learning are predicated and then determines unmet needs and missed opportunities. Finally it analyzes the factors that have been responsible for the needs' being met and the opportunities' being missed.

Input evaluation implies restrictions put upon the system. Every system is restricted in some manner and thus limited in its output. If, for example, only licensed physicians from a particular region of the United States are admitted to a program of education, then the output is limited to learnings by this unique group. Thus input evaluation foretells maximum expectancies for the system or systems implied.

Process evaluation deals with the implementation stage of education. It records and analyzes what is happen-

ing and alerts decision makers to problems and needed changes in the process of education as it is taking place.

Product evaluation is primarily a measurement phase. It attempts to measure the effects gained from the process, such effects usually being determined in terms of changes brought about in the system by means of the process.

The initial job of the evaluator consists of determining the kind of information which must be delineated before the study can begin. To this end, the evaluator works with the decision-makers to frame questions that must be answered in order that the following may be ascertained: definition of the system; decisions to be made; policies for the evaluation; assumptions to be made in evaluation. Each of these categories must ultimately be dealt with across context, input, process, and product evaluation.

Once the questions are framed, the evaluator then must seek the answers, some of which he can obtain directly from the decision-makers while others of which he must get from data. The answers to the questions constitute the delineation phase of the four evaluations and must be completed before any attempt can be made to enter the obtaining phase, for what is to be obtained depends upon what the system is composed of and what limitations may be imposed on it or on the evaluation because of peculiarities found within it.

Thus, even in its initial stages, the C.I.P.P. model offers a unique approach that marks it as different from

other evaluation models. The C.I.P.P. model suggests at the very beginning that each system is unique and that, therefore, one cannot assume that any two systems can be compared or even that any two programs within a given system can be compared. Implied here is a truism well known to researchers but often forgotten by evaluators, namely: no two sets of circumstances nor subjects are ever exactly alike and therefore criterion measures must be suited to what exists. Moreover, it implies that certain features of the system are subject to change even while the evaluation is in progress. Should such be the case, then the evaluator must alter the model specified for the study. Every evaluation model must, therefore, have built into it a means for determining such changes, informing the decision-makers of them, and restructuring those phases of the evaluation that will be affected.

In the obtaining information stage, particularly, such alterations can create problems, especially in those areas being investigated by research necessitating experimental design. But experimental design has limited, if important, use in the total structure of the evaluation model. Stufflebeam discusses this point in his article "The Use of Experimental Design in Educational Evaluation."⁴⁷ He sug-

⁴⁷D. Stufflebeam, "The Use of Experimental Design in Educational Evaluation," Journal of Educational Measurement, VIII, (Winter, 1971), pp. 267-274.

gests that experimental design has its use only at the input and product evaluation levels and then with respect to only certain aspects of them and providing that "...the assumptions required by the experimental design can be met...".⁴⁸

Experimental design at the input level can be efficacious in answering such a question as "What are the operating characteristics and effects of competing strategies under pilot conditions."⁴⁹ Yet, even here, Stufflebeam suggests that an alternative technique exists, namely:

"Querying ERIC, visitations to sites where the competing strategies are operating."⁵⁰

Experimental design has its "strongest" use in answering such questions as "Are objectives being achieved," and "What probability statements can be made about the relationship between procedural specifications and actual project attainments?"⁵¹ To the first question, Stufflebeam sees an alternative for answering, namely: "Comparison of attainment measures with absolute standards."⁵² To the second question, however, he sees no satisfactory alternative technique for answering. Stufflebeam, in this article, is

⁴⁸Ibid., p. 270

⁴⁹Ibid.

⁵⁰Ibid.

⁵¹Ibid., p. 272

⁵²Ibid.

exploring ways to use experimental design, not to discard it, but even so, he finds the technique of limited usefulness.

What emerges from such an investigation is a clearer understanding of how evaluation differs from the more rigorous forms of research. Evaluation is eclectic in its methodology. Research epitomized by experimental design plays a role in this methodology, but is not central to it. One obvious reason is that such research must be rigid; evaluation must be fluid. Such research is laboratory-oriented; evaluation is field-oriented.

As Provus has pointed out, in the early stages of learning how to evaluate school programs, the evaluators, who were researchers trained in universities, had attempted to carry into their new endeavors the rigors of what they had learned in the laboratory. But they soon found that compromise had to be made with what they had been taught in the laboratory.

The compromise was occasioned by the results of working in a living situation where but few if any variables could be controlled in the empirical sense. But Provus and others who have found themselves in such a situation were not the only ones to come face to face with the problems inherent in attempting to apply scientific research techniques to a world created and sustained by men rather than by nature. The Seventy-first Yearbook of the National Society

for the Study of Education⁵³ deals with just such problems and concludes with what should be, but has not been, obvious: Educational research cannot mirror scientific research. Gowin explains it this way:

Most commonly, criteria for creating, directing, and judging educational research come from concepts of science (philosophy of science) and the customs of research practice. Usually the researcher tries to get clear about the procedures of research practice before undertaking to use them in an educational setting. The main recommendation of this paper is that this familiar pattern be changed. The researcher should first try to be clear about the concepts, methods, and procedures of educational practice so as to be able to select phenomena to study that pass as educational phenomena and then adapt, invent, or utilize relevant research procedures. The reason for this recommendation is simply that many events which are educational never get studied now, and many events which educational researchers concern themselves with now have little or nothing to do with education. Further, to follow this recommendation would force researchers to argue first about what is and is not educational, rather than discussing only what is and is not scientific. This kind of discussion would lead to a thorough analysis of educational theories, concepts, and practices.

It is my belief that this analysis would reveal a most significant fact about educational phenomena: They are man-made (artifactual), not natural. They are therefore not likely to yield laws and other modes of invariance such as the natural sciences report in that domain. Whatever regularities researchers are to find in educational phenomena will have been determined by human beings in a social context. Normative judgments (rules, policies, value judgments, ideals which govern action) condition greatly the phenomena to be studied. Change a belief system and

⁵³Philosophical Redirection of Educational Research, Seventy-first Yearbook of the National Society for the Study of Education, Part I. (Chicago: The National Society for the Study of Education, 1972.)

the content of research reports will be very different.⁵⁴

Not the least of the reasons for the failure of so many evaluations has been that those in charge have insisted upon a methodology that was consistent with and limited by the requirements of empirical research. Stufflebeam, Provus, and others have, through experience, found that such an approach to a dynamic, living, system simply does not work. They have, by their actions, joined with Gowin's point of view.

The C.I.P.P. model is a complex structure calling for a team of evaluators. It attempts to be adequate to all the needs of an evaluation of a large school system. Yet, the framework is simple and applicable to far more limited systems than those described. This thesis contends that it is applicable not only to the compact systems represented by postgraduate medical courses, but also to the even shorter versions referred to as "continuing education courses."

⁵⁴D. Gowin, Is Educational Research Distinctive?, Seventy-first Yearbook of the National Society for the Study of Education, Part I. (Chicago: The National Society for the Study of Education, 1972), pp. 9-10.

THE NEED FOR EVALUATION IN MEDICAL EDUCATION

The attempt to apply the C.I.P.P. model or any model to the needs of medical evaluation is no idle intellectual exercise. Like the public schools, medical schools, specialty societies, and others who receive federal funds for educational purposes receive at the same time, directives calling for evaluations of the program so financed. But even beyond this immediate need for evaluation is another need that is rapidly approaching. Medical education is presently undergoing radical change both within and without the medical colleges themselves. As the change becomes a reality, evaluation needs are being felt by the profession itself.

The Flexner Report of 1910⁵⁵ occasioned a radical reform in medical education that made the university the prime agency for the profession's learning and the basic sciences the foundation for its practice. Medical research, carried on primarily by scientists rather than by physicians, became an integral part of the medical schools' product, and knowledge grew at an unexpected rate. Until about 1940, however, although medical education in the basic sciences was under the control of the scientist who worked within the school

⁵⁵A. Flexner, Medical Education in the United States and Canada. A Report to the Carnegie Foundation for the Advancement of Teaching, Bulletin No. 4. (Boston: The Merry Mount Press, 1910.)

structure, education in clinical medicine was in the hands of the physician who worked within the hospital structure. Slowly this system began to change, and scientists became a part of the clinical area as did their research. Knowledge at all levels of medicine increased and more and more medical school graduates began to specialize, until, by the late 1960's nearly 90 percent of all students who graduated from U.S. medical schools were entering residency programs.⁵⁶

The trend in specialization has continued because the knowledge explosion in medicine has continued. In the 1970's, therefore, medical education was facing its second radical reform.

The Committee on Goals and Priorities of the National Board of Medical Examiners has suggested that in the near future medical education and licensure will resemble the model in Figure 2.

According to this model, the M.D. degree would not be sufficient to obtain licensure for solo practice, such licensure depending upon completion of residency education or certification in a specialty. Recertification and relicensure, moreover, would be a continuing legal as well as moral need, motivating the practitioner to seek competent continu-

⁵⁶C. Mueller, and M. Sabshin, "Trends in Graduate Education, Licensure, and Certification: A Tracking Study of 1960 and 1964 U.S. Medical Graduates." Study undertaken for the Committee on Goals and Priorities of the National Board of Medical Examiners, to be published.

Figure 2.--A Future Evaluation System For
Certification and Licensure*

	Undergraduate A	Graduate B	Practice C
<u>EDUCATION:</u>	M.D. Degree	Completion of Graduate (Residency) Education	
<u>EVALUATION:</u>	General Competence	Specialty Competence	Recertification of Continued Competence
<u>LICENSURE:</u>	Permit to Practice in a Supervised Setting	Full License for Independent Practice	? Relicensure

*Adapted from Evaluation in the Continuum of Medical Education. Report of the Committee on Goals and Priorities of the National Board of Medical Examiners (Philadelphia: National Board of Medical Examiners, June, 1973), p. 51.

ing education in his specialty.

Such a model seems to be, at this point in time, a realistic outcome of changes that have been occurring in both education and licensure during the 1970's. The time-honored freestanding internship was scheduled to be discontinued in 1975, allowing the individual to use his first year following graduation from medical school as his first year of residency in a specialty.⁵⁷ A new specialty called "Family Practice" has developed in order to meet the need for more primary-care physicians whose numbers have been severely eroded as the general practitioner has begun to disappear because of increased specialization.

New Mexico, Kansas, and Maryland had all, by 1973, passed legislation allowing state medical boards to require that physicians holding licenses in their respective states give evidence of having pursued some form of acceptable continuing education within a given period of time if the license is to remain in force. In addition, the specialty societies themselves are calling for periodic recertification based on acceptable continuing education. There is no reason to believe that the trend toward increased specialization and toward relicensure and recertification will reverse itself. Indeed, there is every reason to believe just

⁵⁷"Medical Education in the United States 1971-1972." Journal of the American Medical Association, CCXXII (June, 1972.)

the opposite.

Throughout all these changes is the implied need for continual learning on the part of the physician and the additionally implied need for methods of evaluation that will serve to determine the suitability of the continuing education actually offered. Not all courses or programs are of equal value. Those charged with determining the worth of such programs for purposes of relicensure or recertification are aware of that fact. Now at issue is how judgment as to the relative worth of any given program can be made realistically.

Evaluating continuing education programs in medicine is not like evaluating school curriculums, although there are similarities between the two. For one thing, the time element in continuing education is considerably shorter than that allowed for even a mini course. For another, the heterogeneity of the audience is greater as is the sophistication of the equipment often required. Possibly the most obvious difference lies in the improbability of being able to measure learning outcomes by paper-and-pencil achievement tests.

Like the public school, however, the various segments of medical education require a practical approach to the problem of evaluation. Moreover, the problem of defining ultimate criteria is crucial and cannot await years of empirical research for its determination. Medical educators

know what their goals are, but they do not necessarily know how to determine whether they have met these goals. These goals deal with the real world, with the capacity of the physician to function as a practitioner of modern medicine. Therefore, the evaluation models used to determine how well such goals are met must also be capable of working in the real world. The C.I.P.P. model is designed to do just that.

CHAPTER II

DELINEATING INFORMATION FOR THE TRAINING PROGRAMS

The programs at issue were courses of training in family-planning medical services instituted by medical schools through a grant given to The American College of Obstetricians and Gynecologists by the Health Services and Mental Health Administration of the Department of Health, Education and Welfare, Public Health Service. By the terms of the contract, HSM 110-72-276, (see Appendix A), the College was to let subcontracts to five medical schools of its choosing for the purpose of developing and delivering continuing education programs to physicians as specified.

The schools were to be chosen not only by virtue of the interest they displayed in developing family-planning courses and in the facilities they had for delivering programs, but also on the basis of their geographic location. Since the purpose of the funds granted was to afford continuing education in family planning for practicing physicians throughout the United States, to facilitate the students' attendance it was established that each of the five schools should service a particular area of the country. Therefore, one school had to be chosen from each of the following regions: West, Southwest, South, Midwest, and East. The bound-

aries for these regions, together with the approximate location of the five schools, are shown in Figure 3.

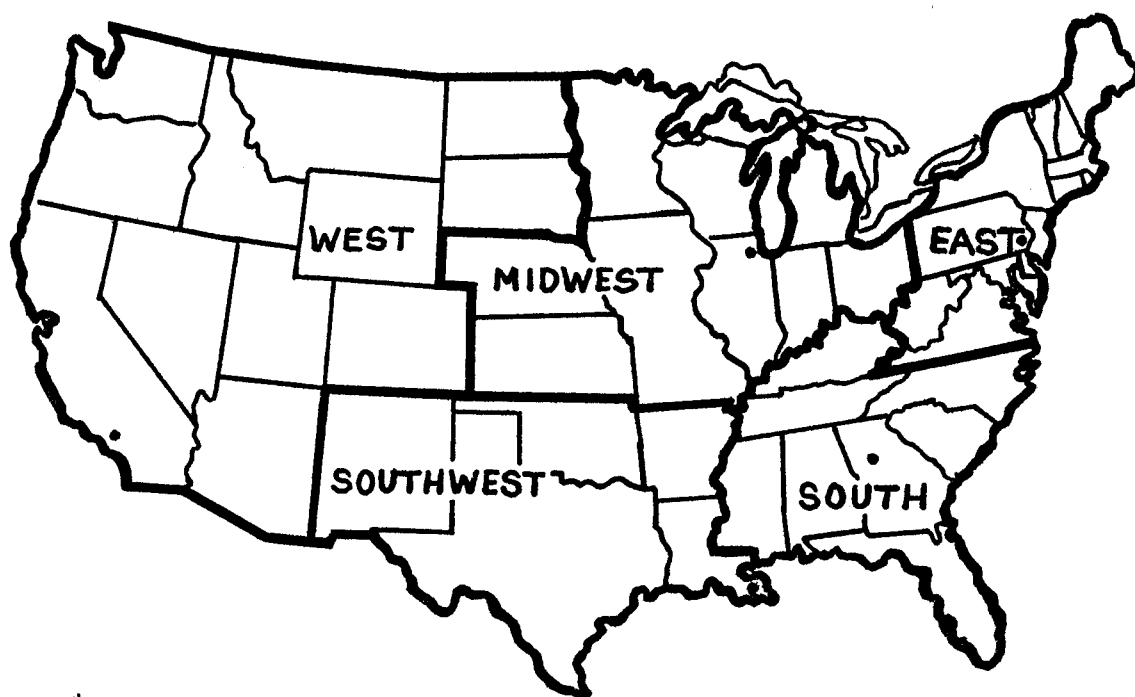
The contract attempted to afford to each of the teaching institutions selected a wide latitude in terms of course length, number of students that would be admitted to any session, teaching methodology, and emphasis to be placed on any single area of the total curriculum. The curriculum itself, although not structured by the College, was to include seven areas described thusly:

- (1) Personal health and social benefits derived from fertility regulation.
- (2) Pertinent reproductive anatomy, physiology and biochemistry.
- (3) Methods of contraception (including sterilization) currently available, and their associated indications, contraindications, efficacy, mortality, and morbidity.
- (4) The rational usage of history, physical and laboratory examinations necessary for provision of contraceptive services and for infertility diagnosis.
- (5) The role of the paraprofessional and related disciplines necessary for high quality delivery of family planning care.
- (6) Emotional and social factors and their relationship to fertility regulation.
- (7) Special considerations appropriate in the provision of services to adolescents, minority groups and the indigent, including information concerning the knowledge, aptitudes and practices (KAP) of these groups.¹

The curriculum was also to be presented in didactic and

¹Negotiated Contract HSM 110-72-276, Assisting Five Medical Institutions to Develop Training Programs in Family Planning Medical Services, Issued by The Health Services and Mental Health Administration, Department of Health, Education, and Welfare, 1972, p. 6.

Figure 3.--Schools* and Their Regions



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PHYSICIAN EDUCATION PROGRAM SITES

clinical settings, as needs dictated.

The five medical schools selected to present the courses in 1973 were those associated with the University of California at Los Angeles; the University of Chicago; Emory University, Atlanta; Louisiana State University, New Orleans; and Temple University, Philadelphia. Each of the schools entered into contract with the College, thus being a subcontractor to the original contract. Each school in its contract described, among other things, the curriculum it would present and the approximate methodology to be used. (See Appendix B.)

Four of the schools elected a similar strategy concerning the total curriculum, that is, presentation of didactic subjects to all participants, with clinical sessions offered on an elective basis. Emory's concept was unique. This school planned to use some of the funds for creating a film on the philosophy of family planning, contraceptive techniques, and sterilization. Other funds were to be used primarily for conducting many short-term courses on various segments of the total curriculum. For example, nine courses, each of which was to last two days, were planned on laparoscopy. Each course would accommodate three physicians and would be held at University Hospital at Jacksonville, Florida. No course session, therefore, presented the full curriculum to any student. The College accepted Emory's unique plan in a spirit of experimentation and agreed to leave mat-

ters of evaluation primarily in the school's hands. This dissertation does not attempt to model Emory's unique approach nor does it use any of Emory's students in its research into possible means for eliciting information that will serve as criterion variables.

The contract HSM 110-72-276 was renewed for the year 1973-74. At that time Emory declined further involvement with the program since some of its staff, including the physician who had directed the family-planning course, left the school for positions elsewhere. The Medical College of Georgia, Augusta, Georgia replaced Emory as one of the subcontractors, the other four continuing from the previous year. The University of Georgia adapted to its needs a model resembling that used by Louisiana State. Thus during the second year, all five schools presented what four had given during the previous year: variations on the original general plan for the curriculum. In other words these schools offered to all students the same didactic material and clinical sessions on an elective basis.

Although each of the schools was directed to conduct its own evaluation of its course, the College was interested in a model for evaluation of all of the programs, a model which might transcend those needed for the family-planning programs and might be applicable in general form to other continuing education efforts. The author of this dissertation had suggested that the C.I.P.P. approach might lead to

such a model and applied some aspects of it to the programs at hand.

The C.I.P.P. model affords a structure suitable to the needs of evaluating postgraduate medical education primarily because it calls for analysis not only of product, but also of content and input and process, and, further, calls for such analysis along three dimensions required for judging decision alternatives: delineating information, obtaining information, and providing information.

The delineation of the four types of evaluation is modeled in Figure 4.

Figure 4.--Information To Be Delineated
For The Study

Types of Information	Areas of Evaluation			
	Context	Input	Process	Product
Define System or Systems				
Specify Decisions				
State Evaluation Policies				
State Evaluation Assumptions				

The step of delineation organizes a basis for modeling the obtaining and the reporting of information which in many other approaches to the problem are actually designated as evaluation. In the C.I.P.P. approach, the delineation is treated as an evaluation in and of itself. It deals ultimately with the questions that the decision-makers want answered, but these questions are framed by the evaluator in terms of the system to be evaluated and the restrictions imposed upon both that system and the evaluative techniques by such matters as policy.

The delineating phase of Context evaluation seeks to determine such factors as elements and boundaries of the system or systems; antecedents that led to the evaluation; names and jobs of the chief decision-makers; possible criterion variables; factors involved in stating evaluation policies; and what assumptions may be made. These factors must then, in Input evaluation, be judged against limitations necessarily present in any system; for example, they must be seen against limitations imposed by policy and altered accordingly.

Evaluation of the process of delineating information may be simple or complex, depending upon the variety of sources available to the purpose. Product evaluation in the delineation phase should result in a broad description of the system or systems and their elements and boundaries; description of the antecedents that led to the need for eval-

uation; description of the role of each decision-maker and, in accordance with that decision-maker's function, the determination of the stages at which feedback should be given to him; formulation of questions to be answered and criterion variables that can be used to answer them; statement of policy as it affects obtaining data, and authority to receive feedback; and, finally, a model of the evaluative design for obtaining and for reporting information.

The model that emerges thus is predicated on the practical constraints of the actual situation, rather than a theoretical view of what might be done if conditions paralleled the evaluator's view of the ideal. It is possible that no model will emerge from the delineation phase when this phase of evaluation shows clearly that the restraints within the system prevent the obtaining of data necessary for making judgments about the system. Thus proper delineation can prevent an attempt to obtain the unobtainable.

DELINEATING INFORMATION FOR THE EVALUATION
OF THE FAMILY-PLANNING PROGRAMS

Four general areas of information need to be delineated across Context, Input, Process, and Product evaluation. They are definition of the system or systems; types of decision needs and persons who should make decisions, evaluation policies; and evaluation assumptions.

In defining the system, Context evaluation called for determining elements, characteristics, and boundaries within it, while Input evaluation suggested determining the limitations implied as to type of students, faculty, institution setting, curriculum, time, and cost. The Process by which such information could be delineated consisted primarily of reviewing the terms of the contract and talking with Louise Tyrer, M.D., Project Director, Family Planning Division of the College, and William A. Granzig, Ph.D., the then Administrator, Department of Physician Education, of the College, both of whom could interpret not only details of the contract but also aspects of College policy that might affect any area of the program. In fact, virtually all of Process evaluation in the delineating stage depended upon investigating the terms of the contract and eliciting information from Drs. Tyrer and Granzig. Product evaluation is designed to yield a model of the system in terms of what

Context, Input, and Process evaluation specified. Thus, here, it culminates in the description of the total system.

In the first stage of delineation of information concerning elements, characteristics, and boundaries of the system, the work had to be done primarily in terms of the limitations discovered by Input evaluation, since who ultimately would be chosen as students was a matter exclusively in the province of the participating schools acting under the directives and prohibitions of the contract and College policy. Moreover, the schools themselves, which constituted the setting of the system, had to be chosen in terms of restrictions specified by the contract.

Insofar as the institutions were concerned, a minimum of five had to be chosen, each of which was so situated as to offer easy access to all areas of the geographic region it was to serve. Institutions located in major cities, therefore, became prime targets, since large cities usually afford bus, rail, and air transportation facilities as well as highways that make automobile transportation practical. Moreover, if the courses offered were to exceed a time-span of a morning or afternoon, then facilities for housing students had to be close at hand. Unless the institution had a continuing education center with housing facilities, then hotels or motels within the immediate vicinity were needed. Again, large cities were the most obvious locations for such facilities. Both meeting rooms of suitable size for didactic

sessions and hospital facilities for clinical sessions had to be in some way provided also.

Clinical material for instruction for up to 25 students was another requirement by the contract; therefore, a hospital with large free clinics became a necessary facility of the school, and, once more, a large city is the most likely location in which to meet such needs. Implied also was an institution the facilities of which provided not only undergraduate medical education but also intern and residency programs in obstetrics and gynecology in general and family planning in particular. The graduate programs implied a particularly able staff in obstetrics and gynecology, denoted by both their individual national reputations and their academic credentials, particularly evidence of board certification.

The institution which had, in addition to these attributes, training programs for allied health personnel in family planning was especially favored for selection, since this fact implied some formal program in family planning at the clinical level. Again, institutions in large cities were most likely to be able to comply.

Elements of the system included, in addition to the facilities cited previously, the physician participants, the faculty, and the clinic patients presented or seen during the clinic sessions. The physician-students were restricted to medical school graduates licensed to practice in

the United States, its territories, or its commonwealth. Preference was to be given to physicians in family-planning programs, general practitioners, and university and college health physicians. The contract does not prohibit admitting other physicians to the courses but implies that where the number of applicants may exceed the number of persons who can be accommodated, then preference should be given to those whose practice can be categorized as cited. No specific number of students allowed per course is stated; however, facilities are called for that will accommodate 25 in each course.

Nothing is directly stated in the contract concerning the criteria for selecting faculty. It can rightly be assumed that some faculty would have to be chosen from among licensed physicians, since clinical training that could be given only by a licensed physician is included in the curriculum that each of the institutions is called upon by contract to present.

The curriculum as outlined in the contract is broad in its implications; however, it calls for training not only in medicine but also in psychology and sociology, particularly with respect to sexual practices. One area commonly dealt with in some of the subject matter of the curriculum, however, was not mentioned in the contract, namely, abortion. The teaching institutions selected were made aware of the College's position on this subject with respect to family

planning. This position states that although abortion obviously is one means by which population can be controlled, it is not a method of fertility regulation and, therefore, not a part of family planning. The funding agency also had made that distinction with respect to abortion. Thus there was a prohibition against teaching abortion techniques in these courses. At the time the courses began, providing medical abortion on demand was illegal in most states, although therapeutic abortion was included in the practice acts of all of the states. During the two-year period during which the courses were conducted, providing medical abortion on demand became a legal procedure; however, for the reasons stated, the techniques remained outside the province of the courses.

The setting for the didactic sessions of necessity had to be a hotel meeting room, facilities in a continuing education complex, or classrooms or other adequate space within a medical school or hospital. Clinical sessions had to be delivered within a hospital or clinic. What might be chosen depended upon cost as well as availability, however. In fact, what was offered generally depended upon cost as did the number of students who could be accommodated in any single course.

The contract awards a total of \$283,687 to the College for the purpose of presenting, consulting on, and administering the courses. The contract also specifies a

per diem for all family-planning and university-health physicians. The College extended this prescription to include all students. The per diem agreed upon was \$26, and was to be paid from the \$37,800 which each institution received from the College for the purpose of presenting its courses during one contract year.

Time for any course is variable according to the contract, depending only upon how long it might take for the students to master the prescribed program. Each institution chose a different approach, including a different time sequence. (See Appendix B.)

Table 1 summarizes the delineation of information for defining the system or systems across Context, Input, and Process evaluation. Product evaluation for the delineation is incorporated into Chapter III as part of the completed model for the obtaining phase.

Specification of decisions across Context, Input, Process, and Product evaluation ultimately leads to a description of the antecedents that gave rise to the need for evaluation; description of the role of each decision-maker (who is named) and the stage at which feedback should be given to him; and formulation of the questions to be answered as well as criterion variables for these questions. Antecedents that led to evaluation were, in this case, simply the contractual statement calling for such evaluation. By contract each school must evaluate its own courses. In

Table 1.--Summary of Delineation of Information for Defining System or Systems Across Context, Input, and Process Evaluation

Item (Context)	Restriction (Input)	Source of Restriction (Process)
Students	1. Licensure: hold license to practice in United States or Commonwealth	Implied by contract
	2. Type of Practice: any type, but preference given to generalists, family-planning practitioners, and those practicing in university or college health facilities.	Stated in contract
	3. Residence: in geographic area prescribed for institution the student attends	Stated in contract
	4. Cost to student: costs incurred beyond <u>per diem</u> of \$26	Stated in contract
Faculty	1. Board certified obstetricians and gynecologists	Implied in contract
	2. Non-physicians who are specialists in psychology, sociology, administration of family-planning clinics, and others concerned with fertility control	Implied in contract
Teaching Institution	1. Size: facilities for 25 students in didactic sessions	Stated in contract
	2. Teaching facilities: place for didactic sessions; clinical facilities for teaching medical techniques; clinical facilities for teaching surgical techniques	Stated in contract
	3. Equipment and patients: fully furnished room for didactic sessions providing for projectors, screen, and other similar teaching aids; fully equipped clinic with surgery; patients for presentation as needed	Stated in contract
	4. Family-planning clinic (or cooperating family-planning agency) for demonstration of practice and administration aspects of a family-planning service	Stated in contract

Table 1.--Summary of Delineation of Information for Defining System or Systems Across Context, Input, and Process Evaluation

Item (Context)	Restriction (Input)	Source of Restriction (Process)
Curriculum	1. Didactic: medical, psychological, and sociological aspects of human sexuality and fertility control through contraception	Stated in contract
	2. Clinical: any allied material, but must offer physician an opportunity to learn proper insertion of the IUD	Stated in contract
	3. No didactic or clinical content on abortion techniques	Stated in College policy; implied in federal policy
Location	1. Easily accessible to all in geographic area	Implied in contract
	2. City of sufficient size to afford clinic patients needed	Implied in contract
	3. City of sufficient size to afford housing for students	Implied in contract
Personnel other than Faculty	1. Secretarial and clerical personnel to handle registration and other such tasks of running sessions	Implied by nature of courses as provided by contract
	2. Evaluator	Indirectly stated by requirement of evaluation

addition, however, the College wanted to explore the use of the questionnaire or any other possible technique as suitable means for eliciting certain types of information from students after they had returned to practice.

The reason for the College's added interest in evaluation stems from the fact that more and more all specialty organizations are forced into the necessity of determining what constitutes worthy continuing education. Means of judging worth, or evaluation, of such education, therefore, is a paramount concern to the College.

The only limitations for evaluation that the antecedents imposed were that what was judged had to be a part of the system under study and that the decision-makers specified by the contract had to approve the means. The decision-makers at the College level were Drs. Tyrer and Granzig. At the school level they were primarily those who directed the institution's courses under the dictates of the subcontract.

At the College level, two types of information were wanted: (1) information that would determine whether contractual obligations had been met; (2) information that would determine whether the courses had been successful. The criteria for each type of information is easily determined. The capability for obtaining the various types of responses that constitute possible criterion variables are, in the case of the second type of information, not easily received.

For example, the ultimate criterion for the determination of the success of the courses is that the physicians who took them altered their practices to reflect what had been taught. Short of monitoring a physician's practice habits before and after the course, one cannot be certain that such has been the case. Such action on the part of the evaluator is precluded not only by certain legal restrictions concerning a patient's right to privacy, but also by policy as framed by the College and other medical groups.

Peer review, wherein a physician's peers evaluate the records, skills, etc. of a colleague represents such a criterion to some degree but was outside the scope of the possible evaluative methodology for this program. The best means available for obtaining such information seemed to be a questionnaire which asked the physician directly about his change in practice habits. Even here, certain limitations were imposed. The College, by virtue of its own policy, requires that any and all questionnaires dealing with the practice habits of physicians be responded to anonymously. Moreover, all such instruments sponsored by the College must be returned to a member of the College staff who has administrative status.

Achievement tests of any kind given during any phase of the course was also prohibited by College policy, unless they are self-evaluation tests that the physician is free to take on his own. Thus, the ordinary paper-and-pencil

achievement test was prohibited. Such a prohibition was not considered a difficulty, since achievement tests as a means of determining the worth of continuing education leave much to be desired. Even should a student show, by his responses to test items, that he has mastered the content of a curriculum, one has no guarantee that he will put into practice what he has learned. Thus the ultimate criterion against which one wanted to measure the success of these courses was not met in such tests.

Observation of a course in progress and informal questioning of students and faculty were other means by which the evaluation could take place. That the schools themselves might evaluate their success using criterion variables other than change in practice habits was not made possible by either the contract or College policy. The contract does not specify the criteria nor does it specify the methodology to be used for that evaluation. It was to be assumed, therefore, that the evaluation that would be done by the teaching institutions themselves would be at the Product stage. Moreover, it could further be assumed that such evaluation would use data compiled by having the students respond to questions not of an achievement type but rather of a like or dislike type. Why such would be a fair assumption is predicated upon the fact that most continuing education courses are currently evaluated in a like manner.

The most common type of questionnaire in use consists

of items that deal with the student's opinion of how well an instructor taught a course, of how much interest the course was to the student, of what practical advantage the student felt the content might be to him in his future practice, and whether the student felt that there was a lack of some content that he would have liked to have learned about.

Such items seldom specify beyond generalities so that should the students respond negatively to questions about the worth of the instructor, just what the weakness in the presentation might have been cannot be determined. Evaluations based on such questionnaires are not useless. They merely are not specific and often miss the more important information.

Table 2 summarizes the delineation of information for specifying decisions across Context, Input, and Process evaluation. Product evaluation for this delineation is incorporated into Chapter III as part of the completed model for the obtaining phase.

Delineating information about evaluation policies across Context, Input, Process, and Product evaluation is a relatively simple procedure, since not many such policies have as yet been constructed by the College and no such policies are incorporated in the contract nor have they been stated by the federal agency funding the program. In terms of context evaluation, the only factors involved in stating evaluation policies are those involved in doing the evalua-

Table 2.--Summary of Delineation of Information for Specifying Decisions Across Context, Input, and Process Evaluation

Item (Context)	Restriction (Input)	Source of Restriction (Process)
Antecedent that led to need for evaluation:		
1. Statement in contract	No restrictions	Stated in contract
2. Desire of College to determine means of evaluating continuing education programs	1. No achievement tests 2. No peer review or similar methodology 3. Questionnaires and similar instruments must permit the respondent to remain anonymous 4. Observation of courses in progress and interviewing techniques must preserve respondent's anonymity	Statements by Drs. Tyrer and Granzig re College policy
Chief decision-makers and their roles:		
1. Louise Tyrer, M.D., Project Director	Follow contract and College policy	Implied by contract
2. William A. Granzig, Ph.D., Project Administrator	Follow contract and College policy	Implied by contract
3. Directors of the Teaching Institutions' programs presented under sub-contracts of the College	Follow contract and College policy	Implied by contract
4. Faculty and other persons involved in delivering the courses	Follow contract and College policy	Implied by contract

Table 2.--Summary of Delineation of Information for Specifying Decisions Across Context, Input, and Process Evaluation

Item (Context)	Restriction (Input)	Source of Restriction (Process)
Type of information desired (all at Col- lege level):		
1. Did teaching in- stitutions meet contractual obli- gations?	Investigate course contents; selection of students; payment of <u>per diem</u> , and related factors	Drs. Tyrer and Granzig
2. Were courses suc- cessful in improv- ing family planning care?	How did physicians re- late to course learn- ings after they resumed their practices?	Drs. Tyrer and Granzig
Criterion variables:		
1. Adherence to con- tract directions	College questionnaires; evaluations by the teaching institutions, subcontracts and bud- gets; informal inter- views with faculty and with students	Statements in contract; College policy
2. Student physicians' view of courses: a. Were expecta- tions met? b. Were needs met? c. Weaknesses d. Strengths e. What unexpected and unintended outcomes resulted?	College questionnaire; evaluations by the teaching institutions	Teaching institu- tions' policy; College policy
3. Change in the student- physicians' practice of techniques of fam- ily planning after return to practice	College questionnaire	Statements in contract; College policy

tion itself. Since no budget was set aside for evaluation, one policy that grew out of the practical necessity thus imposed was that at the College level evaluation had to be done by someone who was willing to work without payment. At the level of the teaching institutions, the same restriction applied, since here, too, evaluation was not a budget item. Such sophisticated technology as represented by computers could not be used, since the cost of examining data by this means was clearly beyond a "no budget" situation. Even printing and mailing questionnaires, the cost for which could be anticipated to be at least \$300, seemed impossible. Anything helpful, including evaluations done by the teaching institutions, could be made available to the evaluator but little except the evaluations of the teaching institutions could be anticipated. Data from other studies did not exist, since other studies of the type represented by the project and its evaluation had not been done. What was called for was intensive research and evaluation in several areas. Without funds, however, such became impossible.

One of the most significant pieces of information to emerge from this area of the evaluation is that no money had been budgeted for any kind of evaluation, even though such evaluation had been called for. If the evaluation process had begun when it should have, namely, when the proposal for the program was first submitted to the funding agency, the evaluator would have included his work as a budget item.

Evaluation began, however, at the time the first courses were presented and most of the money had already been earmarked for other expenses. In the normal course of events, the delineation phase would have determined the necessary budget for what was to come and, should a lack of funds have appeared as a reality, evaluation would have been stopped. The delineation phase would thus have shown that the system made evaluation impossible. Indeed, such was the case. Feedback concerning this oversight was given to the College's chief decision-maker who then reallocated some funds for traveling expenses to permit the evaluator to do some observation of courses in progress and also to permit mailing of a questionnaire to student-physicians who had returned to practice after taking their respective courses. Practical considerations brought about by oversight thus limited the extent and methodology of evaluation.

The oversight shown in this project is not unusual. In fact, it underscores currently common practice concerning evaluation. Although most federal funding of education specifies that an evaluation of the program be done, few contractors to date have provided for the practical necessities needed for the task. The College and the teaching institutions behaved "normally" in this regard, primarily because of a lack of sophistication about evaluation and not because of a lack of interest or a lack of regard for what the process could do for them.

The situation parallels that of experimental design with respect to the collection of research data. The experimental design must precede the collection of data if those data are to be used in a meaningful way and to the ultimate good of the research; yet, thousands of research projects begin with the collection of data and end with an experimental design adopted because it fits the data rather than because it affords the best means of testing the hypotheses or otherwise serving the ends of the original purpose of the research.

To be most useful, evaluation must begin when the program or course to be evaluated is initially constructed. Where evaluation of on-going programs is called for, sufficient time is required to permit the evaluators to examine in detail how and why such programs were constructed as they were. Such, of course, would be the case in an evaluation of a school or of a school district which had been in operation before the need for evaluation arose. In such a case the evaluation is conducted by a team, or several teams, each specializing in a particular aspect of the problem. Long before the evaluation proper begins, one of the teams investigates how and why the present curriculum, teaching methods, etc. are in operation. Continuing medical education offers no such opportunity, since the time of course presentations is far too short to permit a detailed examination of its processes even before an evaluation model can

be made. In the case of the program for the College, the evaluation had to proceed while the evaluator determined the how and why of the course curriculums.

Table 3 summarizes the delineation of information for stating evaluation policies across Context, Input, and Process evaluation. Product evaluation for the delineation is incorporated into Chapter III as part of the completed model for the obtaining phase.

The last area of delineation of information, that dealing with evaluation assumptions, deals primarily with what can be said concerning the willingness of the student-physicians and faculty to state their opinions, either in conversation or on a questionnaire, honestly. Under the restrictions imposed by the College concerning methodology of obtaining information (no achievement test, guarantee of anonymity of respondents, etc.) and the limitations imposed by the small budget even after adjustments had been made, no sophisticated measurement could be made. Sampling was not to be done, either. Instead, even in the case of questionnaires, whole populations were to be investigated.

As a result, only these evaluation assumptions emerge: (1) the student-physicians and faculty will respond in terms that parallel their feelings and thoughts; (2) those asked to respond will not comprise a sample but a population or populations to be described simply as all those who responded to a given set of questions.

Table 3.--Summary of Delineation of Information for Stating Evaluation Policies

Item (Context)	Restriction (Input)	Source of Restriction (Process)
No special factors involved in stating evaluation policies	Budgetary limitations: 1. Travel expenses for visits to cities where courses are in progress 2. \$300 for production and mailing of questionnaires 3. No budget for payment to evaluator or consultants on evaluation College facilities available: 1. Library 2. Policy statements	Subcontracts Drs. Tyrer and Granzig

Although the contrary may seem true, in actuality the specific restrictions placed upon evaluating this program do not preclude doing useful evaluation. Indeed, restrictions in continuing medical education, as in other fields of education are always present and are the test of the evaluator's skill. The one problem for the evaluation was the small budget allowed. This factor, introduced through oversight only, is alterable in most cases. Indeed it was alterable in this case but not to the fullest extent necessary. The source of this problem can actually be traced to the fact that evaluation entered the planning too late.

The model that must emerge from the delineation of information must reflect this restriction as well as others imposed. This does not mean, however, that other models that can be generated from it must be bound by the same budgetary restrictions. In fact, one of the most productive results of any restricted model can lie in the fact that it points out possible problems that can be avoided if early considerations are acted upon in time.

CHAPTER III

MODEL FOR EVALUATION OF THE FAMILY PLANNING PROGRAMS

The model for the evaluation of the family-planning programs is the culmination of the delineation of information phase and is directed toward the obtaining and providing phases. It is a work plan that must be flexible enough to respond to new needs and new information that are uncovered whenever the Context, Input, Process, or Product evaluations in the obtaining phase reveal problems in the system. What is proposed here, therefore, is an initial design, viable but not immutable.

Because change is expected, a mechanism whereby the model can be altered without being destroyed must become part of the original design. Moreover, it must afford an orderly and continuous means for implementing change, a fact that suggests systematic monitoring of the information obtained and regular feedback of the results to those decision-makers who have a need to know.

The strategy for creating the initial model consists of doing the Product evaluation in the delineating of information phase. Context, Input, and Process evaluation in this phase have already provided the basic substance and limitations of the Product. What remains to be done for Product evaluation is to specify details, the integration of

which appears as a model.

Four areas have been evaluated across Context, Input, and Process in the delineation phase: definition of the system, specification of decisions, statement of evaluation policies, and statement of evaluation assumptions (see Chapter II). Product evaluation of the delineation of the first of these areas, definition of the system, requires a realistic look at the five models that emerged as designs for each of the original five subcontractors and finding the commonalities that exist among them (see Appendix B). The five models and their sponsors are summarized as follows:

1. A tutorial-based individualized program (Emory University)
2. A total immersion experience (Temple University)
3. A weekend seminar approach with options to return for clinical experience (Louisiana State University)
4. A series of packaged programs presented in local communities (University of Chicago)
5. A tracking system wherein physicians build their own programs according to their needs (University of California, Los Angeles)

Model number 1, the Emory design, was used for only the first year. Faculty changes that coincided with the program's beginning of the second year, but which were unrelated to the program, made continuation of this model impractical at this institution, and, in fact, made continuation of teaching the courses using any model impractical. The Medical College of Georgia, which replaced Emory as one of the five teaching institutions for the program after the first year, elected to follow a design that approximated

model number 3, although with some alterations.

Originally, the College had hoped to be able to compare the five models, seeing them as representing five different treatments of the curriculum. To this end, it originally contacted the evaluator. The evaluator, however, in assessing all aspects of the system including geographic location, faculties, and students, pointed out that such a comparison was not possible in a statistical sense. Each system proved to be unique in most if not all of its elements. Most importantly, there was no guarantee that the student-physicians could be said to be members of the same statistical population. Indeed, there seemed to be ample reason to suggest otherwise, since, under the terms of the contract, each school could service only those physicians from within specified and unique geographic boundaries. Moreover, although the general curriculum was to be the same, there was no guarantee that differences would be in methodology only. On the contrary, early in the planning it seemed that content would differ in significant details. The faculties, of course, would differ in many respects as well.

The College contented itself, therefore, with viewing each teaching institution as singular and with attempting to elicit information about certain learnings and points of view that might be accepted as common to four models. Model 1 had been seen from the beginning as experimental and so

was excluded from considerations that would come later with respect to institutions adopting the other four.

The emphasis on commonalities did not rule out the possibility of obtaining data that might suggest significant impacts which different surroundings or different faculties, etc. might have on students. Indeed, the only thing precluded by virtue of the fact that unique systems were involved was measuring the effects of the differences experimentally.

The emphasis in investigation was to center around the student, who, therefore, became the focal point of the system within which he was placed. Should an investigation be centered around location, facility, or curriculum, then the student would assume a different position in the model.

What is of interest in the model at hand is how all other elements of the system impinge upon the student. The affect of all other elements depend, in turn, on who the student is.

The physicians who took the courses under study could be expected to be unlike most other students who ordinarily seek education in a formal setting, although not necessarily unlike other physicians who take such courses. In the first place, a physician's right to work, that is, his right to practice, is determined by a license granted by the state. Even if he works in a clinic or some other agency that pays him a salary, it is the state that grants him his working

privilege.

During the period in which the family-planning courses were given, only three states required re-licensure predicated on proof of acceptable continuing education. Even at that time, however, the states were still in the process of determining, together with the local medical societies, what might constitute acceptable continuing education. The physician who enrolled in these family-planning courses, therefore, had to be considered as doing so in order to meet certain personal-professional goals. Indeed, teachers of postgraduate medical courses are well aware of this fact and verbalize it by asking themselves as they design a curriculum, "What will this give the physician that he can take back to use in his practice?" This question is important because the teacher is aware that should he fail to give the student such practical knowledge, the student will not complete the course. This is not to say that everything in the curriculum must be practical. Theory which supports good practice is always welcome, but theory alone will not satisfy these students.

For these reasons, the educational objectives for any postgraduate medical curriculum must be evaluated not only before but also during the course presentation to be certain that the students' goals and expectations are being met. It is almost certain that the objectives will be altered and, with them, certain aspects of the curriculum.

Moreover, the audience is more likely than not to be heterogeneous with respect to educational background, experience, and attitude. Certainly, all members of a student population composed only of physicians will possess an M.D. degree granted by a medical college. The curriculum implied by that degree will depend, however, not only on the individual medical school involved, but also on the era in which the degree was granted. Those who graduated from medical school before World War II pursued a vastly different course of learning from those who graduated within the last five years. Whether the student took an externship -- particularly in obstetrics and gynecology in the case of the family-planning-program courses -- and where he took his internship, as well as what other professional continuing education he has had and how long ago, will also make a difference. Some, although not board certified physicians, may well have limited their practices to one area of medicine and be conversant with the latest methods in it but not in others. Those who have spent their professional lives in private practice are different from those who have pursued careers in institutional medicine. If the individuals in the student population practice in different states (which certainly was to be the case of those who took the family-planning-program courses), yet another element contributing to the heterogeneity is introduced, since varying state laws necessitate differing medical approaches to a given problem.

To help the teaching institutions determine the characteristics of their students, Howard Osofsky, M.D., Ph.D., of Temple University Medical School created the "Family Planning Program---Needs Assessment", a questionnaire that seeks not only such information as age, marital status, type of community in which the student practices, religion, religiosity, and type of practice and patients, but also facts concerning the areas of family planning in which the student wants more education and details on the techniques the student currently uses for contraception and the indications that seem to him to call for such techniques (see Appendix C).

No teaching institution, including Temple University Medical School, was obligated to make use of this questionnaire. The College, however, made the questionnaire available to all of them and urged its use, pointing out that valuable information that curriculum planners and teachers needed could be elicited through it. It had been thought that the questionnaire would be used by all of the teaching institutions to determine student expectancies at least.

Since the questionnaire is lengthy and since the courses were short, there is a presumption that the feedback would have to be received from the questionnaire before the first didactic session in order to provide ample time for changes in the curriculum and educational objectives to be put into effect. The creation of the curriculum could not coincide with the time the questionnaires were received,

since students would presumably elect to take the course, in part at least, on the basis of the description of the curriculum and background of those doing the teaching. Thus, the mailings sent to possible students as well as announcements placed in local medical journals and other literature did have to provide some details on both, just as do announcements of other postgraduate medical courses with which the family-planning-program courses were competing.

In the early stages of the program's preparation, no one could predict the extent of the enrollments. Each institution was charged with teaching at least 50 students in a one-year period and there was doubt that enrollments that large could be attained. This doubt gave added impetus to presenting the curriculum in greater detail in course literature that was designed to reach potential students.

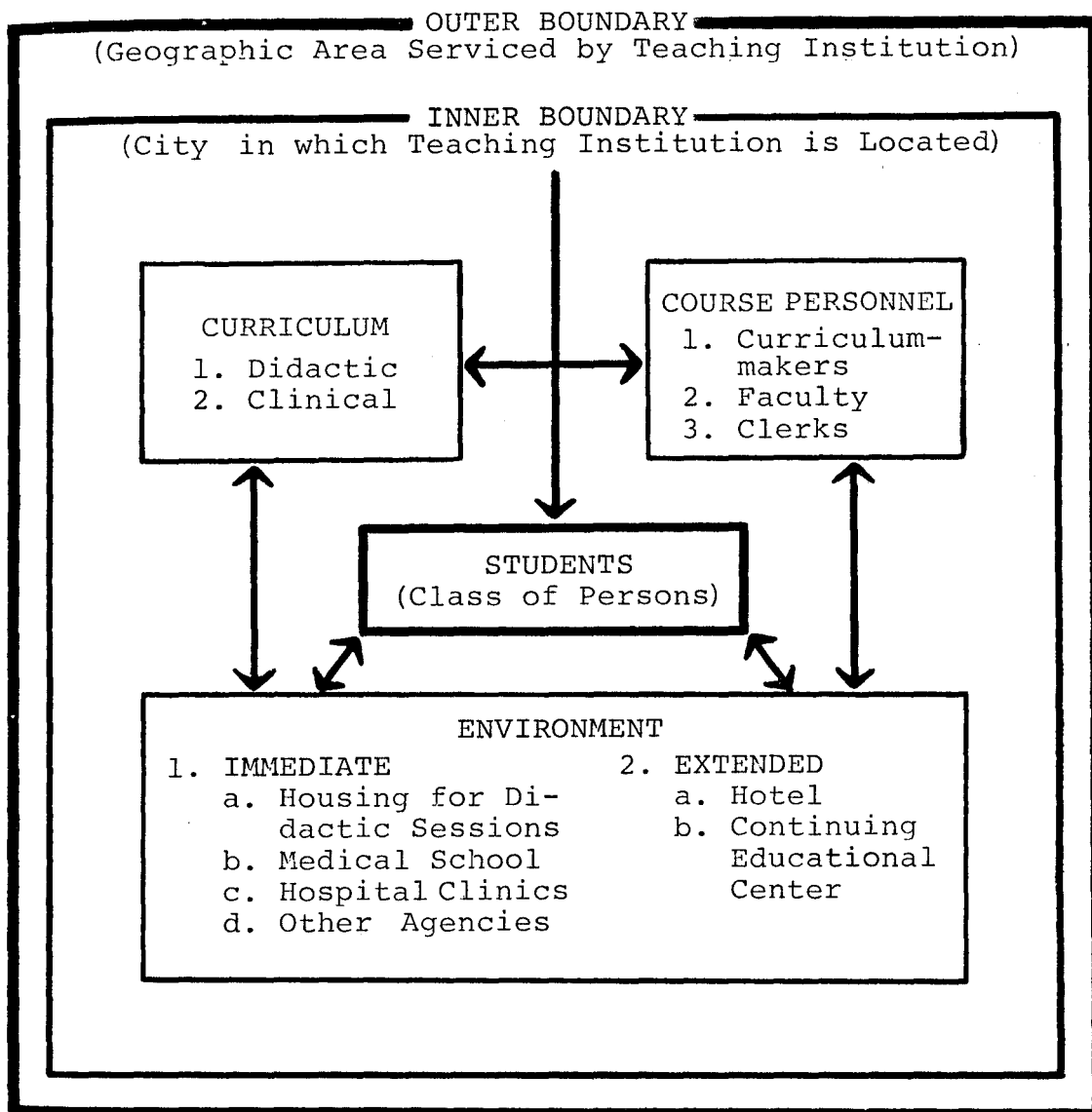
The system for each of the five teaching institutions and, therefore, for the entire program consisted of three classes of elements: persons, curriculum, and environment. These classes, in turn, were set within an inner boundary of the city in which the courses were held, and an outer boundary of the particular geographic area to be serviced by the teaching institution. The class of persons consisted of four groups: students, curriculum-makers, faculty, and clerks. In some cases curriculum-makers and faculty were the same people engaging in different roles. The designation "clerk" is used here to denote any person who did not

belong to the other groups, but who, by virtue of handling registration, publicity, the mailing of questionnaires, reproducing and distributing curriculum materials, making housing arrangements, etc. contacted students, curriculum-makers, and faculty directly or indirectly.

Since all elements were designed to produce a change in the students, these students became the focal point of the system and occupy a unique position with respect to all other persons and classes. It is the interaction between the students and the other elements of the other classes that merits the primary attention of the model, therefore. The state of other interactions assume significance only insofar as it affects the students. Figure 5 shows diagrammatically how the classes and elements relate to one another within the boundaries of the system.

The product evaluation (and this part of the model) for specifying decisions concerns what kind of information will be needed by whom and at what time. Two classes of information and two classes of decision-makers are involved in these courses. The first class of information concerns that which is involved in any single course. The second class concerns that which the College needed or wanted. Decision-makers in the first instance consist of personnel involved in the course and most particularly the director and faculty. In the second instance, Drs. Tyrer and Granzig, representing the College, are the sole decision-makers.

Figure 5.--Diagram of Classes and Elements of the System
and Possible Interactions Among Them



Time elements involved in providing information differ widely in the case of the two classes. Personnel providing the course need daily feedback while the course is in operation and regular feedback between the time that the course offering is announced and the students arrive at the place of presentation. The College required feedback during the stages of planning, registration, and presentation of the course, and at the end. More importantly, the College needed feedback after students returned to their practices. Thus, at no time did the College require continuous monitoring of the courses, while the schools required a system to provide just that.

Such information gained from monitoring continuously was left to the individual course directors to provide for themselves. To this end, the contract specified and provided funds for a full-time secretary. The schools were not compelled to hire a single new person for this purpose. They could if they so desired, use the half-time of two people, etc.

Certain materials had to be made available to the College prior to presentation of the course and the publicity about it. These included an outline of the curriculum, together with broad educational objectives, and a listing of the majority of the faculty. Such material was actually a part of the subcontract. A copy of mailing pieces to be sent to the prospective students, as well as a detailed report on other media to be used for publicity, had also to be

sent to the College well in advance of placement or mailing dates. Lists of students accepted for the course as designated by name, address, and type of practice were submitted to the College as registration took place. Thus, prior to the presentation of the course, the College could audit adherence by the schools to certain terms of the contract, namely, whether the intended curriculum and its goals had been met and whether the students accepted practiced at that time within the geographic area assigned to the school and whether the type of practice fell into the preferential categories.

Dr. Tyrer, Dr. Granzig, or both were scheduled to attend each presentation by each school, except in the case of the Emory courses which were too frequent and too fragmented in terms of the total curriculum. Regular visits to Emory were scheduled, however. Such site visits constituted the most regular and important means of evaluation and concentrated on judging the didactic and clinical content of the presentations.

It was anticipated, because of contractual obligations, that the schools planned means of obtaining feedback from students at the end of the course. The thrust here, since the feedback was to be obtained before the group had disbanded, was to be on whether the students liked the course as a whole, the methodology of teaching, and the faculty.

The College, while interested in such information, wanted to go further and to discover, if possible, what impact the courses might have had on the practice of the students, on the communities the students returned to, etc. To this end, the author developed a questionnaire as an instrument of measurement of these questions, following the restrictions of the Input evaluation (see Chapter II). She also wrote the cover letter to accompany the questionnaire, although, in accordance with College policy, it was signed by Dr. Granzig (see Appendix D).

The questionnaire represents, in part, the Product evaluation for the delineation of information for specifying decisions, and is predicated upon specific questions that Drs. Tyrer and Granzig had regarding certain facets of the program. The questionnaire is in two parts, both of which are designed in some respects to elicit similar information. Part I is primarily objective in nature, an ideal form for tabulating large amounts of data. Part II consists of open-ended questions dealing with specific changes in practice and judgment of strengths and weaknesses of the course. The open-ended questions were chosen in order to avoid a suggestion of any particular response. It was feared that should a list of options be given, even though "Other (specify)" were one of them, the respondent might, in his zeal to be helpful or for some other like reason, choose one or more of them, even though none actually applied.

The first two items of the questionnaire were intended merely to determine which of the presentations of any particular school were attended by the respondent. All other items and questions were intended to answer specific questions asked by the chief decision-makers, Drs. Tyrer and Granzig.

Most important of all were the questions concerning whether, after taking the course, the student altered his practice with respect to family planning. Next in order of importance concerned whether, after taking the course, the student attempted to change attitudes toward or the practice of family-planning medicine of his colleagues, his community, or both. The list of questions to be answered, although not in the order of their importance to the chief decision-makers, are as follows:

1. In what state does the respondent practice now (after taking the course)?
2. Is the respondent a licensed physician?
3. What are the respondent's age and sex?
4. Is the respondent a certified specialist in obstetrics and gynecology?
5. What type of practice does the respondent engage in?
6. Would the respondent have taken the course even if the per diem had not been offered?
7. What was the dollar-cost to the respondent for taking the course?
8. What information did the respondent want to receive when he elected to take the course?
9. Were the respondents' felt needs met in the course?
10. Did the respondent attend the entire preentation?
11. If the respondent did not attend the entire presentation, why not?
12. What, if any, unintended learning outcomes did the respondent receive?

13. Did the respondent's practice change with respect to family planning, and, if so, in what ways?
14. After taking the course, did the respondent seek further information in family planning?
15. After taking the course, did the respondent attempt to influence his colleagues, his community, or both in terms of attitude toward or practice of family planning?
16. What did the respondent think were the weaknesses of the course he took?
17. What did the respondent think were the strengths of the course he took?

The reasons behind some of the questions are obvious. In many cases, however, the reasons were generated from less apparent needs. The first question is a case in point. Long before the courses were presented, the chief decision-makers knew from what states the students came, since such information had been supplied to the College along with student names. The primary reason for restricting each school's student body to a specified geographic area had been to ensure an even distribution of trained family-planning practitioners throughout the country. Physicians, however, no longer tend to remain in one place through the practice years. Moreover, preference was given to those engaged primarily in family planning -- and such persons are most likely to work for agencies that do not necessarily continue to exist for a long period of time -- and to those in university health programs, which are subject to change in personnel needs. It was by no means certain, therefore, that those who had taken the course would, at the time they responded to the questionnaire, still be practicing in the same state. Some means of testing mobility was thus wanted.

Since all students were supposed to be licensed physicians, question 2 seems superfluous. It was included lest inadvertently a questionnaire had been sent to a non-physician. Nurses and allied health personnel were to be permitted to attend the didactic sessions as observers should the room be large enough to accommodate them as well as the student-physicians. In some cases, the names of the observers were also submitted to the College and the possibility existed that such people might also receive a questionnaire.

The age and sex of the respondents, specified in question 3, was of general interest only, but whether the respondent was a certified specialist in obstetrics and gynecology, asked by question 4, was a further check both on the type of practice of the student and also on the meaning of responses to items dealing with what the student wanted to know. Although courses sponsored by the College are usually designed for the specialist, these were not. Yet, specialists in the discipline, seeing the College's name, might assume otherwise. In light of what the specialist could be expected to know of the subject at hand before he entered a course, such a person would probably want information in topics outside the realm of the curriculum to be presented. Since the questionnaire was the only approved means of obtaining documented data and since it was also to be anonymous, it was necessary to judge responses to items about stu-

dent needs, practice changes, and satisfaction with the course in terms of whether or not the respondent had had a specialist's training.

Question 5, aimed primarily at those for whom the curriculum was designed, was asked for much the same reasons as lay behind question 4. What students wanted to know and their satisfaction with the course was thought to be a function of the type of practice in which they engaged.

Both questions 6 and 7 emerged because of doubts that the chief decision-makers and others had had concerning the need for the courses. No data existed to suggest whether courses on family planning were felt needs by any sizeable segment of the medical profession outside certain specialty groups. A very real question of whether physicians would be willing to assume dollar-costs for such training arose as a result. A per diem was offered as an incentive, although it was clear that \$26 per day would certainly not be adequate compensation in most cases, even though the course were free of charge. The cost of travel to and from the place in which the course was to be held could be great. Even greater could be the cost of maintaining an office during the time of the course, while no fees for service could be gained. The private practitioner especially would sacrifice income in this regard.

Questions 8 through 12 and 16 and 17 deal with what the students wanted and whether the respondent was satis-

fied with what he received. It was assumed that the teaching techniques would be such as to deliver what the curriculum offered. It was also assumed that unintended learning outcomes, especially where the environment encouraged the students to fraternize, might occur. What such outcomes would be were of great interest to the chief decision-makers, who wanted to know whether the students would still pursue problems of family-planning medicine or whether they would talk to one another about other medical subjects while being exposed to the curriculum.

If the student left before the course was over, such action would indicate a failure on the part of the curriculum. It was anticipated that the students attending these courses would behave in the same manner as physicians attending any postgraduate session, and it is common for the physician who is not receiving information that he believes to be beneficial to his practice to leave the meeting or course. Question 11, therefore, was a reasonable one in seeking information about the respondent's satisfaction with the presentation.

Questions 13 through 15 were, for the chief decision-makers, the crucial ones. They deal with whether or not the respondent had changed with respect to his interest in, attitude toward, and practice of family-planning medicine.

An attempt to provide all of the information implied by the questions was made through construction of the ques-

tionnaire, "Evaluation of Course on Family Planning Sponsored by The American College of Obstetricians and Gynecologists" (see Appendix D). Table 4 shows which items in the questionnaire were designed to provide data to answer which specific questions.

The list of questions does not constitute all of the information that might have been useful or wanted. Limitations imposed by the allowable costs for the questionnaire restricted the length of the instrument and, therefore, the number of items. This restriction, in turn, limited the information that could be gathered and, thus, the questions that could be asked. The list that emerged represents what the chief decision-makers considered as most significant to their purpose.

The list of questions also implied a check-list for use in informal, on-site questioning of students by the evaluator. Since the evaluator was not able to attend every session of every course, because of budget limitations and because frequently sessions were held concurrently in different cities, such informal questioning consisted only of a test of whether significant information could be elicited in such a manner.

Other types of information, gained primarily by means of observation, were also wanted. The evaluator attempted to gain such information, which was primarily of a process nature, by observing certain aspects of the courses in pro-

Table 4.--Items by Question

Question	Item Number
1. In what state does the respondent practice now?	3
2. Is the respondent a licensed physician?	4
3. What are the respondent's age and sex?	5, 6
4. Is the respondent a certified specialist in obstetrics and gynecology?	7
5. What type of practice does the respondent engage in?	8
6. Would the respondent have taken the course even if the <u>per diem</u> had not been offered?	9, 10
7. What was the dollar-cost to the respondent for taking the course?	11
8. What information did the respondent want to receive when he elected to take the course?	12
9. Were the respondent's felt needs met in the course?	13, 14, 27, 28
10. Did the respondent attend the entire presentation?	15
11. If the respondent did not attend the entire presentation, why not?	16, 17
12. Did the respondent's practice change with respect to family planning, and, if so, in what ways?	18, 19, 20, 21, 24
13. After taking the course, did the respondent seek further information in family planning?	22, 23
14. After taking the course, did the respondent attempt to influence his colleagues, his community, or both in terms of attitudes toward or practice of family planning?	25, 26
15. What did the respondent think were the weaknesses of the course?	27
16. What did the respondent think were the strengths of the course?	28

gress with especial care. Observation was not limited to special processes but did focus on them.

Since the schools had planned for nothing but product evaluation, such observations of process constituted the only evaluation of the type that occurred. The evaluator's observations were centered primarily on the behavior of the students and the faculty, with some attention, where possible, given to other personnel.

The evaluator was concerned with three aspects of affective behavior in the students both while presentations were being made and afterwards: attending, responding, and valuing. Attending was relatively easy to observe, but higher order responding and valuing had to depend upon the willingness of the faculty to encounter the students in ways other than through the lecture.

Observation of the faculty was confined primarily to whether and how they related to the students while lecturing, receiving questions, and during "coffee breaks" and other activities not fundamentally a part of the presentation. Other personnel were also observed in terms of their willingness to relate to the students as individuals. Such personnel could not be expected to be present during all phases of the course. Indeed many persons who had dealt with such aspects as registration, housing, and transportation would never be seen by the evaluator.

Since, prior to arrival at the place of presentation,

the evaluator could not determine what the environment, faculty, or students would be like except in the most general of terms, she did not construct a check-list for the observations themselves. Instead, she determined the behavioral characteristics to look for, being guided by the list of questions asked by the chief decision-makers.

Many of the items in the questionnaire deal with affective behavior and served as a check on the more subjective observations of the evaluator. For example, if the responses to the questionnaire should indicate that the majority of the curriculum was of little interest to the students, the evaluator's observation that students seemed to value what was offered could be called into question. One problem existed with such cross-checking, however. The evaluator would have difficulty in determining whether the observed groups were representative of the responding groups. Some information about this question could be obtained by noting which of the respondents had attended the session observed by the evaluator, the first two items in the questionnaire addressing themselves to such data.

The chief decision-makers also were to engage in observation of the courses in progress, but their main attention was to center on the course content. After each site visit, Dr. Granzig was to write a report on the strengths and weaknesses of the presentation and to make his findings available not only to Dr. Tyrer, but also to the director of

the course so evaluated. Dr. Tyrer in turn was also to give feedback to the director about her impressions of the session.

Neither evaluations were meant to be given in writing only. Both chief decision-makers felt that where it would be helpful to do so they should give such feedback through conversation with the director before the site-visit ended.

Ideally, feedback should come from two major sources: (1) the system itself and (2) College personnel observing the system. It was to be expected that the director and faculty would informally communicate their view of the session's programs to the entire group as the processes occurred. It was also to be expected that some of the students might verbalize their views of the process as well. While such informal exchange could be helpful and was to be encouraged, it could not replace a system of monitoring that would determine whether objectives were being met. For such a system to be effective, all elements of the system would have to have a means of providing feedback and, what is more, would have to be encouraged to do so.

A monitoring system of this type implies personnel to direct it, moreover, and since the faculty and director were delivering the course content and could not assume further obligations while the course was in progress, a clerk logically would be the one to assume the task. Since it would be unreasonable to expect a clerk to be a professional eval-

uator or systems analyst, the monitoring system developed would have to be a simple, albeit effective, one that could be managed without the clerk's having to make judgments.

The particular problem would involve obtaining feedback from the students. It was feared that rather than voicing unmet needs or great dissatisfaction, they would leave the course.

THE TEACHING MODELS AND THEIR SYSTEMS

The original five teaching models reduced to four, following the withdrawal of Emory from the program. Emory's model was unique and required a different approach to evaluation, since what was taught at any one time or to any one group was not the total curriculum but bits of it. The Emory sessions, therefore, are best thought of as mini-courses. Moreover, they were primarily tutorial in character as well as individualized to meet a specific need of the student. Since the Emory model was primarily tutorial, monitoring of the system became a matter of establishing and maintaining a working relationship between the student and his teacher. No more than three students at a time were taught under the terms of the model, except for a three-day course in human sexuality which was scheduled for 15 students. In the main, the courses sought to teach clinical skills, didactic sessions being held to a minimum and confined to the necessary theory that underlies the practice of the skill. Thus, for example, the curriculum for the nine two-day courses in laparoscopy called for didactic sessions consisting only of a discussion of the selection of patients, follow-up, indications, contraindications, and complications in the surgical procedure. The bulk of the time was devoted to a demonstration of the technique and clinical ex-

perience in that technique.

The four other models as designed by the faculties at Temple, Louisiana State, Chicago, and the University of California, Los Angeles, all endeavored to present the entire curriculum, but under different circumstances and with different emphasis. The Temple model presented a total immersion experience; the Louisiana model, a weekend seminar with options to return for clinical experiences; the Chicago model, a series of packaged programs presented in local communities; and the California model, a tracking system wherein physicians built their own programs according to their needs.

The Temple model presented one of the longest courses in terms of time, the course extending for five full days, from Monday through Friday. Housing in the case of this model assumed extraordinary significance and permitted the total immersion technique. All of the students were housed in the place where the didactic sessions were held, namely, in Temple's continuing education center "Sugar Loaf" in the Germantown area of Philadelphia. The center, once a private estate, is set amid the woods of the property and consists of two structures: the original mansion and a modern, hotel-like building behind it.

Arrangements were made for the students to have all three meals of the day together in the dining room and to meet informally after dinner in the library where a bartend-

er dispensed a variety of beverages and "snacks" until 10:00 P.M. to those who wanted them. The didactic sessions were held from 9:00 A.M. until 12:00 P.M. in the large meeting room on the first floor, after which lunch was served. At 1:00 P.M. the students were transported by chartered bus to places where clinical sessions were held. They were returned by chartered bus to the continuing education center at 5:00 P.M. where they remained.

The continuing education center is many miles from downtown Philadelphia, a fact that discourages a trip into town for the evening and thus the students remained together. The members of the faculty arranged to be with the students after dinner for the purpose of further informal teaching, if such was desired, and for fellowship.

The model called for the presentation of two sessions of the course each year. Each session was to accommodate 25 students. The faculty included not only teachers from Temple's medical school, but also those from other medical schools both in and outside Pennsylvania, as well as those such as Dr. Louis Hellman from H.E.W. in Washington, D.C. Philadelphia's location thus also became a significant advantage, since it is relatively close to Washington, D.C. and several New England states and could draw upon a wide range of speakers from outside its immediate area.

Taking advantage of this fact, the curriculum-makers enlarged the original view of what should be offered and

included legal aspects of family planning, the current status of population growth, and the federal government's role in family planning. With approximately 15 hours of didactic sessions, the inclusions of such material did not necessitate the curtailing of content on the theory and technique of practice.

The clinical training was done in hospitals, clinics, and the medical school itself, the students electing to attend whatever sessions they pleased. Since five afternoons were devoted to clinical sessions, the students could choose from a wide variety of subjects that ranged from teaching human sexuality to medical students to observing a vasectomy.

One problem presented itself with respect to clinical sessions. Since the student groups were so large, if the majority chose to perfect skills in one technique, the facilities could not accommodate them except as observers. Thus the opportunity for developing the psychomotor skills needed for laparoscopy, for example, were limited. Learning had largely to be confined to observation.

Like the Temple model, the California model was designed to present both didactic and clinical sessions in a five-day time period, Monday through Friday. Unlike the Temple model, however, it called for several presentations of the course through the year, since for the clinical sessions in particular it was primarily tutorial in character.

Thus only four physicians were admitted to any one session. The time span was divided into a core course presented on the morning of the first day and attended by all students and elective courses, which were either primarily clinical or of such a nature as to call for the student's doing site visits. The elective options were presented in the afternoons and, in some cases in the mornings as well.

Core courses consisted of didactic sessions on the theory underlying sound medical practice, the psychosocial aspects of family planning, and a general review of counseling techniques, and also a presentation of how to create and manage a family-planning clinic. During the first morning session, each student was assigned a tutor, a physician on the faculty who helped individualize the clinical program to meet the student's needs. The student could choose from among 13 elective subjects, each of which was presented by a specialist in the area and at one of four teaching resources including the school's department of Obstetrics and Gynecology; the Department of Obstetrics and Gynecology at Harbour General Hospital; the Department of Population, Family, and International Health, U.C.L.A. School of Public Health; and Los Angeles Regional Family Planning Council. Because the electives were planned to be covered in 1/2 to 5-day sessions, the student could choose to attend a number of them. If, on the other hand, he chose to receive more intensive training in some of them, instruction to meet his

needs could be provided and more time would be spent in pursuing such studies.

The student and his tutor filled out a card for elective subjects that provided a time-table similar to the college student's program for the semester. The tutor assumed the responsibility for constructing, with the specialists, the exact type of training session needed.

A student who had recently been hired to administer a new family-planning clinic might have a felt need to have intensive training in administrative and community organization in family-planning, family-planning-program evaluation, socio-cultural aspects of family planning, and training and utilization of allied health personnel in family-planning, but not in other subjects under the model. He could spend the 4 1/2 days of clinical training for just this purpose, electing not to pursue study in the other areas offered.

Because the students would be exposed to different experiences in the clinic areas, interactions among them would be at a minimum and not significant to the conduct of the course. Thus didactic sessions were held in a meeting room of the medical school's hospital and although the students gathered together at that time, after lunch on the first day when they had met with the tutors, their attention was diverted from one another and toward the instructors. Housing was arranged in small neighborhood hotels that offered little but sleeping accommodations. Thus fraterniza-

tion among the students after the day's learning experiences was not fostered. All sessions began at 8:00 A.M. and continued until 7:00 P.M. One evening was reserved for a "Togetherness Night", when students and instructors met for dinner.

The Louisiana model, which, like the Temple model also called for presentations to large numbers of students (25 each session), solved the problem of clinical training by offering it at a later time. This model called for two days of didactic sessions, both scheduled from 9:00 A.M. to approximately 6:00 P.M. The dates selected fell on Saturday and Sunday so that the course represented a weekend seminar.

The weekend seminar approach was elected for two reasons. First, it was thought that physicians would be more likely to attend a course scheduled to be held on a weekend, since absenting themselves from their offices on these days would interfere less with their practice. Second, it was thought that spending a weekend in New Orleans might appeal to the physicians' spouses and thus be an added incentive to the physician's choosing the family-planning course instead of some other postgraduate offering.

Thus, the inner boundary of the model's system assumed particular significance to the development of this model, particularly in competing for the physician's time. The sessions were held in the Roosevelt Hotel, where the stu-

dents and their spouses were housed. This hotel offers easy access to the French Quarter and many other points of interest in New Orleans. It also has well known restaurants and show lounges of its own.

To further emphasize the possibility of making the weekend a combination of postgraduate study for the physician and a holiday for him and his spouse, the model called for a cocktail party for both students and spouses at 7:00 P.M. on Saturday and a lunch for both on Sunday. Both events were intended as learning experiences in family-planning also. Informal discussions were designed for the cocktail party which was attended by faculty as well as by guests. It was intended that at this party faculty might receive feedback from students concerning the course and also that the spouses, through these discussions, might gain an overview of what was being presented.

A formal program was planned for the lunch. This program, titled "Teen-age Counseling Regarding Family-Planning and Venereal Disease" consisted of a film and discussion led by Drs. Tyrer and Granzig. The topic was chosen not only because it afforded important learning for the physician, but also because it would be of great interest to wives, many of whom had teen-age children.

Involving the spouse in the content of the course was seen as having possible implications for the practice of the physicians. The course presented in this model, like most

of the courses, emphasized not only the medical aspects of family-planning, but also the psychosocial aspects, a fact which, in turn, implies that the physician who practices family-planning medicine has to be aware of and active in the development of his community's view of the subject. It was stressed that the physician should not be a judge of the propriety of such views, however, but a source of information upon which such views might be predicated. A spouse who was interested in and informed about such areas of family-planning practice was seen as a possible asset to the physician's successful conduct of his role in this regard.

Clinical sessions were not scheduled to be held during the weekend for two reasons. First, neither patients nor clinical facilities were available on weekends. Second, since the number of students was large, there was no possibility of providing adequate training in any procedure over a two-day time span. The physicians were, therefore, given the privilege of returning, at a time convenient to them, for particular clinical experiences. The clinical sessions were scheduled on weekdays at hospitals and clinics in New Orleans and Shreveport. Sessions on the administration of family-planning programs, pelvic examinations, insertion of intra-uterine devices, and safe-period method of family-planning were scheduled to be given in one day, and the sessions on the technique of the vas deferens ligation was planned as a two-day study. Sessions on Caesarian section,

hysterectomy, post-partum tubal ligation, and laparoscopic tubal sterilization, open only to qualified obstetricians, gynecologists, and surgeons, were three-day sessions.

Like the Louisiana model, the Chicago model attempted to involve spouses in the program. It went even further, however, in also involving allied health personnel. The inner boundary of its system, however, differed greatly, since it was ever-changing. Although, like New Orleans, Chicago offers many facilities for a holiday, they were not of direct concern in this model. What was of concern in terms of places for conducting the sessions was the number and types of persons who could be accommodated at least cost. Although each medical school was charged with the training of 50 physician-students each year and although the funds available could extend only to that number, the didactic sessions did not have to exclude any others, providing space was available. Taking advantage of this fact, the Chicago model provided for many sessions confined to fewer physicians per session so that both spouses and allied health personnel could attend the didactic part of the program.

Instead of presenting each session in the same place, different places were selected and included hospitals, schools, and other facilities in and around Chicago that offered large meeting rooms and that would be close to those persons who were not physicians but who were interested or active in delivering family-planning medicine. Such persons

included office and hospital nurses, laboratory technicians, social workers, counselors, and nurse's aides, as well as physicians' spouses. It was reasoned that if the physician were to deliver the comprehensive care in family-planning that the course implied, he needed persons around him who themselves were trained in the philosophy and techniques he himself had learned. Thus allied health personnel with whom he worked should be admitted to the didactic sessions. The spouse, because she was seen in a supportive role, was also considered a candidate for such study.

The inner boundary of this model's system also, therefore, became a crucial factor in the delivery of total learning, just as it had been in the case of both the Temple and Louisiana models. In each case, in fact, the inner boundary of the system determined whether major rationales and goals could be realized. Attendance of clinical sessions were restricted to physicians and were offered at later times as options, just as in the case of the Louisiana model. Although all clinical techniques were presented, some were open only to those trained in surgery.

The Georgia model was an adaptation of the Louisiana model, although no attempt was made to encourage the spouses to attend the meetings. Large numbers of students were given a 2 1/2 day didactic session with options for taking clinical sessions at a later time in smaller groups. Since the University of Georgia was brought into the program dur-

ing the second year and only after Emory withdrew, the faculty had little time in which to create its model and, therefore, elected to adapt to its own needs, a model that had already proved successful.

Four different models thus actually emerged from the individual schools, all of which contained the classes and elements of the system shown in Figure 5, but each of which showed interactions of varying significance. For example, while the inner boundary of the Louisiana model assumed especial significance, it assumed virtually no significance in the case of the California model. Interaction among students assumed a singular significance in the Temple model as did the interaction between students and the total environment.

Table 5 compares the relative importance of the classes and elements within the systems of the four models. Figure 6 presents each model's system in terms of the diagram shown in Figure 5, but modified in accordance with the unique features imposed by the individuality of each model. "System", as used here, means a collection of defined elements and their interactions taken over a specified interval of time. It defines a total course, including boundaries and all elements affecting the structuring and delivery of the program. "Model", here, is an analagous representation of a given system. It is isomorphic, with respect to elements and inter-relationships, to the total course program

Table 5.--Comparison of the Four Teaching Models With Respect to the Importance to the Student of Classes and Elements Within the System

Class and Element	Degree of Importance	
	Great	Moderate
Outer Boundary		Temple, Chicago, California, Louisiana
Inner Boundary	Louisiana	Chicago, California, Temple
Course Personnel		
1. Curriculum-makers	Temple, Chicago, California, Louisiana	
2. Faculty as a whole	All schools as above	
3. Clerks	All schools as above	
Curriculum		
1. Didactic	Temple, Chicago, California, Louisiana	
2. Clinical*	Temple, California	Chicago, Louisiana
Environment		
1. Immediate		
a. Course environment	Temple, Chicago	California, Louisiana
b. Medical School	Temple	Chicago, Louisiana, California
c. Hospital Clinics*	Temple, California	Chicago, Louisiana
d. Other agencies	California	Temple, Louisiana, Chicago

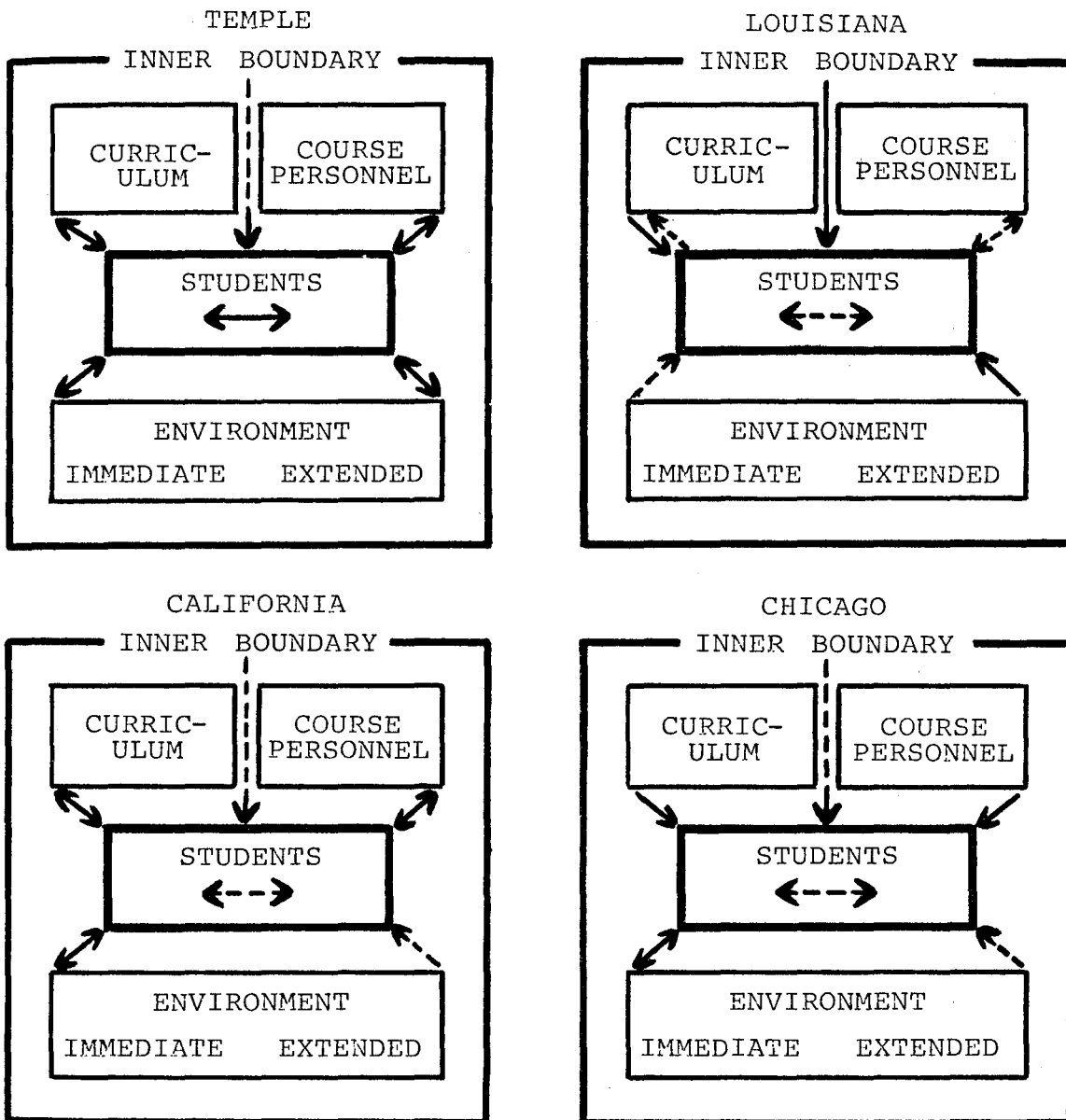
*Refers only to clinical sessions held during time period in which didactic sessions were given. Does not imply that the clinical curriculum was not important.

Table 5.--Comparison of the Four Teaching Models With Respect to the Importance to the Student of Classes and Elements Within the System

Class and Element	Degree of Importance	
	Great	Moderate
Environment (cont'd.)		
2. Extended+		
a. Hotel	Louisiana	Chicago, California
b. Continuing education center	Temple	

+Only Temple had a continuing education center; thus it is not included under the designation "Hotel", and the other models are not included under the designation "continuing education center".

Figure 6.--Diagram of Possible Interactions Between Students and Classes Within the Systems of the Four Models (Outer Boundary Excluded)



Legend

- Strong influence
- - - - - Weaker influence

which it represents. Emphasis here is on the degree of influence that each class in the system might have upon the situation and where interaction may occur because of the construct of the model. Thus, in the California model the students could influence the curriculum because they were asked to determine a large part of what they would learn. Temple students could also influence the curriculum by virtue of the informal discussions they could have with the faculty and with each other during the evening sessions in the continuing education center's library following dinner.

THE EVALUATION MODEL

Any evaluation model must be predicated on the system in which it will be used as well as on the restraints imposed by policies, budgets, etc. The model presented here would not be apt for all of the systems described but should be adaptable to any one of them.

The model assumes a system like that presented in Figure 5, that is, a system in which each class of elements can and does interact with one another and in which the inner boundary influences the student as well. Since the evaluation model is based upon the possible occurrence of these interactions, adaptability depends upon selecting the techniques applicable to the interactions that logically can be expected to occur because of the system.

The evaluation model is divided into two considerations at the interaction level: (1) interactions between the students and the other classes of the system and between the students themselves; (2) interactions between the classes themselves exclusive of the students.

Much of the evaluation of the interaction among the classes can and should be done prior to the presentation of the course. Interaction between the students and the course personnel, particularly the clerks, also begins prior to course presentation as does the possible influence of the in-

ner boundary upon the students.

Since the personnel who monitor the system and, therefore, seek the information that ultimately will provide significant feedback to the decision-maker of the course are clerks in the case of these courses, the methodology must be simple in construct. It begins with a well-wrought description of the system, which must be constructed by the administrators and ends with a thorough listing of needs -- intelligence and facilities that must be fed into the system if the course is to meet with success. The system and lists must of necessity be predicated on certain assumptions that may later prove to be unwarranted. If so, then a change in needs will be seen and, if the monitoring is continuous, will be seen in time to meet.

In the case of this program, the starting place for the evaluation is the outer boundary, that is, the geographic location from which students could be drawn. Once given a specific outer boundary, the chief decision-makers needed to know first what medical schools were located within the region and, second, which of them would be willing to present the program. A listing of medical colleges in the United States provided the College's decision-makers with the answer to the first question. Correspondence and conversations with the head of the obstetrics and gynecology departments of the schools provided the answer to the second question.

The ultimate choice of an institution depended upon its meeting the criteria selected for the purpose. Such criteria consisted primarily of medical elements, although access to the school by various means of transportation was also a factor. Medical elements included the reputation of the department of obstetrics and gynecology and its individual faculty, whether a family-planning clinic was a part of the hospital's facilities or attached to them, and areas of research currently being reported by the department's faculty members.

The final selection of schools was made only after site visits and the inner boundary and environment became unforeseen criteria. Thus two new factors were added to the list of criteria to be considered.

Table 6 summarizes the initial evaluation to be done by the chief decision-makers in order to select appropriate institutions. The Product of this evaluation was the choice of the institutions themselves and so is not shown on the table.

In the case of the courses themselves, the evaluation of the interactions among classes would begin with the curriculum, since it is the curriculum that is specified, at least in broad terms, by the contract. Management of the curriculum depends upon the students, who are also specified in the contract in terms of type of practice. Details of the curriculum would be determined by the director and his

Table 6.--Summary of Initial Evaluation Concerned in Selection of the Medical Schools

1. Definition of Needs	1. Check contract 2. Check lists of medical schools in area 3. Discover by telephone conversations, which medical schools would participate	1. Check library sources 2. Use telephone and/or correspondence
2. Definition of criteria to be used in the final selection	1. Find out reputation of Ob.-Gyn. departments of schools 2. Research being done in departments 3. Reputation of individual faculty members 4. Overview of teaching facilities 5. Type of family-planning services being given	1. Telephone and write medical evaluators (persons who certify institutions for residency training) 2. Use library resources for research papers 3. Talk to other researchers 4. Check reports on family-planning medical services 5. Reports on funding for family-planning medical services
3. Determine importance of system's inner boundary and environment*	1. Knowledge of physical access to school 2. Knowledge of what site is like	1. Transportation schedules and manuals 2. Observing when on site visit 3. Discussions with tourist centers

*Added to considerations after first site visit.

staff in terms of the needs of the students, therefore, and it is the interaction between these two classes that assumes first priority in evaluation.

Although publicity on the curriculum and major faculty members was scheduled to reach the student before registration, neither should have been unchangeable. Ideally, some information concerning needs and interests relative to learnings in family-planning practice by type of practice should have been available before the publicity was written, but no research was available on such material. Therefore, schools had to do their own research. To this end Dr. Osofsky had prepared the questionnaire on the student's needs assessment. Ideally, the student would complete such a questionnaire and return it with his registration by mail. Clerical personnel would then tabulate the data and the director would alter or extend the curriculum accordingly. Such alteration would possibly initiate additions to the faculty, one element in course personnel. On the basis of this final determination of the curriculum, elements of the environment would be finalized. Again, depending upon the availability of certain facilities, alterations in the curriculum might have to be made, which, in turn, might affect course personnel.

If the inner boundary was such as to affect the decision of students to bring their spouses, the curriculum might again be affected, with a corresponding effect being

transmitted to the course personnel. The extended environment, particularly that concerned with student housing, would also be affected.

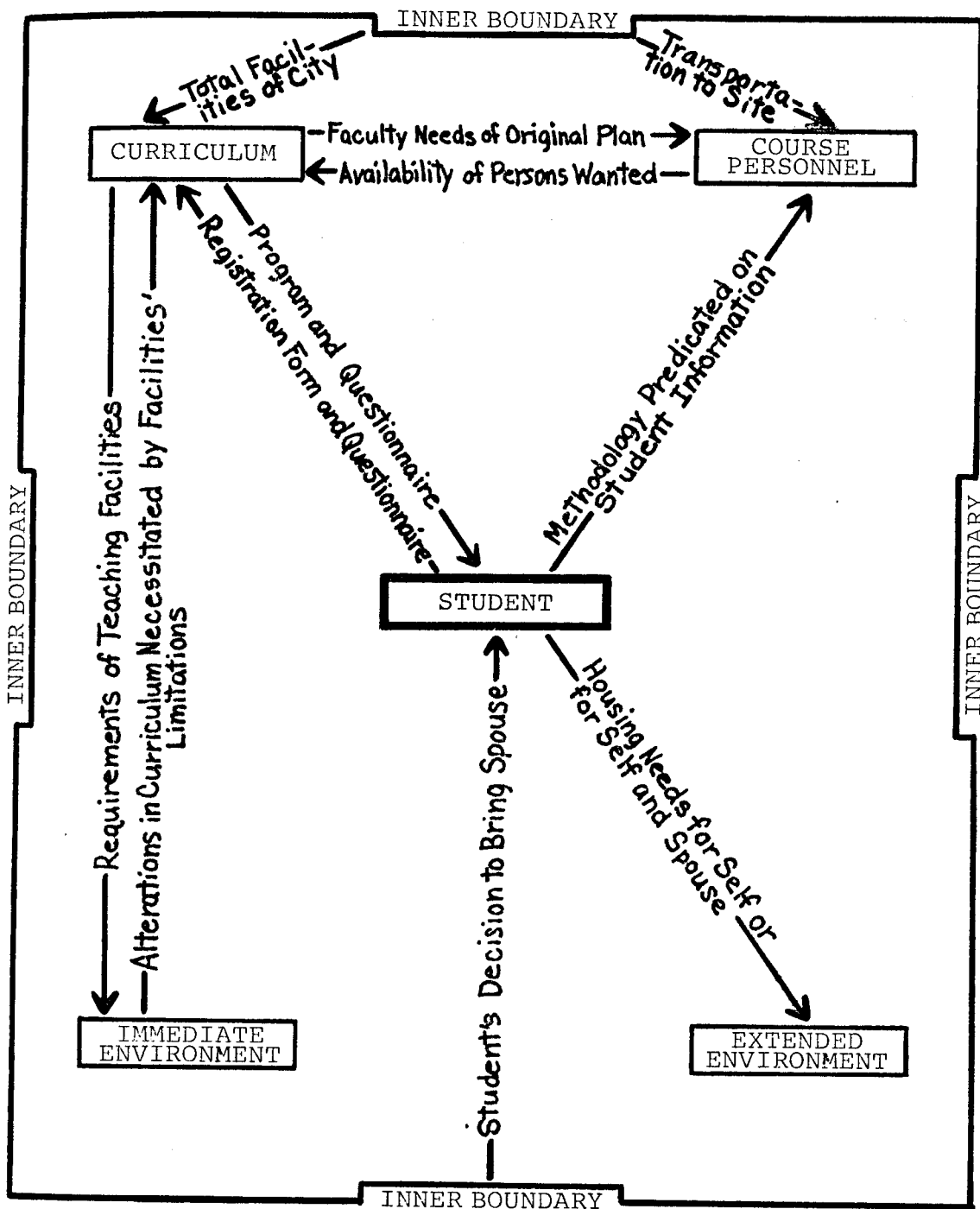
All of these changes would occur before the students arrived and would constitute both delineation and obtaining information over all four phases of evaluation: Context, Input, Process, and Product. The monitoring and feedback of findings are at the providing-of-information stage. They are modeled in Figure 7.

To simplify matters, such input should be reducible to information responding to check-lists. These completed check-lists should then form the intelligence needed for the clerk to ascertain immediately whether unique situations are arising which must be communicated to the director for decision. A time schedule for completion of check-lists and for reporting both problems and progress of the ongoing work must also be established.

When the course itself is ongoing, the clerk should monitor interaction phases between classes and elements in the classes. Again, check-lists of expected interactions should be kept and completed by the clerks. Instruments designed to measure such interactions should be scheduled for use by the director and administered and, where possible, scored by the clerks. Feedback of the results then can be given to the director.

The possibility of interactions among classes can be

Figure 7.--Model for Evaluation of Course
Prior to Student's Arrival



seen from a review of the system described in a manner similar to that shown in Figure 6. What type of information should be sought will depend upon the strength of the possible interactions. Simple check-lists with room for further comment offers one of the most simple yet valuable ways in which to gain information needed. For example, such a check-list might be passed out to students at the time of registration at the site and could concern their housing facilities. The information wanted would deal with the satisfaction or dissatisfaction of such facilities. The completed check-list could then be returned to the clerk in the afternoon or on the next day, etc. A form of written communication concerning the curriculum as it is presented and the student's further needs should also be devised. Again, a check-list with room for further comments can be used. The results of this check-list should be rapidly tabulated and also communicated to the director who can then make changes in the program if such are indicated.

Some of the courses were structured to encourage the students to communicate verbally their needs and wants to the faculty; however, there is always a possibility that negative comments will not be given in person. Thus a form of written communication, preferably anonymous, is always a preferred form.

Successful monitoring depends upon having trained personnel at hand throughout the entire presentation. Clerks

can be so trained. They are seldom, however, seen as an integral part of a continuing education course and thus little ongoing evaluation is done.

CHAPTER IV

OBTAINING INFORMATION ABOUT THE TRAINING PROGRAMS

The primary purpose of this study was to determine a possible model for evaluating the training programs and not to do an actual evaluation at the obtaining-of-information level. However, it was important to test whether the methods and instrumentation proposed at the delineating-of-information level could obtain the information wanted and, therefore, the questionnaire designed by the author (see Appendix D) was sent to physicians who had taken courses at Louisiana State, Temple, U.C.L.A., Chicago, and Georgia medical schools. Students who had taken Emory's mini-courses were excluded, since the curriculum had differed greatly from that offered by the other schools. The author also endeavored to test whether observations made by her on site visits could be valid. Since the College controlled only these forms of evaluation, the others being left in the hands of the individual schools, only these two forms were tested by the author.

The College's questionnaire was mailed to 490 physicians who had taken the family-planning course at the schools named. The 490 represented the total population of students whom the College could verify as being physicians and for whom the College could also verify addresses. The schools

whose students were surveyed had been under contractual obligation to enroll a total of 450 physicians during the time in which they acted as subcontractors to the College. Some of them had been able to increase their student size beyond that number, however. Therefore, it was not surprising to discover that the schools reported larger enrollments than the subcontracts called for.

The percentage of questionnaires returned differed from school to school. Table 7 shows the number of questionnaires mailed for each school, the number of respondents, and the percentage of returns:

Table 7.--Questionnaires and Returns by School

School	Number of Questionnaires Mailed	Number Returned	Percentage Returned
L.S.U.	120	58	48.33
Temple	100	54	54.00
U.C.L.A.	89	49	58.33
Chicago	100	30	30.00
Georgia	86	28	32.56

INFORMATION OBTAINED FROM PART I OF COLLEGE'S QUESTIONNAIRE

The results are given for all schools in terms of sections of the questionnaire. Items 1 and 2 of the questionnaire dealt with information needed to determine the school and exact period of instruction. Item 2 was originally broken down by months as a clue to whether the student was referring to didactic or clinical sessions, since in some of the models these dates differed by some months.

Item 3 was designed to determine whether the physicians who took the courses tended to practice in the same region that was serviced by the school at which they attended the family-planning programs. It was known that when they were accepted, these physicians lived in the region serviced by the school, but there had been a question about whether a significant number would still live in that region after a year or two. Table 8 shows the states in which the respondents now practice.

The respondents practice in 38 states and Guam and Puerto Rico. Only 12 states were not represented: Colorado, Idaho, Maine, Minnesota, Mississippi, Montana, Nebraska, New Hampshire, Rhode Island, South Carolina, Utah, and Vermont. This is not to say that students did not come from these states originally. With the exception of physicians who had taken the program at the University of Chicago, the respon-

Table 8.--Areas in Which Respondents Practice.

State or Other Area	Number of Respondents by School				
	L.S.U.	Temple	U.C.L.A.	Chicago	Georgia
Alabama			3		7
Alaska			1		
Arizona					
Arkansas	5				
California			32	1	
Connecticut		1			
Delaware				1	
Florida					4
Georgia					9
Hawaii			1		
Illinois				6	
Indiana				2	
Iowa	1			1	
Kansas				1	
Kentucky				1	1
Louisiana	15			1	
Maryland		6			
Massachusetts		6			
Michigan		1		5	
Missouri			1		
Nevada				1	
New Jersey		3		1	
New Mexico	2				
New York		7	1	1	
North Carolina				1	3
North Dakota			1	1	
Ohio	1			3	
Oklahoma	3				
Oregon			1		
Pennsylvania		24			
South Dakota				1	
Tennessee					3
Texas	30	1			
Virginia		2			
Washington			6		
West Virginia		1			1
Wisconsin	1	1		2	
Wyoming			1		
Guam			1		
Puerto Rico		1			
Total	58	54	49	30	28

dents tended to remain in the region in which they had studied the course. Three Temple, L.S.U., and U.C.L.A. respondents reported practicing in areas other than the one serviced by their respective schools. Thus, 5.56 percent of Temple's respondents, 5.17 percent of L.S.U.'s respondents, and 6.12 percent of U.C.L.A.'s respondents practice outside the school's region. Only 1 or 3.60 percent of Georgia's respondents practice outside the region. Ten, or 3.33 percent of Chicago's respondents practice outside the region. This percentage, particularly in view of the percentages for the other schools, seems very high. Why so many of the Chicago students should now practice outside the region cannot be answered with data from this questionnaire. One hypothesis might be that Chicago encouraged residents to attend the course. If such were the case, it would be reasonable to expect that these people would move to various parts of the country later.

All of the respondents answered "yes" to the question in Item 4 asking whether the individual was a licensed physician. Thus, the data verify the practice status of those to whom questionnaires were mailed. Items 5 and 6 asked for personal information, the first concerning age and the second concerning sex. The percentage of women who took the courses over the entire period during which they were offered were as follows: L.S.U., 6.90; Temple, 18.52; U.C.L.A., 26.53; Chicago, 13.33; Georgia, 7.13. The differences, if seen in terms

of regions represented are not surprising. Women physicians seem to enjoy more significant positions in the far West than in any other area of the country, and are apparently more restricted in the South.

The percentages in the various age categories are shown in Table 9. These data also show few surprises except that the respondents at Chicago's courses and at Georgia's courses are younger as a group than might be expected and suggest the possibility of residents at Chicago and either residents or military physicians at Georgia.

The type of practice in which the respondents engaged was of especial interest to the College. Item 7 asked whether the respondent was certified or studying to become certified in obstetrics and gynecology at the time he took the course. The percentage of respondents answering "yes" are as follows: L.S.U., 5.36; Temple, 57.40; U.C.L.A., 19.21; Chicago, 53.33; Georgia, 28.57. The high percentages of those certified or studying for certification seen in the Temple, Chicago and Georgia respondents are significant and must be born in mind when viewing answers to questions concerning expectancies that the respondents had of the course. It had not been supposed that the students would include so many who were as sophisticated as these respondents would be in the subject. These data, when compared with those concerning the age of respondents, seems reasonable. It does seem, indeed, as was suggested, that the young age did re-

Table 9.--Response to Item 5, "What is your age?"

Option	Percentage by School				
	L.S.U.	Temple	U.C.L.A.	Chicago	Georgia
a. Under 35	17.24	11.11	26.53	13.33	16.86
b. 36-45	30.03	37.04	18.36	43.33	39.28
c. 46-55	31.03	25.92	30.60	26.66	21.43
d. 56-65	20.69	20.07	24.49	16.66	17.86
e. Over 65	0	3.70	0	0	3.57

fect the respondents' status as residents or similar students.

The types of practice in which the respondents engaged is shown in Table 10. Originally preference was to be given to those engaged in general practice (options "a" and "b"), University Health Services (option "d"), and family-planning agencies (option "e"). Those who elected option "f" ("Other"), also specified family-planning agencies.

The data show that, indeed, the schools did give preference to the categories of physicians whom it was most crucial to reach, if the respondents can be considered representative of the whole population of students accepted to the courses. Not all of the schools included the same numbers of physicians in each of the categories. For example, U.C.L.A. and Georgia show an unusual percentage of respondents who practice in health agencies, while L.S.U. and Chicago show a great percentage of respondents in private practice. Temple shows a more balanced distribution, although private practice seems to be the place from which it drew most of its respondents.

Item 9 asked whether the respondent had received a per diem, and 10 inquired whether the respondent would have taken the course had a per diem not been offered. A total of 69.64 percent of L.S.U.'s respondents received it. In the case of U.C.L.A. respondents, 71.43 percent received a per diem, and for Chicago, 23.33 percent. For Georgia, only 50

Table 10.--Response to Item 8, "What type of practice do you engage in?"

Option	Percentage by School*				
	L.S.U.	Temple	U.C.L.A.	Chicago	Georgia
a. Solo Practice	58.92	33.33	22.45	43.33	35.71
b. Group	22.20	24.07	22.45	30.00	17.86
c. Academic	0	5.55	8.16	3.33	10.71
d. University Health Service	1.80	18.52	18.37	10.00	0
e. Community Pro- gram	5.36	5.55	6.12	13.33	9.17
f. Health Agency	8.93	12.96	42.86	6.66	39.28
g. Other (specify)	16.07	14.81	10.20	3.33	14.28

*Percentages total to more than 100 since respondents checked more than one category if appropriate.

percent received a per diem. These data further suggest that in all cases persons not included in the preferential categories were among the respondents and that in the case of the groups from Temple, Chicago, and Georgia they might have been those permitted to attend because accommodations were large enough to include them.

Responses to Item 10, which asked "Would you have taken the course even if a per diem had not been offered," since one of the options was "I did not receive a per diem," was addressed to those who answered "yes" to Item 10. Percentages of respondents who would have taken the course had no per diem been offered were as follows: L.S.U., 65.45; Temple, 46.29; U.C.L.A., 51.02; Chicago, 40; Georgia, 82.14. Since the percentage of responses to the option "I did not receive a per diem" did not reflect the answers of "yes" to Item 9, one must interpret this item with care. Many respondents who did not receive a per diem according to their answers to Item 9, made a judgment and responded "yes" rather than "I did not receive a per diem". The item must be considered faulty, therefore, and a different way of obtaining information on the subject should be found.

Item 11 asks about the dollar-cost to the individual for taking the course. Table 11 shows the responses to it. For the great majority of these respondents, a per diem, if paid, did not compensate for dollar-costs. Most significant from the point of view of those who plan postgraduate courses

Figure 11.--Responses to Item 11, "What is your estimate of the dollar-cost to you for taking the course in terms of time lost from practice, travel expenses, etc.?"

Option	Percentage by School				
	L.S.U.	Temple	U.C.L.A.	Chicago	Georgia
a. Less than \$100	15.81	22.22	39.00	23.33	25.00
b. \$101 - \$200	15.55	9.26	6.12	10.00	7.14
c. \$201 - \$300	18.18	4.85	10.20	8.66	14.28
d. \$301 - \$400	11.90	13.23	8.16	11.00	17.85
e. \$401 - \$500	25.45	10.26	6.12	13.33	17.85
f. Over \$500	12.73	38.88	30.61	33.33	17.85

is the fact that the physician will absorb a cost of \$500 or more, if the program seems to present information he wants.

Items 12 through 15 deal with the expectancies and satisfaction that the respondents had with regard to the program. Item 12 has several subsections, but all deal with areas or techniques about which the physician wanted to know. Table 12 shows the percentage of responses that those answering the questionnaire gave for each of the subsections. The data are not surprising. Respondents for all five schools indicated a desire for more information on prescribing pills and IUD's as contraceptive means. Indeed, these two methods were in greatest use throughout the country at the time the courses were presented and also were offering many problems to the physician. The fact that more respondents from L.S.U. indicated a desire to know more about rhythm as a method is understandable, since Louisiana has a relatively large number of Roman Catholics in its population. As a result, the L.S.U. program devoted more time to exploring the rhythm method than did the other schools.

The high percentage of respondents who wanted more information on laparoscopy (often called "belly-button" surgery) is not surprising either. Although the procedure may be done only by surgeons and those who specialize in gynecologic surgery, the fact that more and more women know about and demand this method forces the generalist and others who do not perform it to become conversant with its indications,

Table 12.--Responses to Item 12, "In which of the following areas did you want additional education when you came to the course? (In all cases respond to as many as are appropriate.)"

Subitem and Option	Percentage by School				
	L.S.U.	Temple	U.C.L.A.	Chicago	Georgia
A. Contraceptive methods other than surgical					
1. Pill	91.38	74.07	77.55	63.33	85.71
2. Rhythm	24.14	9.26	16.33	6.66	7.40
3. Jelly	12.07	9.26	26.53	3.33	3.57
4. IUD	75.86	68.52	81.63	56.66	71.42
5. Condom	15.52	7.41	16.33	3.33	3.57
6. Diaphragm	15.52	11.11	26.53	3.33	10.71
B. Surgical Procedures as contraception					
1. Tubal ligation via abdomen	18.96	18.52	28.57	16.66	21.43
2. Tubal ligation via the vagina	25.86	16.66	20.41	23.33	17.86
3. Tubal ligation by means of laparoscopy	56.90	68.52	55.10	60.00	71.42
4. Other (specify)	13.79	3.71	18.37	10.00	10.71
C. Abortion techniques	39.66	37.04	55.10	40.00	50.00
D. Issues related to prescribing contraceptives					
1. Patient motivation	50.00	40.74	63.25	20.00	42.86
2. Patient needs	56.90	46.30	67.34	26.66	42.86
3. Establishing community programs	20.69	37.04	48.98	13.33	21.43
4. Immunologic methods and problems (complications)	25.86	38.88	34.69	46.66	32.14
E. Governmental directives in family planning	27.59	38.88	32.65	26.66	39.29
F. Future techniques in family planning	67.79	74.07	77.55	70.00	85.71
G. Sensitivity	55.17	61.11	75.51	50.00	53.57

contraindications, and problems.

Responses "Other (specify)" included reference to culdoscopy and other surgical techniques. Such techniques, like laparoscopy, are done only by those trained in surgery and further trained in these special techniques. Considering the unexpected large number of specialists in obstetrics and gynecology that were in the audience of three schools in particular, it is not surprising that such techniques were expected to be part of the courses.

During the presentation of the first sessions of the program, the U.S. Supreme Court legalized abortion on demand, and physicians began to desire knowledge about the techniques for it. That does not mean that every physician intended to do abortions, but knowledge about procedures became necessary for referrals, counseling, etc.

The fact that such a high percentage of respondents from U.C.L.A. wanted information on methods of establishing community programs reflects the fact that 48.98 percent of them categorized their practice as being in community and health agencies (see Table 10). Unexplainable in these terms is the fact that 37.04 percent of Temple's respondents also wanted such information, since only 18.54 percent of them listed their practice as involving community or health agencies. However, like respondents for U.C.L.A., more than 18 percent of Temple respondents listed university health services as their area of practice and such services are in

an allied field.

That a high percentage of persons who attended the family-planning programs sponsored by the College were interested in future techniques in family planning is not surprising. Such persons were involved in this area of medicine and could be expected to continue this interest. That more than 50 percent of all respondents wanted to increase their knowledge of how to become sensitive to patients and their problems was heartening.

Item 12 was taken from a portion of the Osofsky questionnaire (see Appendix C). It was included because none of the schools used that questionnaire to determine what changes in their curriculum might be advisable, and the College wanted to view student satisfaction and practice change against the background of expectancies in the particular areas.

Items 13, 14, and 15 speak to whether or not the student's original expectancies were met in the course. Item 13, which asks "Were your wants met in this course?" was to be answered simply "yes" or "no". The percentage of "yes" answers by school were as follows: L.S.U., 94.83; Temple, 90.74; U.C.L.A., 89.80; Chicago, 86.66; Georgia, 92.86. Item 14 suggested that not all student expectations might have been met, however. Table 13 shows the percentage of responses to the options for this item. Examination of this figure suggests what percentage of the course the respondents expected to meet their needs and interests if their answer

Table 13.--Responses to Item 14, "Approximately what percentage of the course was devoted to areas that had no bearing on your needs or interests?"

Option	Percentage of School				
	L.S.U.	Temple	U.C.L.A.	Chicago	Georgia
a. None	13.79	29.63	16.33	16.33	10.07
b. Less than 20%	50.84	42.59	59.18	63.33	64.28
c. 21 - 40%	18.97	14.81	16.33	13.33	21.43
d. 41 - 60%	6.90	3.70	4.08	0	0
e. 61 - 80%	3.50	1.85	2.04	3.33	3.57
f. More than 80%	3.45	3.70	0	0	0

to Item 13 was "yes". A review of the data for Item 14 suggests that "yes" answers to Item 13 mean, generally, that for many, satisfaction is expressed when only 60 percent of the course content deals with felt needs.

A further test of satisfaction with the course was sought with Item 15, which asks "Did you leave before the course ended." None responded to option "a" which suggested boredom with the presentation. One respondent from U.C.L.A. answered "b", which was "Yes, because the course involved too much material of no interest to me." This respondent was a male in the 56 - 65 age group. He was not certified nor was he studying to become certified in obstetrics and gynecology and, in fact, had identified himself gratuitously as a "general practitioner" in solo practice, working in California. He received no per diem but would have attended anyway. He reported that the dollar-cost to him was over \$500. He answered "yes" to Item 13, which asked if his wants were met in the course, and said that 41 - 60 percent of the course was devoted to areas that had no bearing on his needs or interests. In response to Item 27, he said that the weakness of the course was that it was "not down to earth or practice." In response to Item 28, he said that the strengths of the course were "none". The data show some definite contradictions in the views this respondent expressed, but give little clue to what the actual problem might have been. Lest the fault lay with the questionnaire,

the author checked others whose responses to some of the questions in Part II showed similar answers for weakness of the course. However, these others also included comments on strengths of the course which seemed real and consistent with the other responses they had made in both Parts I and II.

The greater percentage of respondents answered "no" to the question of whether they left before the end of the course. The percentage of respondents by school who gave such an answer were as follows: L.S.U., 93.10; Temple, 87.03; U.C.L.A., 93.88; Chicago, 66.66; Georgia, 78.57. With the exception of the one respondent cited, all others who left before the course was ended did so because of prior commitments or an emergency.

An important part of some of the courses was interaction among students and between students and faculty outside the classroom. What learnings occurred in such encounters was of great interest. Items 16 and 17 address themselves to these matters. Item 16 asks whether the respondent received help in areas of practice other than that of family planning and, if so, what areas. The following percentage of responses by school are to "yes" answers: L.S.U., 41.38; Temple, 50.00; U.C.L.A., 59.18; Chicago, 60.00; Georgia, 46.43. Thus, many unintended learning outcomes did occur in these courses.

The type of such learning outcomes for respondents

from L.S.U. centered about general surgery and infectious diseases, caring for and counseling patients not in family planning, general gynecology, psychological aspects of self-induced abortion, suicide, the role of the nurse in premarital counseling, review of anatomy, fertility evaluation, the treatment of venereal diseases, management of the diabetic, menopausal symptoms, the management of obstetrical and gynecological emergencies, cryosurgery, and medical economics. The two areas most frequently mentioned had to do with counseling and with management of venereal disease.

For Temple respondents, the following areas were covered: homosexuality, understanding problems of other physicians (with referrals in mind), sexual problems of college students, general areas of student health, more information on "everything" in the "night sessions - bull sessions", world population problems, sexual dysfunction, abortion, hormonal imbalance, alternate life styles, psychosomatic sexual problems, history-taking generally, and sex education at the college level. The areas most mentioned were homosexuality, particularly with regard to how the physician could best treat both sexual and non-sexual problems of the homosexual, and also how to deal with the sexual problems of college students.

Respondents from U.C.L.A. had unintended learnings in the following areas: interpersonal relations in general, counseling in general, office practice of gynecology, hor-

monal problems, sexual dysfunctions, and free-clinic experiences. The Chicago respondents reported the following: help in understanding people, endocrinology, oncology, and pediatrics. Georgia respondents referred to endocrinology, surgery of transsexuals, and office gynecology. Almost 50 percent of the responses to this option for all schools dealt with human sexuality. Thus, much of the discussion actually dealt with the material from the course.

Table 14 shows the data obtained from Item 17. The fact that Temple respondents learned more from other students than did respondents from other schools probably reflects the fact that student interaction was encouraged at Temple more than at other schools. Both more L.S.U. and Temple students report conversations with faculty and that is to be expected, since the two models encouraged such conversation. The respondents from U.C.L.A. show lectures given in response to student requests. Since the U.C.L.A. model was tutorial, such a result was also to be expected.

The remaining items in Part I deal with changes in practice and in learning behavior. With respect to family planning, Item 18 asks whether the respondent's practice had changed with regard to family planning since the individual took the course. Three options are given, "no", "yes", and "not sure". The percentage of respondents answering "yes", by school, is as follows: L.S.U., 39.65; Temple, 31.49; U.C.L.A., 57.14; Chicago, 20.00; Georgia, 32.14. Those an-

Table 14.--Responses to Item 17, "If you did receive such help, how did it come about? (Please respond to as many as are appropriate.)"

Option	Percentage by School				
	L.S.U.	Temple	U.C.L.A.	Chicago	Georgia
a. I did not receive such help	29.31	27.77	24.49	13.33	21.43
b. Through material presented as part of the course	27.59	44.44	57.14	46.66	42.85
c. Through conversations with course presenters	34.48	38.88	32.65	23.33	21.43
d. Through conversations with others taking the course	18.96	29.63	12.24	10.00	14.29
e. Through a formal lecture given by a course presenter in response to a request from several members of the audience	5.17	5.56	20.41	3.33	10.71
f. Other (Please specify)	0	3.70	12.24	0	7.14

swering "not sure" by school were L.S.U., 17.24; Temple, 22.22; U.C.L.A., 12.24; Chicago, 26.66; Georgia, 28.57. All schools, except Chicago, show more than 30 percent of their respondents' being aware of a change in practice due to the course, with almost 60 percent of the U.C.L.A. respondents so reporting. Whether this large percentage can be attributed to the tutorial system is not apparent nor is the reason for such a relatively small percentage of Chicago's respondents' reporting change.

Item 19 asked "If your practice has changed, do you attribute that change primarily to what you learned in the course?" Options were "no", "yes", and "not sure", and "My practice has not changed." Percentages of "yes" answers, by school, were as follows: L.S.U., 34.48; Temple, 29.63; U.C.L.A., 48.98; Chicago, 16.66; Georgia, 32.14. Percentages of "not sure" answers, by school, were L.S.U., 15.51; Temple, 16.66; U.C.L.A., 18.37; Chicago, 23.33; Georgia, 14.28. Percentages of "no" answers by schools are these: L.S.U., 8.62; Temple, 1.85; U.C.L.A., 2.04; Chicago, 10.00; Georgia, 3.57. These data also underscore the fact that a large percentage of respondents did change their practice as a result of the course, except those who attended the program at Chicago. Again, here, more students from U.C.L.A. seem to have changed practice habits.

Item 20 asked "Do you do more family planning now than you did before you took the course?" The percentages,

by school, who answered "yes" were L.S.U., 50.00; Temple, 37.04; U.C.L.A., 38.78; Chicago, 16.66; Georgia, 21.43. Thus, the training seems to have increased practice in family-planning medicine. The pattern seems to hold here, too, more respondents from U.C.L.A. answering "yes" but fewer from Chicago giving an affirmative answer.

Item 21 asks "If you do more family planning now, has this fact increased your practice?" Affirmative answers by percentage and school are as follows: L.S.U., 18.97; Temple, 14.81; U.C.L.A., 16.32; Chicago, 10.00; Georgia, 0. Item 22 asks "Have you taken other courses in any aspect of family planning since you took this course?" "Yes" answers by percentages and schools were as follows: L.S.U., 3.4; Temple, 11.11; U.C.L.A., 10.20; Chicago, 10.00; Georgia, 3.58. Types of further study included special courses in clinics, courses at meetings of the Association of Family-planning Physicians, special courses in sex education, and courses in laparoscopy.

The last item of Part I asks "Have you increased your reading of the medical and other scholarly literature concerning family planning since you took this course?" "Yes" answers by percentages and schools were: L.S.U., 58.62; Temple, 66.66; U.C.L.A., 64.39; Chicago, 36.66; Georgia, 64.28.

RESPONSES TO PART II OF THE QUESTIONNAIRE

Part II of the questionnaire consists of five open-ended questions dealing with some aspects of the course that items in Part I covered. However, since the questions are open-ended, the respondent had an opportunity to express himself as he wished rather than as forced by options.

The first question of Part II, question 24, asks in what ways if at all the respondent has changed his manner of practice since taking the course. The second question, question 25, asks in what ways the respondent has helped change his community's standards, and question 26 asks in what ways the respondent has tried to influence his colleagues regarding family planning. Question 27 asks what the respondent thought were the weaknesses of the course, and question 28 asks what the respondent thought were the strengths of the course he took.

Not all respondents answered all of the questions for Part II. Moreover, although some respondents gave essentially the same answers, many gave unique ones. There was more than one response by some to a given question.

For question 24, regarding the ways in which practice in family-planning medicine had changed, 19 Louisiana respondents did not answer, while 7 wrote as their answer "none". Thus, a total of 26 of the 58 had no specific

response. How many if any of the 19 had not changed their practice habits cannot be known from the responses to this question. Together, these responses account for 44.83 percent of the students. In responding to Item 18, which also asked about change of practice habits, 43 percent said they had not changed.

The ways in which the respondents said they had changed their practice habits and number of persons mentioning them are as follows: difference in prescribing pill, 19; more aware and responsive to patient needs, 2; difference in prescribing IUD, 3; do more counseling in family planning, 2; take better or more frequent sexual histories, 5; do more laparoscopy, 1; and have more confidence in methods already used, 1.

In response to the question concerning how the physician had helped change his community's standards, question 25, 22 did not answer and 23 said "none". Those who did answer gave the following as things they had done: advocated family planning in the community, 7; taught paramedical personnel about family planning, 1; gave time to work in family-planning clinics where they had not previously worked, 4; provided counseling services free through an agency, 1; became a discussant on a panel assembled to determine what services were needed in the community regarding family planning, 1; and teaching family planning at the local high school, 1.

Nine did not answer and 22 answered "none" to question 26, concerning ways in which the physician tried to influence his colleagues. Affirmative responses and their categories were as follows: speaking at non-physician meetings, 2; trying to influence practice among other physicians in community on a personal basis, 13; consulting with local physicians in family planning, 1; and providing sexual counseling for other physicians' patients by referral, 1.

Item 27 asked about the weakness of the course. Thirteen Louisiana respondents did not answer the question, and 19 said there were no weaknesses. Weaknesses that were mentioned, together with the number of such mentions, are as follows: lectures on nursing care and clinic work not long enough, 3; not enough about birth control pills, 3; not enough time for questions, 2; no mention of cryotherapy, 1; could do with less surgical procedures, 1; should have had a psychiatrist discuss psychological aspects, 1; no help given with procedure of vasectomy, 1; films not good, 3; clinical demonstrations should have been held on the same days as didactic sessions, 1; certain speakers not dynamic, 1; nothing on abortion, 1; surgical procedures not interesting, 1.

Question 28 asked about the strengths of the course and drew no answer from 15 respondents and an answer of "none" from 12. Strengths that were mentioned, together with the number of such mentions, are as follows: all lectures were well done, 14; panel discussions were excellent,

5; teaching on surgical sterilization was good, 1; the materials handed out to the students to keep were excellent, 2; the elaborate breakdown on the pills and their differences, presented by Dr. Dickey, was superb, 4; enough detail was given to help practitioner, 1; the informality of the sessions, 1; concerned with real life problems of the general practitioner, 2; discussion of the diaphragm and foam was good, 1; postcourse training session in laparoscopy was good, 1.

Eleven of Temple's respondents did not answer question 24 which dealt with manner in which practice had changed and 20 answered "none". Thus 31 might be categorized as "no" or "not sure" in terms of question 18. This number constitutes 57.40 percent of the total and compares with 46.31 percent who said they did not change in response to question 18.

The categories of responses and number of times each was cited are as follows: do more taking of sexual history, 11; do more counseling, 6; teach family planning to patients, 2; changed prescription method for pills, 8; provide more patients with contraceptive means, 1; evaluate patient's psychosocial problems, 1; use better basis for prescribing IUD's, 2; more likely to refer for abortion, 1; use more intelligent approach to sexual problems, 1; more selective in choice of method for family planning for individual patient, 1; no longer recommend laparoscopy, 1; more sensitive to pa-

tients, 1; and now do family planning where before I did none, 1.

Eight from Temple did not answer question 25 concerning how they have helped change the community's standards, and 29 replied "none". Those who did reply in the affirmative cited the following categories: broadened interest in campus program, 1; trained nurse practitioners, nurses, etc. in family planning, 3; established family-planning clinic in student health service, 2; established sexual counseling at university, 2; established community family-planning clinic, 2; give time to family-planning clinic, 2; upgraded practice in Planned Parenthood center of family-planning clinic, 1; and changed practice to work full-time in family-planning clinic, 1.

Ten of Temple's students did not answer question 26, which asked how student attempted to influence colleagues concerning family planning, and 17 responded "none". Answers included the following: encouraged colleagues to take the same course, 1; gave formal and informal talks to young college girls, 1; talked to individual physicians, 3; spoke at local medical meetings on subject of family planning, 5; presented material of the course to hospital staff meeting, 4; and spoke to students at school of nursing, 1.

In answer to question 27, 21 found no weaknesses and 5 did not reply. Weaknesses mentioned were as follows: needed "free" afternoon, 1; too much money spent on food --

seemed wasteful, 1; too much emphasis on out-patient clinics, 1; too oriented to the general practitioner, 8; need more on administration of community agencies, 2; too long, 2; a few speakers deviated from main theme, 1; not enough on future contraceptive possibilities, 1; no individual training on laparoscopy, 2; not enough clinical work, 3; should have given audience copies of lectures, 1; needed longer training on culdoscopy, 1; discussion of sex mores could have been more realistic, 1; and not enough on pills, 1.

No one suggested that the course had no strengths, and only four did not answer question 28, which asked for a listing of the strengths of the course. Categories of responses were as follows: personal attention to subjects, 1; good facilities, 4; well organized, 7; excellent presentation by faculty, 27; group not too large, 1; good location (Sugar Loaf), 7; good afternoon workshops, 1; interest of staff in helping individuals, 1; informal exchange of ideas, 10; good choice of subjects, 20; good surgical technique series, 1; good psychosocial material, 1; everything excellent, 1; course on sexuality for medical students, 1; Dr. Daley outstanding, 1; good on laparoscopy, 1; and ran on time, 1.

Respondents from U.C.L.A. gave the reply "none" in seven cases to question 24, concerning how their practice had changed. Three did not respond at all. These 10 cases account for 20.41 percent of the respondents. In answering

Item 18, 30.62 percent said that they had not changed their practice habits.

Those who did reply, mentioned the following categories: more basic understanding of administration problems in planning and organizing family-planning programs, 3; do more sexual counseling, 5; now working toward training nurse practitioners, 1; became more interested in emergency medicine than family planning, 1; prescribe IUD and diaphragm more frequently, 2; recognize the "gay" as groups of "normal", 1 and now working part-time in treatment of sexual dysfunction, 1.

Five U.C.L.A. respondents did not answer question 25 concerning ways in which physicians tried to change their community's standards, and 18 replied "none". Ways in which change had been attempted included the following: administration of public health district, 3; work in free clinics, 17; trying to make inroads into community's understanding of family planning, 1; spoke to local, non-physician groups on family planning and human sexuality, 4.

Three did not answer question 26, concerning ways in which physicians tried to influence their colleagues, and 16 replied "none". Ways in which some tried to influence their colleagues included the following: assisted others involved personally in community clinic, 14; acted as consultant to family-planning nurse practitioner, 1; taught other physicians in family-planning clinic, 9; set up in-service train-

ing in sexuality at local public health department for staff handling venereal disease, 1.

Item 27, which asked what weaknesses in the course were, drew no response from 13 students and a "none" response from 10. Replies included the following: should have had options available for administrative part of the course for example, clinical aspects, 13; too much talk about color of condoms and size, 1; too much on diaphragm, 2; too much theory, 6; not much that was of use to specialist, 1; needed more opportunity to observe IUD insertions, 4; no techniques on abortion, 2; too short a time, 1; wasted time traveling between school and Harbour General Hospital, 1; movies took too much time and were repetitious, 2; section on administration was weak, 1; should have offered certification of attendance, 1; the didactic sessions were weak, 1; not what I wanted or needed, 1.

In response to question 28, concerning the strength of the course, only four did not answer and only one wrote "none". Five replied "very good in every way". Other categories of responses included the following: sexual counseling, films, and lectures, 8; sincerity and dedication of instructors, 1; presentation by faculty, 20; teaching hospital with its aggressive clinic, 5; good clinical supervision on human sexuality, 5; taught me how to be a good lecturer, to be aware, and to be patient, 1.

Six of Chicago's respondents did not answer question

24 concerning ways in which practice had changed and eight answered "no change". These 14 represented 46.66 percent of the respondents. In response to Item 18, however, 57.34 gave a negative answer.

Affirmative replies to question 24 included these categories and numbers: listen for "cues" on "routine visits" for need for discussion about family planning, 1; deal more with sexual problems, 1; do more sex counseling, 8; changed basis for prescription of pill, 8; changed basis for prescription of IUD, 1; purchased my own laparoscope and returned to hospital for 5-day clinical training in its use, 1; take more sexual histories, 1; stopped using saline injections, 1; more receptive to use of IUD, 1; more tolerant and understanding attitude toward minor degrees of sexual deviation, 1.

Eleven Chicago respondents did not answer question 25, which asked in what ways the physicians had attempted to change community standards, and 10 replied "none". Categories of affirmative replies and their numbers included the following: became medical director of Planned Parenthood group, 3; work with medical students, residents, and interns on problems in family planning, 1; work as consultant in family-planning clinic, 1.

Categories of affirmative replies to question 26, concerning how respondents helped to change colleague's practice in family planning included the following: gave

report of meeting to hospital staff, 4; and offered to teach my colleagues on any area of course, 1. Twelve gave no answer to this question, and 13 responded "none".

Seventeen of the Chicago respondents did not answer question 27 concerning weaknesses of the course, and 7 answered "none". Categories of affirmative answers included the following: some talks oriented toward nurses and other auxiliary personnel, 1; the course for physicians only had to be cancelled, 1; the "health educator specialist" was only fair, 1; not enough objective discussion of oral contraceptives, 2; too much for non-physicians, 1; and not enough time, 2.

Seventeen did not answer question 28 about the strengths of the course, but none suggested that there were none. Eight said whole course was well presented, and 3 pointed out discussions of the pill as a strength. One said he appreciated the fact that no fee was charged and another said he liked the fact that lectures were short and informal.

Fourteen Georgia respondents gave no answer to question 24, concerning type of practice change and 4 answered "none". These 18 represent 64.29 percent of the total respondents from Georgia. Almost 64 percent of these respondents answered either "no" or "not sure" to Item 18.

Affirmative answers included the following categories: use more scientific approach in choosing contraceptive for patient, 10; spend more time on sexual history-taking, 3;

more aware of total family planning, 2; and use laparoscopy now, 1.

Six gave no answer and 11 answered "none" to question 25 which asked how if at all the physician tried to improve community standards in family planning after taking the course. Those who said they had tried answered within the framework of these categories: expanded my family-practice clinic in numbers and quality of care, 9; now work for Planned Parenthood clinic part-time, 1; try to see community needs and do something about them, 2.

Ways in which some of the respondents tried to influence other physicians concerning family planning (answer to question 26) included training hospital nurses in family-planning work, 1; recommended that two colleagues take the course, 1; and spoke on family-planning at hospital staff meeting, 4. Ten did not answer the question and nine responded "none".

To question 27 concerning the weaknesses of the course, five gave no answer and four said there were no weaknesses. Affirmative replies included the following categories: bad movie on laparoscopy, 1; Dr. Bronstein talked too much, 2; night session too long, 1; sexual counseling was not good, 2; lack of student participation, 1; some of the lecturers could not be understood because either they had a foreign accent or spoke too low, 1; dinner party and sex discussion were boring, 1; ladies talked

too much, especially in the evening, 1; should have been more clinical work, 7; presentation too repetitious, 2; needed more emphasis on various types of pills and the dosage for them, 1.

Four did not answer question 28 concerning the strengths of the course. Affirmative answers included the following: all worked hard, 4; knowledgeable speakers, especially Dr. Bronstein, 1; most lectures were fine, 8; certain lecturers were outstanding, 3; good information on contraceptives, 4; Drs. Lippe, Cohen, Freeman, and McDonough were especially good, 3; and good discussion on transsexual psychology, 1.

OBSERVATIONS OF SITE VISITS

Site visits to all of the schools were made, but observations from only two will be discussed. The reason for the limited discussion is that only two of the schools presented a model that permitted the evaluator to have conversations with students. That does not mean that the evaluator was prevented from speaking to students anywhere, but that the schedule was such as to afford her the greatest opportunity at L.S.U. and Temple.

A few observations might be made about all five of the schools, however. In all cases, the majority of the faculty not only gained the attention of the audience but also response by virtue of the fact that speakers were enthusiastic and also made it apparent that questions both during and after the lecture would be welcomed. The faculties seem dedicated and eager to help those in the audience improve their practice and help them solve their individual problems. Moreover the faculty addressed the students as colleagues, a fact that gained trust from the audience.

The personal giving of self which faculty displayed was far greater than one expects to see. Perhaps the reason was that most of those who spoke are not professional teachers, although many of them do teach in the medical schools. They still have an enthusiastic and giving approach that

typifies the new teacher, rather than the business-like attitude of the experienced one. For the groups whom they were addressing, this "new teacher" approach was not only more appropriate but was needed, since many members of the audience were timid about asking questions in the beginning. What success each school met with must be attributed first, then, to the individual presenters and, secondly, to the directors who chose them and set the pace for other speakers.

The L.S.U. program offered three opportunities for the evaluator to speak to students. First were the "coffee-break" periods in the morning and the afternoon sessions. Second was the luncheon conference of the first day where one faculty member met with every ten students in a separate room for lunch and informal discussion. The third was the lunch the second day for physicians and their spouses, where tables accommodating eight were set up.

The evaluator was most interested in physicians whose type of practice made them part of the preferential groups. When the evaluator identified herself as being with the College, the physicians were willing to talk to her about whatever she wished. The evaluator usually merely asked what the person thought of the course to that point in time or why he had elected to take the course in the first place. The evaluator was impressed with the humility of the general practitioners she spoke with and also of the people who worked in student health services and family-planning clinics.

These people expressed, over and over again, their surprise that anyone -- the federal government, the College, the medical school -- would offer to them a free postgraduate course of the magnitude of the family-planning program and also that the faculty of "experts" would take the time to speak with them individually about their practice problems. They were also surprised that anyone, faculty and evaluator in particular, wanted their opinions as to the worth of the course.

Those to whom the evaluator spoke were enthusiastic about the course and wanted to take advantage of everything offered. Their enthusiasm and humility were borne out in little notes that were appended to many of the College's questionnaires. These notes were expressions of thanks for the opportunity of attending the course. Such notes were received from a proportion of respondents from all schools, L.S.U. and Temple students predominating. All of the notes were received from persons whose practices had put them into the preferential categories.

The extraordinary availability of the L.S.U. faculty during and after course presentations was unusual. They made time for conversations where no planned time had been included and attempted to get to all students.

The model of Temple made such availability mandatory, since members of the faculty met with the students after dinner in the library of Sugar Loaf every evening. Here in-

formal discussion of anything the students wanted to talk about was encouraged. Small groups would get together to discuss common problems in medicine. At one such evening session five women physicians who were in the student health service at five different women's colleges and who had similar problems in establishing sex counseling and family-planning programs as well as programs for detection and treatment of venereal disease received very direct help from one of the faculty members. The discussion was, in fact, a seminar on various aspects of university health service, with special emphasis on sexual problems of students.

The responses to the questionnaire reflect the amount and depth of such unintended learnings at the five schools. If Temple seems to show a greater amount and wider diversity of such learnings, then it is due to the model which provided for time for it.

CHAPTER V

CONCLUSION

That the C.I.P.P. model for evaluation can be applied to continuing medical education there is no doubt. That it should be so applied is obvious from the results of both the delineation-of-information and the obtaining-of-information stages presented in this thesis. Both stages revealed faults and oversights in the over-all conduct of the program as well as strengths and successes.

The C.I.P.P. calls for evaluation to begin at the planning stage of the program to be judged. Thus this model in actuality calls for evaluation of the plan long before implementation occurs. If evaluation is initiated at this stage of development, then oversights come to light early enough to be corrected, and changes can be effected before commitments to a plan of action have been made. Indeed, evaluation begun early enough can predict weaknesses in a plan that make implementation of its basic structure unwise. In essence, the delineation-of information-stage of evaluation over Context, Input, and Process levels results in a model, the Product evaluation, that should make apparent, (1) the feasibility of putting the program into operation at

all, and (2) the probability of reaching the basic objectives of that program by the means under consideration.

In the case of the family-planning program, one gross oversight and one weakness were brought to light by the delineation-of-information stage alone. The oversight was that no budget had been estimated for evaluation either at the College level or school level. The weakness, which stemmed in part from this oversight, was that no common measurable criteria and no plan to obtain them had been devised by the schools for evaluation at their level. Basic to these problems was the fact that the systems in which the program would operate had not been fully defined or modeled, and definition and modeling of the system is one of the first products of the delineation-of-information stage in the C.I.P.P. model. Once the system is defined, then means for monitoring the process it implies can be discovered. The monitoring, in turn, can detect any flaws that may be preventing the final objectives from being met. Such monitoring and the means to achieve it imply both personnel and methodology, including instrumentation, which must be planned for and budgeted for in advance.

The question arises as to just how serious the lack of evaluation at the delineation-of-information stage was to the success of the program in each of the schools. The

results of the College's questionnaire give a partial answer.

The program had as its main goal the raising of the standards of excellence in family-planning medicine for women throughout the United States. Although family-planning must be seen as a concern to both men and women, at this point in time, both societal dictates and available medical means for regulating the size of families still assign the chief responsibility in the matter to women. Therefore, it was care of women that had to be emphasized in the program.

Five groups of physicians deliver the majority of family-planning care to women: the specialist in obstetrics and gynecology, the internist, the pediatrician who treats sexually active minor females, the general practitioner, and the specialist in family medicine. Because of his initial training and his continuing medical education, the physician certified in obstetrics and gynecology was assumed to be meeting acceptable standards of excellence in family-planning medicine. The certified internist and pediatrician could also be assumed to have, through their continuing medical education, a high degree of competence in the area. Family practice, a relatively new specialty the initiation of which coincided with the exploding demand by the public for acceptable family-planning medicine, includes special training in the area and so many family medicine specialists likewise were seen as delivering acceptable care in this

field. The general practitioners, particularly those who had been out of school for more than ten years, were candidates for intensive re-training in the field, especially since many of them work in family-planning centers and university health services where there is great demand for such care. The target group for the program's training, therefore, was the generalist or the person who restricted his practice to obstetrics and gynecology but who was not certified in the specialty.

It was not assumed that the target group necessarily delivered care of poor quality. What the College was aware of was that since family-planning medicine had changed so drastically over the past ten years, the generalist, who is forced to survey the entire field of medicine, often has difficulty in finding any means of continuing education that provides intensive training designed to meet his needs in any given area. Such physicians can, therefore, find themselves at a disadvantage when seeking to up-date their practice habits in any single area.

Although the program was under the auspices of the American College of Obstetricians and Gynecologists, the content was not designed for certified specialists or Fellows of the College, an unusual circumstance for this group. The curriculum was constructed to cover a wide variety of subjects over a broad spectrum. Lest through oversight or

the task was wanting.

Fearing that what did happen might happen, the author, in constructing the College questionnaire, included not only a section on student expectations of the course, but also an item whose sole purpose was to determine whether the student was a certified specialist in obstetrics and gynecology. It had been reasonable to suppose that Fellows of the American College of Obstetricians and Gynecologists would have been attracted to any course sponsored by their association. Moreover, it was reasonable to suspect that residents or other students preparing for certification in obstetrics and gynecology would be attracted to any course taught by the instructors in the department of obstetrics and gynecology of the medical school and hospitals that were supervising their training. Thus, another group of persons sophisticated in the areas being taught might be added to the class of individuals within the system.

When evaluating the effect of the course, it became mandatory to view results against the background of the individual, particularly with regard to the amount of training he had had in the content. Moreover, it became essential to judge these same results against the type of practice. Certainly one who worked full-time as a director of a family-planning clinic could be expected to want information about organizing, evaluating, and administering such an installa-

lation, while a generalist in private practice would consider training in that area to be a waste of time. Thus, whether one's main criterion for success of the courses were the degree to which the students were satisfied with the presentation, the degree to which what they learned had altered their practice, or a combination of the two, accurate judgment necessitates knowing about the student's work situation. To improve the probability of achieving success in terms of such criteria, the various work situations ought to be exposed prior to presentation so that, where necessary, content and emphasis can be altered. Since the intelligence at hand via the Osofsky questionnaire was not used for its intended purpose, no alteration of objectives and, therefore, no alteration of content or methodology was made at any of the schools. The evaluation of the meaning of the data elicited by the College's questionnaire had to be done in light of who the students were, therefore.

The final evaluation of the presentations as made by each of the five medical schools under consideration must be done primarily in terms of two criteria: (1) whether, after taking the course, the student changed his practice habits with respect to family planning; (2) whether the student liked the presentation as a whole. If the students changed their practice habits, at least in part, then the objectives of the course presenters were met (the assumption here being

failure to judge what the generalist wanted and needed some aspect had been omitted or slighted, a way was needed to determine early whether the offerings coincided with the students' expectations for the courses. In preparing the "needs assessment" questionnaire Osofsky had sought to deal with this problem. He had not included however, a way to determine whether any student was certified in obstetrics and gynecology, probably because he assumed that only a small number, if any at all, of such persons would elect to take the courses.

Even though the question was not asked directly, a review of the needs checked could have served as a clue to the fact that the individual was more sophisticated in the subject matter than the course had expected him to be. Unfortunately, none of the schools used the questionnaire for this purpose. When the schools did use the questionnaire--and only U.C.L.A. was consistent in such use--it was a means of describing the students after the fact, that is, as part of the summary statistics.

Such misuse of instrumentation emphasized the need for modeling the systems and the evaluation of the process prior to the beginning of teaching. It also emphasized the need for persons to be assigned evaluation roles at the planning stage, for most of the reason for not doing even somewhat obvious and simple monitoring was that personnel to perform

that the change was in the direction of meeting higher medical standards). If the students liked the course, then the probability of their pursuing further continuing education in family planning through formal courses, increased reading, or both is greater (the assumption here also being that further learning will continue to change practice habits in the direction of meeting higher medical standards). In the second instance yet another dimension is added to the success of any continuing education course. If students like what they receive--and "like" includes the belief that the course met felt needs, that it was "interesting" to the student, and so methodology and speakers were pleasing, etc.--then the sponsors of the offering are being held in high esteem. Further continuing education efforts produced by them, then, are likely to draw even larger audiences later. This factor, while not essential in the case of the courses under study is often important to groups who attempt to reach the same audience on a yearly basis.

In assessing the results of the presentations in terms of the two criteria stated, the author is mindful that the College questionnaires which were returned and on which she must base her conclusions do not represent a random sample of students. Therefore, anything that is said must refer not to the population of students as a whole for any school, but to the population defined as students who returned the

questionnaire, or respondents.

In all cases the responses to items dealing with the criteria were to be looked at in terms of whether the physician was a specialist. This fact is essential in judging the success or failure of any of the presentations.

On the face of it, the results concerning whether the respondent's practice had changed were disappointing in the case of the Temple, Chicago, and Georgia data. However, if one bears in mind that 57.40 percent of Temple respondents were specialists or studying to be specialists in obstetrics and gynecology, and 53.33 percent of Chicago's respondents and 28.57 percent of Georgia's respondents were in the same category, one judges otherwise. Only 5.36 percent of L.S.U.'s respondents were specialists. In the case of L.S.U., 39.65 percent of the respondents said that their practice had changed and in the case of U.C.L.A., 57.14 percent of the respondents said that their practice had changed.

The practice of specialists would not be expected to change as a result of the curriculum presented, since this curriculum was, for them, elementary. For generalists, whether in private practice or the institutional medicine represented by a university health service or a family-planning agency, much of the curriculum would contain new information. Moreover, it would be informative pertaining to the most significant aspects of their daily practice of family-

planning medicine: contraceptive care that is not surgical in nature. The truth of this fact is born out in the data concerning areas in which the respondents wanted training. The specialist wanted clinical experience primarily in surgical procedures. The generalist wanted training in contraceptive means that could be managed by office visits.

It would seem that each school was successful in achieving what it intended to achieve with respect to the preferential groups as specified by contract. In terms of the respondents, only L.S.U. managed to limit its students almost exclusively to such persons, with Chicago and Temple both drawing heavily from physician populations for which the course was not originally intended.

Under the terms of the model, Chicago also included a large population of students from outside the ranks of physicians. Perhaps a larger population of students from such ranks were drawn than at first had been intended or realized. The percentage of physicians who responded to the questionnaire among the Chicago group was atypically small when compared with the percentage of respondents from the other schools. Only 30 percent of Chicago physicians responded while 48-58 percent of physicians from L.S.U., Temple, and U.C.L.A. responded. Like these schools, Chicago managed a two-year program. Georgia, which managed only a one-year program, accounted for more respondents than did

Chicago. The reason for the discrepancy is not clear. It could depend upon the fact that even fewer physicians than had been reported were among the Chicago students.

Whether the students liked the course or not depended upon whether the course offered them information they wanted and needed. Generalists tended to find no fault with the courses. Specialists, on the other hand, tended either not to respond to the open-ended questions regarding strengths and weaknesses of the course or else find more weaknesses than strengths in the presentations.

In any event, a great problem in all of the schools, except L.S.U., was that the audiences held too many students for whom the courses had not been designed. This same problem recurs in many continuing education courses in medicine. No course can be all things to all men. For maximum effectiveness both curriculum and methodology must be aimed at the student. That means that the content must be presented by means of methodology that the student's previous academic and experiential learning permit him to understand. If either is too sophisticated, the students will be confused and learning will suffer. If either is too elementary, then students will be bored and, again, learning will suffer.

Research needs to be done on methodology for continuing education in medicine. It also needs to be done on finding ways to determine the level of medical knowledge and exper-

tise possessed by any given group of students taking a particular continuing education course. Perhaps the best place to start is by excluding some groups altogether from some courses.

This method of exclusion is used in the case of clinical training in various types of surgery. It has not been used in the case of training by didactic means, however. The assumption in continuing medical education has been that any physician can learn from any curriculum that is primarily didactic in nature. While it is true that any physician can learn something, it is also true that efficiency demands meeting educational objectives constructed not only in terms of curriculum but also in terms of student behaviors. Teaching that helps students meet these behaviors demands, in turn, that the students' readiness for the learning be assessed. In the case of the practicing physician, just what this assessment should consist of is not known. Analysis of skills by level is needed.

A quick and not altogether unsatisfactory assessment can be begun by looking at the type of practice, previous training, and felt needs of the student. This kind of assessment can be done course by course and student-body by student-body. However, such assessment relies on personal and, therefore, biased judgment of an evaluator. A better

means needs to be found to either replace or supplement this kind of judgment. Since continuing education is fated to occupy an even more prominent role in the total training of physicians, research into such areas has both practical and urgent aspects.

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APPENDIX A

DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE

NEGOTIATED CONTRACT

		CONTRACT NO HSM 110-72-276		PAGE <u>1</u> OF <u>15</u> PAGES	
		NEGOTIATED PURSUANT TO 41 USC 252(c)(10)		TYPE OF CONTRACT Cost Reimbursement	
ISSUING OFFICE Health Services and Mental Health Administration 5600 Fishers Lane Rockville, Maryland 20852		CONTRACT FOR Assisting 5 Medical Institutions To Develop Training Programs in Family Planning Medical Services.			
CONTRACTOR (Name and Address) The American College of Obstetricians and Gynecologists 79 West Monroe Street Chicago, Illinois 60603		ACCOUNTING AND APPROPRIATION DATA Appropriation: 7520369 Allowance: 2-6420 CAN: 2-3886420 Object:Class: 25.32 (RFP HSM 110-FPS-51(2))			
PLACE OF PERFORMANCE Chicago, Illinois plus 5 additional locations to be selected.		CONTRACT AMOUNT \$283,687.00			
MAIL VOUCHERS TO See ARTICLE XV		SPONSOR National Center for Family Planning Services		EFFECTIVE DATE	
				EXPIRATION DATE See ARTICLE II	

CONTRACTOR REPRESENTS

- That it is, is not, a small business concern. If he is a small business concern and is not the manufacturer of the supplies to be furnished hereunder, he also represents that all such supplies will, will not, be manufactured or produced by a small business concern in the United States, its possessions, or Puerto Rico. (A small business concern for the purpose of Government procurement is a concern, including its affiliates, which is independently owned and operated, is not dominant in the field of operation in which it is contracting and can further qualify under the criteria concerning number of employees, average annual receipts, or other criteria, as prescribed by the Small Business Administration.) (See Code of Federal Regulations, Title 13, Part 121, as amended, which contains detailed definitions and related procedures.)
- That it is a REGULAR DEALER IN, MANUFACTURER OF, the supplies covered by this contract.
- That it is an INDIVIDUAL, STATE OR LOCAL AGENCY, PARTNERSHIP, JOINT VENTURE, NONPROFIT, EDUCATIONAL INSTITUTION, CORPORATION organized and existing under the laws of the state of _____.

The Contractor agrees to furnish and deliver all the supplies and perform all the services set forth in the attached Special Provisions, for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the Special Provisions and the General Provisions. To the extent of any inconsistency between the Special Provisions or the General Provisions and any specifications or other provisions which are made a part of this contract, by reference or otherwise, the Special Provisions and the General Provisions shall control. To the extent of any inconsistency between the Special Provisions and the General Provisions, the Special Provisions shall control.

IN WITNESS WHEREOF, the parties hereto have executed this contract on the day and year last specified below.

NAME OF CONTRACTOR		UNITED STATES OF AMERICA	
BY	SIGNATURE OF AUTHORIZED INDIVIDUAL	BY	SIGNATURE OF CONTRACTING OFFICER
	TYPED NAME		TYPED NAME
TITLE			DATE
	DATE		

THIS CONTRACT CONSISTS OF:

1. COVER PAGE PHS 4910-1
2. CONTENTS OF CONTRACT PHS 4910-2
3. SPECIAL PROVISIONS PHS-4910-3

ARTICLE I	DESCRIPTION AND SCOPE OF WORK
ARTICLE II	ARTICLES OR SERVICES TO BE FURNISHED AND DELIVERY
ARTICLE III	DESIGNATION OF PROJECT OFFICER
ARTICLE IV	DESIGNATION OF PROJECT DIRECTOR
ARTICLE V	REVIEW AND APPROVAL
ARTICLE VI	NOTICE TO GOVERNMENT OF DELAYS
ARTICLE VII	PROCUREMENT OF ALL MATERIAL, DATA AND SERVICES
ARTICLE VIII	COMPETITION IN SUBCONTRACTING
ARTICLE IX	CONSULTANT SERVICES
ARTICLE X	NOTICE OF MAXIMUM PERMISSIBLE ESCALATION IN WAGE AND PRICE STANDARDS
ARTICLE XI	IDENTIFICATION OF DATA
ARTICLE XII	DEVELOPMENT AND USE OF FORMS
ARTICLE XIII	PUBLICITY AND PUBLICATIONS
ARTICLE XIV	COMPENSATION
ARTICLE XV	SUBMISSION OF INVOICES AND PLACE OF PAYMENT
ARTICLE XVI	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA
ARTICLE XVII	SUBCONTRACTOR COST AND PRICINGS DATA
ARTICLE XVIII	AUDIT AND RECORDS
ARTICLE XIX	FORMALIZATION
4. GENERAL PROVISIONS, HEW FORM 315 (REV. 8/64) NEGOTIATED Cost Reimbursement Contract; and Alterations thereto dated 12/69.

ARTICLE 1 - DESCRIPTION AND SCOPE OF WORK

A. The purpose of this contract is fourfold:

1. To select and provide technical assistance to at least five medical institutions providing education in Obstetrics and Gynecology in order to develop training programs in family planning medical services as outlined below.
2. To develop curricula for family planning physician training programs in conjunction with the five selected medical institutions and obtain American College of Obstetrics and Gynecology (ACOG) approval of such curricula. The approved curricula shall encompass all pertinent and necessary facets of family planning interconceptional care necessary for the Training of physicians in each of the following categories:
 - a. The undergraduate medical student.
 - b. The intern and resident physician in specialties other than Obstetrics and Gynecology.
 - c. The resident physician in Obstetrics and Gynecology.
 - d. Physicians in FP programs and the graduate general practice physician.
 - e. University and college health service physicians.
3. To distribute the ACOG approved curricula to the following professionals:
 - a. Deans of all medical schools in the United States.
 - b. Directors of all Obstetrics and Gynecology training programs in the United States.
 - c. Directors of all Family Practice training programs in the United States.
 - d. Presidents of the American Academy of General Practice and the American Academy of Pediatrics.
4. To provide clinical skill development workshops for physicians in FP programs, general practice physicians, and university and college health service physicians through the five selected medical institutions. These workshops shall include didactic and clinical training in contraceptive technology. Upon completion of a workshop, each physician should be able to participate in the clinical operation of Family Planning Clinics or be able to deliver comprehensive family planning services within the general office practice of medicine.

B. In performance of this contract the contractor, subject to the approval of the Project Officer, specifically shall:

1. Select five medical institutions providing education in obstetrics and gynecology within the United States interested in developing a more standardized approach to family planning services training in undergraduate, intern and residency programs, as well as in developing a continuing educational effort for practicing general physicians. The following factors should be considered in the selection of such institutions:

a. The geographic location of each institution. The five institutions should be selected such that one is located in each of the following five general areas of the United States:

(1) West

(2) Southwest

(3) South

(4) Midwest

(5) East

b. The institution selected must have access to sufficient clinical material to provide clinical instruction for up to 25 participants who are physicians in family planning programs, general practice or university health services. Priority is to be given to attendants by physicians in the following order:

Physicians in NCFPS funded family planning programs, physicians in other family planning programs, physicians in general practice and university health services. (Specifically, the contractor shall insure sufficient clinical material for all participants to become proficient in the use of the IUD. If sufficient clinical material is not available during the family planning course, definitive arrangements will be made for subsequent supervised clinical experience to insure the participants ultimate proficiency.)

c. The institution must have a genuine interest in developing postgraduate training courses.

d. The institution must be willing to alter medical student, intern and residency training programs where deemed appropriate by the contractor and be willing to utilize new methodology in the teaching of family planning materials.

- e. The institution, preferably, will have programs to train, involve and upgrade the utilization of allied health personnel in family planning services.
- f. The institution should be located so as to provide access to large numbers of physicians in FP programs, general practice and university health service.

Provide each of the five medical institutions identified all technical assistance necessary to provide clinical skill development workshops for physicians in FP programs, general practice and university health service. Technical assistance offered will include, but not be limited to, the following items:

- a. Development of curricula for the workshops.
 - b. Design of workshops.
 - c. Identification of instructors/teachers who are members of ACOG and others with proven expertise in the material to be covered. (It is anticipated that the contractor will provide such expertise through their regional organizations.)
 - d. Development and implementation of the program as cited in Part 5 below.
3. Develop curricula in conjunction with the five medical institutions selected under Part B,1.
- a. Such curricula shall be developed for each of the following participant groups:

(1) Medical students:

This curriculum should be directed at medical students well versed in the basic sciences and preferably during their clinical training in obstetrics and gynecology. Family planning clinical experience should be as extensive in range and quantity of services as allowed by the individual medical institution.

(2) Interns and residents not in specific Obstetrics and Gynecology training programs:

This curriculum should be directed toward those interns in general rotating internships and residents in general practice residencies; however, should, where appropriate, involve interested interns and residents in other specialties outside Obstetrics and Gynecology. Clinical experience should provide proficiency in all non-surgical family planning methodology.

(3) Residents in Obstetrics and Gynecology:

This curriculum should take cognizance of general training currently received in Obstetrics and Gynecology and specifically deal with the provision of training material and methodologies to fill any gaps in current training. Specifically training to this group of trainees should deal with the appropriate, developing, expanded role of allied health personnel in the operation of family planning programs. It should further insure the emphasis of comprehensive interconceptional care as a part of the practice of Obstetrics and Gynecology.

(4) Physicians in FP Programs, General Practice and University Health Service:

This curriculum should be developed to provide such extensive training as to allow each participant to become proficient in the delivery of comprehensive family planning medical services.

b. Such curricula shall include, but not be limited to, the following subject matter:

- (1) Personal health and social benefits derived from fertility regulation.
- (2) Pertinent reproductive anatomy, physiology and biochemistry.
- (3) Methods of contraception (including sterilization) currently available, and their associated indications, contraindications, efficacy, mortality, and morbidity.
- (4) The rational usage of history, physical and laboratory examinations necessary for provision of contraceptive services and for infertility diagnosis.
- (5) The role of the paraprofessional and related disciplines necessary for high quality delivery of family planning care.
- (6) Emotional and social factors and their relationship to fertility regulation.
- (7) Special considerations appropriate in the provision of services to adolescents, minority groups and the indigent, including information concerning the knowledge, aptitudes and practices (KAP) of these groups.

- (8) General orientation to sexuality and sex education.
- c. Such curricula should specify training standards to be applied in the teaching of the material specified above. These standards should include but not be limited to:
- (1) Didactic and clinical settings for transmission of the material at each level to be taught (i.e., undergraduate, graduate, specialty training, and practicing general practitioners.)
 - (2) Length of time necessary for mastery of the material at each level to be taught, including proficiency in the use of the intrauterine device.
 - (3) Integration with other related material contained in ongoing medical school and residency training.
- d. It is understood that the American College of Obstetrics and Gynecology is not in a position to implement the developed curricula for medical students, interns and residents both within and without specific Obstetrics and Gynecology training programs. These training programs are under the direction of individuals outside of any specific control by ACOG; however, these individuals are more sensitive to the recommendations of ACOG than they are to any other professional organization. It is, therefore, expected that the contractor will attempt to influence such training programs by direct negotiations between the contractor and the Association of Professors of Gynecology and Obstetrics and by the distribution of an ACOG approved curriculum for each classification of trainee to individuals responsible for such training programs.
- Further, the contractor shall report to the Project Officer from time to time as to any specific influence on or changes brought about in institutional training of medical students, interns and residents as a result of the contractor's efforts under this contract. At a minimum such changes shall be recorded in the final report under this contract.
- e. Following the coordinated development and testing of curricula for all four groups of trainees indicated under Part 3a the contractor shall extract from the various curricula those components and methodologies deemed most successful and collate in such a way as to provide a standardized curriculum for each of the four trainee groups. The resultant compiled curricula will be presented to ACOG for approval.

4. Print and distribute the ACOG approved curricula to the following:
 - a. Deans of all medical schools in the United States.
 - b. Directors of all Obstetrics and Gynecology training programs in the United States.
 - c. Directors of all Family Practice training programs in the United States.
 - d. Presidents of the American Academy of General Practice and the American Academy of Pediatrics.

5. Provide administrative support for Clinical Skill Development Workshops for general practice and university health service physicians. Under the direction of the contractor 10 clinical skill development workshops shall be presented through the five medical institutions selected under Part B,1. Each workshop shall have the capacity to provide training for up to 25 general practice and university health service physicians. The administration of each workshop by the contractor will include all administrative details, including but not limited to the following:
 - a. Development of curricula in cooperation with each of the five medical institutions selected under Part B,1. Such curricula should include all material which is relevant to a currently practicing FP physician or health service physician, including such extensive clinical experience as to provide proficiency in all non-surgical family planning methodology for all participants.
 - b. Provision for course credit for physicians who participate in the workshop from the American Academy of General Practice.
 - c. Provision for administration, publicity, space, visits to clinics, instructors, materials and supplies.
 - d. Provision for per diem for FP program physicians, and university health service physician participants. (This is anticipated to be an essential component if they are to be attracted to this program.)
 - e. Provision for all didactic and clinical skill development material presented in the workshop.
 - f. Provision for participants representative of appropriate geographic areas, as well as from physicians in FP programs, general practice and university health services.
 - g. Provision for evaluation of all workshops conducted.

ARTICLE II - ARTICLES OR SERVICES TO BE FURNISHED AND DELIVERY TIME

The contractor shall submit to the Project Officer, National Center for Family Planning Services, Health Services and Mental Health Administration, DHEW Region VI, 1114 Commerce Street, Dallas, Texas 75202, and to the Alternate Project Officer, National Center for Family Planning Services, Health Services and Mental Health Administration, 5600 Fishers Lane, Room 12A-53, Rockville, Maryland 20852, the following items in the quantities and during the time periods listed below:

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>DELIVERY</u>
1	Progress Report - including a description of problems encountered and possible solutions to such problems.	5 copies	August 31, 1972, and every 2 months thereafter.
2	Identification and selection of five medical institutions.	-	By August 31, 1972
3	Develop curricula for the four participant groups outlined under Article I, B., 3., a.	-	By December 31, 1972
4	Administrate at least one Clinical Skill Development Workshop through each of the medical institutions.	5 workshops	By March 31, 1973
5	Recommended, ACOG approved, standardized curricula for each of the four groups outlined under Article I, B., 3., a.	20	By May 31, 1973
6	Distribution of ACOG approved curricula as under Article I, B., 4.	-	By June 30, 1973
7	Administrate at least one additional Clinical Skill Development Workshop through each medical institution.	5 workshops	By June 30, 1973
8	Final Report to cover all aspects of the contract in detail.	20 copies	By June 30, 1973

ARTICLE III - DESIGNATION OF PROJECT OFFICER

Dr. Ronald Elson is hereby designated as Project Officer for this contract. The Project Officer or his authorized representative's responsibility will be to coordinate with the Contractor in administering the technical aspects of this contract. The Project Officer is not authorized to make any changes which affect the contract amount, terms, or conditions. The Contracting Officer is the only party authorized to bind the Government.

ARTICLE IV - DESIGNATION OF PROJECT DIRECTOR

Work and services shall be conducted under the direction of Dr. Louise B. Tyrer. The Government reserves the right to approve any necessary successor to the designated Project Director.

ARTICLE V - REVIEW AND APPROVAL

Review and approval of the work hereunder shall be performed by the Contracting Officer or his duly authorized representative.

ARTICLE VI - NOTICE TO GOVERNMENT OF DELAYS

Whenever the Contractor has knowledge that any actual or potential situation is delaying or threatens to delay the timely performance of this contract, the Contractor shall, within ten (10) days, give notice thereof, including all relevant information with respect thereto, to the Contracting Officer.

ARTICLE VII - PROCUREMENT OF ALL MATERIAL, DATA, AND SERVICES

Except as otherwise provided herein, procurement of all material, data, and services necessary for performance under the terms of this contract shall be the responsibility of the Contractor.

ARTICLE VIII - COMPETITION IN SUBCONTRACTING

The Contractor agrees to select subcontractors on a competitive basis to the maximum practical extent consistent with the objectives and requirements of this contract.

ARTICLE IX - CONSULTANT SERVICES

Except as otherwise expressly provided elsewhere in this contract, and notwithstanding the provisions of the clause of this contract entitled "Subcontracting", the prior written approval of the Contracting Officer shall be required:

- (a) Whenever any employee of the contractor is to be reimbursed as a "consultant" under this contract; and
- (b) For the utilization of the services of any consultant under this contract exceeding the daily rate set forth elsewhere in this contract or, if no amount is set forth, \$100.00, exclusive of travel costs, or where the services of any consultant under this contract will exceed ten days in any calendar year.

Whenever Contracting Officer approval is required, the contractor will obtain and furnish to the Contracting Officer information concerning the need for such consultant services and the reasonableness of the fees to be paid, including, but not limited to, whether fees to be paid to any consultant exceed the lowest fee charged by such consultant to others for performing consultant services of a similar nature.

ARTICLE X - NOTICE OF MAXIMUM PERMISSIBLE ESCALATION IN WAGE AND PRICE STANDARDS

The Contractor is advised of standards established under Executive Orders 11615, 11627, and 11640 setting maximum permissible percentages of escalation in wage rates and price increases. Such standards call for wage rate increases of no more than 5.5 percent per annum unless specific exceptions have been granted by the Pay Board. The price standard established by the Price Commission has the objective of holding economy-wide price increases to 2.5 percent per annum (3 percent per annum in the case of small business firms). To achieve this target, firms are allowed to increase prices to reflect allowable costs incurred since the last price increase or since January 1, 1971, whichever was later, and such costs as firms are continuing to incur, adjusted to reflect productivity gains. These price increases may not result in profit margins on sales which exceed the firm's profit margins for the highest 2 of the last 3 fiscal years ending before August 15, 1971. Average productivity gains are estimated to be 3 percent or higher for the economy annually for 1972 and 1973.

ARTICLE XI - IDENTIFICATION OF DATA

The Contractor shall identify the technical data delivered to the Government pursuant to the requirements of this contract with the number of this contract, and the name and address of the contractor or subcontractor who generated the data.

ARTICLE XII - DEVELOPMENT AND USE OF FORMS

Any forms which may be developed by the Contractor for use in the performance of this contract shall be submitted to the Project Officer for review and approval prior to their use. The Project Officer shall be responsible for obtaining clearance from the Office of Management and Budget, if required, prior to his approval for use by the Contractor.

ARTICLE XIII - PUBLICITY AND PUBLICATIONS

- A. The Contractor agrees that it will acknowledge Health Services and Mental Health Administration, Department of Health, Education, and Welfare support whenever projects funded in whole or in part by this contract are publicized in any news media.
- B. The Contractor shall include in any publication resulting from the work performed under this contract an acknowledgement substantially as follows:

"The Project upon which this publication is based was performed pursuant to Contract No. HSM 110-72-276 with the Health Services and Mental Health Administration, Department of Health, Education, and Welfare."

ARTICLE XIV - COMPENSATION

- A. The total cost to the Government for the performance of this contract shall not exceed \$283,687.00. The Contractor agrees to use its best efforts to perform all work and obligations under this contract within the total cost set forth herein, subject to the clause of the General Provisions entitled "Limitation of Cost."
- B. For the performance of this contract, the Government shall reimburse the Contractor the cost thereof (hereinafter referred to as "allowable cost") determined by the Contracting Officer to be allowable in accordance with the clause of the General Provisions entitled "Allowable Cost and Payment," and the provisions below:
1. Purchase Orders and Subcontracts
 - a. The following shall require prior written approval of the Contracting Officer:
 - (1) purchase or rental of items of nonexpendable property having unit value exceeding \$100.00 (For the purpose of this contract, nonexpendable property means property or equipment having a normal life expectancy of one year or more.) and
 - (2) purchase orders or subcontracts for any of the work contemplated under this contract exceeding \$1,000.00.
 - b. The Contractor shall give advance notification to the Contracting Officer of all proposed purchase orders or subcontracts which require prior approval in accordance with the clause of the General Provisions entitled "Subcontracts." The advance notification shall include:
 - (1) a description of the supplies or services to be called for by the subcontract;
 - (2) identification of the proposed subcontractor and an explanation of why and how the proposed subcontractor was selected, including the degree of competition obtained;
 - (3) the proposed subcontract price, together with the Contractor's cost or price analysis thereof; and
 - (4) identification of the type of subcontract to be used.
 2. Consultants
 - a. Any fee or other payment to consultants requires prior written authorization by the Contracting Officer.
 3. Salaries and Wages
 - a. Salaries and wages of employees directly employed in performing the work required by this contract.

b. Actual cost of fringe benefits.

4. Travel

Travel and subsistence expenses exclusively in direct performance of this contract.

- a. The Contractor shall be reimbursed for actual transportation costs and travel allowances (per diem) of personnel, authorized to travel under this contract, in accordance with the established policy of the contractor. Such transportation cost shall not be reimbursed in an amount greater than the cost of first class rail or of economy air travel, unless economy air travel and economy air travel space are not available and the contractor certifies to the facts in the voucher or other documents submitted for reimbursement. Travel allowances (per diem) shall be reimbursed in accordance with the contractor's established policy, but in no event shall such allowances exceed \$26.00 per day.
- b. The Contractor shall be reimbursed for the cost of travel performed by its personnel in their privately-owned automobiles at the rate of ten cents per mile, not to exceed the cost by the most direct economy air route between the points so traveled. If more than one person travels in such automobile, no additional charge will be made by the Contractor for such travel between such points.
- c. Travel for general scientific meetings and foreign travel requires prior written authorization by the Contracting Officer.

5. Rental, Rearrangement and Alteration of Facilities

- a. Rental or lease of facilities including office space requires prior written authorization by the Contracting Officer.
- b. Rearrangement, alteration, or relocation of facilities requires prior written authorization by the Contracting Officer.

6. Overtime

- a. Overtime, shift or other incentive premium requires prior written authorization by the Contracting Officer.

7. Indirect Costs

- a. Indirect costs shall be determined in accordance with Clause 27 of the General Provisions of this contract. Meanwhile, indirect costs under this contract shall be provisionally reimbursed in an amount equal to 17.66% of total direct salaries and wages chargeable to this contract.

C. Except as herein above authorized, the Contractor shall not incur costs unless the prior written authorization of the Contracting Officer has been obtained

as required herein. Incurrence with the intent of claiming reimbursement as direct costs shall therefore be at the Contractor's own risk, when without such prior authorization.

ARTICLE XV - SUBMISSION OF INVOICES AND PLACE OF PAYMENT

Once each month the Contractor may submit to the Government an invoice for the allowable cost to the Contractor for the performance of the work hereunder. The Government shall make provisional payment of all invoices submitted hereunder pending the completion of a final audit of the Contractor's cost records. Invoices shall be submitted in accordance with Billing Instructions, a copy of which is attached hereto and made a part hereof. Prior to the payment of invoices under this contract, the Contractor shall place on, or attach to, each invoice submitted the following certification:

"I hereby certify that amounts invoiced herein do not exceed the lower of (i) the contract price, or (ii) maximum levels established in accordance with Executive Order 11640, January 26, 1972".

The Contractor agrees to insert the substance of this clause including this paragraph (c), in all subcontracts for supplies or services issued under this contract.

To expedite payment of invoices or vouchers under this contract, the invoices or vouchers (except COMPLETION INVOICE OR VOUCHER) shall be sent directly to the Paying Office for Payment as follows:

PAYING OFFICE
DHEW-HSMHA-ACCT/FIN. Room 16-36
5600 Fishers Lane
Rockville, Maryland 20852

Where applicable, invoices or vouchers shall be sent through the cognizant DCAA auditor.

THE COMPLETION INVOICE OR VOUCHER will be forwarded to the aforementioned Paying Office through the Health Services and Mental Health Administration, 5600 Fishers Lane, Rockville, Maryland 20852, marked for the attention of the Contracting Officer, Room 16A40.

ARTICLE XVI - PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA

The Price Reduction for Defective Cost or Pricing Data Clause is attached and incorporated herein as Annex 1.

ARTICLE XVII - SUBCONTRACTOR COST AND PRICING DATA

The Subcontractor Cost and Pricing Data Clause is attached and incorporated herein as Annex 2.

ARTICLE XVIII - AUDIT AND RECORDS

The Audit and Records Clause is attached and incorporated herein as Annex 3.

ARTICLE XIX - FORMALIZATION

This instrument reflects the entire agreement between the Government and the Contractor. This is the understanding of the parties respecting the rights and duties of the contract and formalizes the Government's Notice of Award dated June 26, 1972 and the Contractor's acceptance thereof dated June 30, 1972.

APPENDIX B

PHYSICIAN EDUCATION PROGRAM IN FAMILY PLANNING

A.C.O.G. - H.E.W.

SUBCONTRACTOR CONTRACT

Agreement of Contract

This agreement entered into as of August 31, 1972 including all attachments and conditions annexed hereto (which are expressly made part hereof), shall govern certain activities of the Physician Education Program in Family Planning under H.E.W. Contract # HSM 110-72-276 during the period June 1, 1972 until May 31, 1973, to be carried out by the Louisiana State University and Agricultural and Mechanical College hereinafter referred to as the "Subcontractor", on behalf of the American College of Obstetricians and Gynecologists, hereinafter referred to as the "Contractor".

The Contractor and Subcontractor agree as follows:

1. WORK TO BE PERFORMED. All activities authorized by this agreement will be performed in accordance with the approved work program as in attachment 'A', the approved budget, the contract conditions and relevant HEW guidelines.
 2. COMPLIANCE WITH APPROVED PROGRAM. All activities authorized by this agreement will be performed in accordance with the approved work program as in attachment 'B', the approved budget, the contract conditions and relevant HEW directives.
 3. REPORTS, RECORDS & EVALUATION. The Contractor shall supervise, evaluate, and provide guidance and direction to the Subcontractor in the conduct of activities delegated under this contract. The Subcontractor agrees to submit to the Contractor such reports as may be required by HEW directives or by the Contractor.
- The subcontractor also agrees to prepare and retain, and permit the Contractor to inspect as it deems necessary those records that are required by HEW directives. The Subcontractor further agrees that the Contractor may carry out monitoring and evaluation activities and will effectively ensure the cooperation of the Subcontractor's employees and board members in such efforts.
4. COMPLIANCE WITH LOCAL LAWS. The Subcontractor shall comply with all applicable laws, ordinances, and codes of the state and local governments.
 5. SCHEDULE OF PAYMENT. Subject to receipt of funds from HEW, the Contractor agrees to reimburse the Subcontractor for authorized expenditures. The Subcontractor shall submit quarterly financial reports to support payment under Contractor's accounting procedures established or approved by the Contractor's accountant. Within 10 days the Contractor will approve or disapprove payments of the statement and will make payments equal in the amount of such approved expenditures to the Subcontractor.

-2-

6. TERMINATION. The contractor may, by giving reasonable written notice specifying the effective date terminate this contract in whole or in part for cause, which shall include: (1) failure, for any reason, of the Subcontractor to fulfill in a timely and proper manner, its obligations under this contract, including compliance with the approved program and attached conditions, with statutes and Executive Orders, and with such HEW directives as may become generally applicable at any time; (2) submission by the Subcontractor to the Contractor of reports that are incorrect or incomplete in a material respect; (3) ineffective or improper use of funds provided under this contract; and (4) suspension or termination by HEW of the contract to the Contractor under which this contract is made or the portion thereof delegated by this contract. The Contractor may also assign and transfer this contract to another Contractor if required to do so by HEW directive.


If the Subcontractor is unable or unwilling to comply with such additional conditions as may be lawfully applied by HEW to the Contractor, the Subcontractor shall terminate the contract by giving reasonable written notice to the Contractor signifying the effective date thereof. In such cases adequate arrangements have been made for the transfer of the delegated activities to another Subcontractor.

In the event of any termination, all property and finished or unfinished documents, data, studies, and reports purchased or prepared by the Subcontractor under this contract shall be disposed of according to HEW directives, and the Contractor shall be entitled to compensation for any unreimbursed expenses reasonably and necessarily incurred in satisfactory performance of the contract. Notwithstanding the above, the Subcontractor shall not be relieved of liability to the Contractor for damages sustained by the Contractor by virtue of any breach of the contract by the Subcontractor and the Contractor may withhold any reimbursement to the Subcontractor for the purpose of set-off until such time as the exact amount of damages due the Contractor from the Subcontractor is agreed upon or otherwise determined.

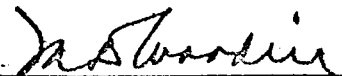
7. NON-FEDERAL SHARE. The Subcontractor is under no obligation to use matching funds, but may do so voluntarily.

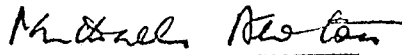
8. REVIEW OF NEW DIRECTIVES. The Contractor will submit promptly to the Subcontractor for comment those proposed additional directives that it received from HEW for comment.

In witness whereof, the Contractor and the Subcontractor have executed this agreement as of the date first above written.


Richard P. Dickey, M.D., Ph.D.
Project Director


Abe Mickal, M.D., Chairman
Department of Obstetrics and Gynecology


M.D. Woodin, President
Louisiana State University System


The American College of Obstetricians
and Gynecologists

POST GRADUATE TRAINING IN FAMILY PLANNING METHODS

INTRODUCTION: The L.S.U. Training Program Plan is predicated on the idea that physicians differ in their level of training, in their previous experience in family planning, and in their interest in improving family planning skills especially when such training will involve time spent away from a busy practice. Therefore our program is designed around a two day core course with the option of continuing in one or more of eight clinical training courses, from one to three days in length. An important component of the program is pre training evaluation in which the individual physician's current skills and knowledge are determined along with his specific needs for further training. The optional courses need not be confined to the immediate time period following the core program. Therefore a physician who takes the core program may decide to return at a later time to take clinical training in one or more areas which because of lack of time or preknowledge he did not contemplate enrolling in when he attended the original training session. In every case the emphasis will be twofold. To increase physicians' overall knowledge of family planning and reproductive physiology. To give physicians needed clinical skills in family planning methods.

PROGRAM PLANPRE TRAINING PREPARATIONS

8 weeks before - Mail out brochure on course to all eligible physicians in the target region. Selection of optional training areas can be made at this time.

4 weeks before - Questionnaire sent to all participating physicians designed to evaluate their level of training, present knowledge of family planning and specific needs in the area of developing new skills.

2 weeks before - Reminder of course and final details sent to participants. Program materials sent to enable those who wish to do so to begin reading. Any changes in the optional courses selected by the participants because of lack of pre-requisite skills on their part or over enrollment in specific areas will be made at this time.

CORE PROGRAM - L.S.U. and Family Health Training Facilities, New OrleansSaturday

- 8:30 a.m.: Continental Breakfast - Registration
 9:00 a.m.: Welcome - Agenda Briefing
 9:30 a.m.: The Population Problem
 10:15 a.m.: Review of Reproductive Physiology
 11:00 a.m.: Coffee Break
 11:30 a.m.: The Origins and Behavioral Aspects of Human Sexuality
 12:15 p.m.: Luncheon Seminars
 A. Family Planning in General Practice
 B. Family Planning in Student Health
 C. Family Planning in Medical Specialties
 D. Family Planning in Public Health and Family Health Clinics
 1:30 p.m.: Comparison of Fertility Control Methods, Safety, Effectiveness
 2:00 p.m.: The Pill and Other Steroid Methods
 3:00 p.m.: Mechanical Methods - Condom, Diaphragm, Foam
 3:30 p.m.: I.U.D.
 4:00 p.m.: Safe Period Method
 4:30 p.m.: Coffee Break
 5:00 p.m.: Management of Contraceptive Problems - Panel
 7:00 p.m.: Cocktails - Meet Faculty - Informal Discussion - Objectives of
 Family Planning - Wives Invited.
 8:00 p.m.: Free Night - Enjoy New Orleans

Sunday

- 8:30 a.m.: Continental Breakfast
 9:00 a.m.: Utilization of Para Professional Medical Personnel In
 Family Planning
 10:00 a.m.: Techniques of Patient Education
 10:45 a.m.: Infertility Evaluation
 11:30 a.m.: Post Abortion Problems
 12:00 noon: Lunch - Teenage Counseling Regarding Family Planning and
 Venereal Disease - Wives Invited
 2:00 p.m.: Sterilization Procedures - An Overview
 2:30 p.m.: Abdominal and Vaginal Tubal Ligation
 3:15 p.m.: Laparoscopic Tubal Ligation
 4:00 p.m.: Vas Deferens Ligation
 4:30 p.m.: Question Period and Wrap Up
 5:00 p.m.: Preview of Optional Courses

OPTIONAL PROGRAMS - Monday through Friday

1. Administration of Family Planning Program
One Day Family Health, Inc., New Orleans
2. Pelvic Exam - Pap Smear Technique - Use of Diaphragm
One Day Family Planning Clinics, New Orleans
3. Practice in Insertion of Intra Uterine Device
One Day Family Planning Clinics, New Orleans
4. Safe Period Method of Family Planning
One Day Charity Hospital and Family Planning Clinic, New Orleans
5. Technique of Vas Deferens Ligation
Two Days Family Planning Clinic, New Orleans
6. Caesarian Section Hysterectomy*
Three Days Charity Hospital, New Orleans
7. Post Partum Tubal Ligations*
Three Days Earl K. Long Hospital, Baton Rouge; Confederate Memorial
Hospital, Shreveport, La.
8. Laparoscopic Tubal Sterilization*
Three Days Earl K. Long Hospital, Baton Rouge; Charity Hospital,
New Orleans; Confederate Memorial Hospital, Shreveport

Times may be extended or courses repeated by arrangement.

*Only qualified Obstetricians, Gynecologists or Surgeons may enroll in these.

POST TRAINING

2 month follow-up - Questionnaire to determine how the new knowledge and skills learned have been implemented in practice. Physicians reminded at this time that they may return for additional optional program which they may desire.

LOUISIANA STATE UNIVERSITY BUDGET

ACOG - HEW Physicians Education Program

Personnel

Salaries	\$ 6,500	
Fringe Benefits	<u>455</u>	
	\$ 6,955	\$ 6,955
Honorariums for Instructional staff		\$ 12,045
Travel (project meeting, etc.)		2,000
Consumables (supplies, postage, phone)		2,500
Miscellaneous expense		
Seminar (meeting site, facilities, etc)		2,000
Educational Media		3,000
Trainees (per diem allowance)		6,500
		<hr/>
	SUB-TOTAL	\$ 35,000
Indirect Costs @ 8% total direct cost		2,800
		<hr/>
	TOTAL	<u>\$ 37,800</u>

CONTRACT

The DEPARTMENT OF OBSTETRICS AND GYNECOLOGY of TEMPLE UNIVERSITY HEALTH SCIENCES CENTER agrees to the following :

1. To provide two clinical skill development seminars for physicians in family planning program, general practice, and university and college health services. These seminars shall include didactic and clinical training in contraceptive technology. Upon completion of a seminar, each physician should be able to participate in the clinical operation of Family Planning Clinics or be able to deliver comprehensive family planning services within the general office practice of medicine.
2. To develop curricula that will encompass all pertinent and necessary facets of family planning interconceptional care necessary for the training of physician in each of the following categories.
 - A. Medical students:

This curriculum should be directed at medical students well versed in the basic sciences and preferably during their clinical training in obstetrics and gynecology. Family planning clinical experience should be as extensive in range and quantity of services as allowed by the individual medical institution.
 - B. Interns and residents not in specific Obstetric and Gynecology training programs:

This curriculum should be directed toward those interns in general rotating internships and residents in general practice residencies, however, should, where appropriate, involve interested interns and residents.

in other specialties outside Obstetrics and Gynecology.

Clinical experience should provide proficiency in all non-surgical family planning methodology.

C. Residents in Obstetrics and Gynecology:

This curriculum should take cognizance of general training currently received in Obstetrics and Gynecology and specifically deal with the provision of training material and methodologies to fill any gaps in current training. Specifically, training to this group of trainees should deal with the appropriate, developing, expanded role of allied health personnel in the operation of family planning programs. It should further insure the emphasis of comprehensive interconceptional care as a part of the practice of Obstetrics and Gynecology.

D. Physicians in Family Planning Programs, General Practice and University Health Services:

This curriculum should be developed to provide such extensive training as to allow each participant to become proficient in the delivery of comprehensive family planning medical services.

The curriculum shall include, but not be limited to, the following subject matter:

- A. Personal health and social benefits derived from fertility regulation.
- B. Pertinent reproductive anatomy, physiology and biochemistry.

- C. Methods of contraception (including sterilization) currently available, and their associated indications, contraindications, efficacy, mortality and morbidity.
 - D. The rational usage of history, physical and laboratory examinations necessary for provision of contraceptive services and for infertility diagnosis.
 - E. The role of the paraprofessional and related disciplines necessary for high quality delivery of family planning care.
 - F. Emotional and social factors and their relationship to fertility regulation.
 - G. Special considerations appropriate in the provision of services to adolescents, minority groups and the indigent, including information concerning the knowledge, aptitudes and practices (KAP) of these groups.
 - H. General orientation to sexuality and sex education.
4. Such curricula should specify training standards to be applied in the teaching of the material specified above. These standards should include but not be limited to :
- (1) Didactic and clinical settings for transmission of the material at each level to be taught (i.e., undergraduate, graduate, specialty-training, and practicing general practitioners).
 - (2) Length of time necessary for mastery of the material at each level to be taught, including proficiency in the use of the intrauterine device.

- (3) Integration with other related material continued in ongoing medical school and residency training.

The AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS agrees to support this program for the fiscal year July 1, 1972, through June 30, 1973, in the amount of \$37,800.00. The College also agrees to provide technical assistance.

Michael J. Daly M.D.
Michael J. Daly, M.D.,

Temple University Health Sciences Center,
Department of Obstetrics and Gynecology.

Michael Newton M.D.
Michael Newton, M.D., FACOG,

Director,

American College of Obstetricians and Gynecologists

PHYSICIAN EDUCATION PROGRAM SEMINARS

TEMPLE UNIVERSITY

February 10-13, 1973

April 29 - May 4, 1973

- MONDAY - INTRODUCTION TO FAMILY PLANNING
- Dr. Bowers, ACOG District III Chairman
Dr. Barnes, Vice President, Rockefeller Fdtn.
- PANEL ON FAMILY PLANNING
- Dr. Gray, Psychology Dept.
Dr. Daly, Ob-Gyn Dept.
Dr. Winn, Psychology Dept.
- TUESDAY - PANEL DISCUSSION: ORAL CONTRACEPTIVES & COMPLICATIONS (1/2 hr.)
- Dr. Garcia
Dr. Wallace
Dr. Celebre
Dr. Huggins
- TOTAL ASPECTS OF VASECTOMY (1 hr.)
- Urology Dept., Temple University
- WEDNESDAY - IUD: INSERTION AND CONTRAINDICATIONS
- Dr. Andros, Jefferson Hospital
Dr. Raja, Temple Univ. Dept. of Ob-Gyn
Dr. Lundy, Temple Univ. Dept. of Ob-Gyn
- THURSDAY - PROBLEMS OF FAMILY PLANNING AT VARIOUS LEVELS
1. University - student
 2. Hospital - Dr. Schulman
 3. Community - Dr. Batts
 4. Private Practice - Dr. Guraby
- GOVERNMENT'S ROLE IN FAMILY PLANNING
(Talk by Dr. Hellman)
- FRIDAY - COMPLICATIONS OF FAMILY PLANNING METHODS
- Dr. Myron - Complications
Dr. Siegel - Population Council
- ONE-HOUR WRAP-UP / EVALUATION
- FINAL EVALUATION
-
- CLINICAL EXPERIENCE SCHEDULED TO MEET NEEDS OF INDIVIDUALS

PERSONNEL

1. Departmental Physicians and Administration		15,000.00
2. Clerk Typist		4,500.00
Fringe Benefits		2,535.00

TRAVEL

1. Dr. Osofsky to Denver	350.00	
2. 10 speakers	<u>1500.00</u>	1,850.00

OTHER

1. Trainee per diem	6500.00	
2. Conference Rooms & Misc.	2000.00	
3. Supplies & Misc.	1500.00	
4. Transportation	1500.00	
5. Use of other clinics	500.00	
6. Printing & Misc.	625.00	
7. Honorariums	<u>1250.00</u>	<u>13,875.00</u>

TOTAL		37,760.00
	40.00	<u>37,800.00</u>

ASSESSMENT

PHYSICIAN EDUCATION PROGRAM IN FAMILY PLANNING

SUBCONTRACTOR CONTRACT

Agreement of Contract

This agreement entered into as of November 1, 1972 including all attachments and conditions annexed hereto (which are expressly made part hereof), shall govern certain activities of the Physician Education Program in Family Planning under H.E.W. Contract # HSM 110-72-276 during the period June 1, 1972 until May 31, 1973, to be carried out by:

The University of California at Los Angeles

hereinafter referred to as the "Subcontractor", on behalf of The American College of Obstetricians and Gynecologists, hereinafter referred to as the "Contractor".

The Contractor and Subcontractor agree as follows:

1. WORK TO BE PERFORMED. All activities authorized by this agreement will be performed in accordance with the approved work program as in attachment 'A', the approved budget, the contract conditions and relevant HEW guidelines.
2. COMPLIANCE WITH APPROVED PROGRAM. All activities authorized by this agreement will be performed in accordance with the approved work program as in attachment 'B', the approved budget, the contract conditions and relevant HEW directives.
3. REPORTS, RECORDS & EVALUATION. The Contractor shall supervise, evaluate, and provide guidance and direction to the Subcontractor in the conduct of activities delegated under this contract. The Subcontractor agrees to submit to the Contractor such reports as may be required by HEW directives or by the Contractor.

The Subcontractor also agrees to prepare and retain, and permit the Contractor to inspect as it deems necessary those records that are required by HEW directives. The Subcontractor further agrees that the Contractor may carry out monitoring and evaluation activities and will effectively ensure the cooperation of the Subcontractor's employees and board members in such efforts..

4. COMPLIANCE WITH LOCAL LAWS. The Subcontractor shall comply with all applicable laws, ordinances, and codes of the state and local governments.
5. SCHEDULE OF PAYMENT. Subject to receipt of funds from HEW, the Contractor agrees to reimburse the Subcontractor for authorized expenditures. The Subcontractor shall submit quarterly financial reports to support payment under

Contractor's accounting procedures established or approved by the Contractor's accountant. Within 10 days the Contractor will approve or disapprove payments of the statement and will make payments equal in the amount of such approved expenditures to the Subcontractor. In no event, however, will the Subcontractor receive reimbursement for personnel costs exceeding \$ 5079.00 or for non-personnel costs exceeding \$30,155.00 except as it has received prior written authorization from the Contractor, which is incorporated into and shall be attached to this contract.

6. TERMINATION. The Contractor may, by giving reasonable written notice specifying the effective date terminate this contract in whole or in part for cause, which shall include: (1) failure, for any reason, of the Subcontractor to fulfill in a timely and proper manner, its obligations under this contract, including compliance with the approved program and attached conditions, with statutes and Executive Orders, and with such HEW directives as may become generally applicable at any time; (2) submission by the Subcontractor to the Contractor of reports that are incorrect or incomplete in any material respect; (3) ineffective or improper use of funds provided under this contract; and (4) suspension or termination by HEW of the contract to the Contractor under which this contract is made or the portion thereof delegated by this contract. The Contractor may also assign and transfer this contract to another Contractor if required to do so by HEW directive.

If the Subcontractor is unable or unwilling to comply with such additional conditions as may be lawfully applied by HEW to the Contractor, the Subcontractor shall terminate the contract by giving reasonable written notice to the Contractor signifying the effective date thereof. In such cases adequate arrangements have been made for the transfer of the delegated activities to another Subcontractor.

In the event of any termination, all property and finished or unfinished documents, data, studies, and reports purchased or prepared by the Subcontractor under this contract shall be disposed of according to HEW directives, and the Subcontractor shall be entitled to compensation for any unreimbursed expenses reasonably and necessarily incurred in satisfactory performance of the contract. Notwithstanding the above, the Subcontractor shall not be relieved of liability to the Contractor for damages sustained by the Contractor by virtue of any breach of the contract by the Subcontractor and the Contractor may withhold any reimbursement to the Subcontractor for the purpose of set-off until such time as the exact amount of damages due the Contractor from the Subcontractor is agreed upon or otherwise determined.

7. NON-FEDERAL SHARE. The Subcontractor is under no obligation to use matching funds, but may do so voluntarily.

-3-

8. REVIEW OF NEW DIRECTIVES. The Contractor will submit promptly to the Subcontractor for comment those proposed additional directives that it receives from HEW for comment.

In witness whereof, the Contractor and the Subcontractor have executed this agreement as of the date first above written.

THE REGENTS OF THE UNIVERSITY
OF CALIFORNIA

Michael Keeton Sr. BY: Marie S. Carl
 Position: DIRECTOR, ACOG Contract and Grant Officer
 Position:

ACOG-NEW PHYSICIAN EDUCATION PROGRAM

UCLA MODEL (Tentative)

f o r

CLINICAL SKILL DEVELOPMENT SEMINARS

I. OBJECTIVES (based on ACOG proposal and narrative)

- A. Provide an understanding of "family health" in broad perspective.
- B. Provide new and/or improved clinical and non-clinical skills to practicing physicians, the need for which is self-assessed.
- C. To increase exposure of students and residents to family planning, population and human sexuality.
- D. To provide an understanding of the role of non-physician personnel and of the interaction of the physicians with them in the delivery of family planning services.
- E. To evaluate the impact of the program on subsequent knowledge, attitudes, and professional behavior in family planning.

II. MODELA. Form

1. One week (Monday thru Friday) Four physicians.
2. Monthly (e.g. last week of each month, 2nd week, etc.)

B. Teaching Resources

1. Department of OB-GYN, UCLA School of Medicine.
2. Department of OB-GYN, Harbor General Hospital.
3. Department of Population, Family and International Health, UCLA School of Public Health.
4. Los Angeles Regional Family Planning Council.

C. Content1. "Core Curriculum"

- a. Orientation session (Monday A.M.): An overview of family planning (i.e., there are health issues, socio-cultural issues, demographic etc; what is Family Planning?; what is the role of the physician?)

b. Daily Seminar ("rap session") with local expert.

- (1) End of day (5-7 p.m., 6-8 p.m.?)
- (2) Preliminary reading (s)
- (3) Subjects
 - a) Temporary contraception
 - b) Permanent contraception
 - c) Human Sexuality and counseling
 - d) Training and utilization of allied health personnel and Family Planning.
 - e) Family Planning Administration, Community Organization outreach, evaluation.

2. Elective Courses

- a. Half-day to five days in length.
- b. Offered by one of the four teaching resources.
- c. Subjects
 - (1) Family Planning Among Youth.
 - (2) Clinical Contraception.
 - (3) Male Sterilization.
 - (4) Female Sterilization.
 - (5) Sexual Counseling.
 - (6) Family Planning Counseling.
 - (7) Problem Pregnancy Counseling.
 - (8) Administration and Community Organization in Family Planning.
 - (9) Training and Utilization of Para-professional Personnel in Family Planning.
 - (10) Family Planning Program Evaluation.
 - (11) Socio-cultural Aspects of Family Planning.
 - (12) Natural Methods of Family Planning.
 - (13) Infertility.

III PROCEDURE

- A. Recruitment
- B. Send respondents information brochure containing registration packet:
 - 1. Historical, demographic, education-training information.
 - 2. "Mini-XAP" regarding family planning, population, sexuality; especially professional behavior and experiences.
 - 3. Self assessment of needs -
 - a) ? Brief course descriptions; fill in own schedule.
 - b) ? check list of areas of interest; assign advisor to help with course selections and to be guide - advocate during the course week.
 - 4. Which month desired.
 - 5. Information regarding housing, food, transportation, Los Angeles etc.
 - 6. Notify regarding per diem, \$26.00 per day; transportation not provided.
- C. Respond to registrants regarding course available in month desired, other months available if registration filled, etc.
 - 1. Instruct to arrive Sunday P.M. before course starts.
- D. Arrange housing, in-city transportation, other "housekeeping"
- E. Registration with hospital administration regarding mal-practice coverage.
- F. Course week (see II, Model).
- G. Post-course
 - 1. Evaluation of trainee by instructors.
 - 2. Evaluation of program and experiences by trainee.
 - 3. Award certificate of completion of course.
 - 4. Six to twelve month follow-up regarding family planning, knowledge, attitudes and professional behavior.

Budget

Salaries	Percent	Amt.	Fringe	TOTAL
Irvin Cushner, M.D.	2.5	1294	194	
K. May/Secy	5	337	40	
M. Williams/Admin.	20	2870	344	
		<u>4501</u>	<u>578</u>	5079.00
Trainee-Per diem:				6500.00
Instruction Services:				12,903.00
Intercity Transportation:				1000.00
Recruitment:				8000.00
Printing				
Mailing				
Reproduction:				1000.00
Travel:				1000.00
Indirect Cost				2318.00
				<u>37,800.00</u>

CONTRACT

Between

The American College of Obstetricians and Gynecologists

and

The University of Chicago

This contract is entered into this 6th day of August, 1973, effective as of July 1, 1973, between The American College of Obstetricians and Gynecologists (called "the College") and The University of Chicago (called "the University").

The College has been awarded a contract No. HSM-110-73-440 (called the "Prime Contract") by the Health Services and Mental Health Administration of the United States Department of Health, Education, and Welfare (called HEW) to support a project entitled "Physician Education Program in Family Planning". The University of Chicago Department of Obstetrics and Gynecology has the capability to perform certain aspects of physicians' postgraduate training in family planning methods and has agreed to perform the activities described in Attachment A hereto. The College desires to contract with the University to perform this work in accordance with the terms and conditions of this agreement and shall reimburse the University for such work.

NOW, THEREFORE, the College and the University do mutually agree as follows:

ARTICLE I - DESCRIPTION AND SCOPE OF WORK

The work to be performed and the services to be provided by the University are as described in Attachment A, "ACOG-HEW Physicians Postgraduate Training in Family Planning Methods", which is hereby incorporated in and made a part of this contract.

ARTICLE II - PERIOD OF PERFORMANCE

The University shall be reimbursed for work performed between July 1, 1973, and June 30, 1974. The period may be extended by written agreement between the College and the University.

ARTICLE III - COMPENSATION

The actual cost to the College shall not exceed \$37,800 for both direct and indirect costs. The University will be reimbursed for all costs (direct and indirect) incurred in the performance of the work described in ARTICLE I. The estimated cost for the performance of this work is detailed in Attachment B, "Estimated Budget", which is hereby incorporated in and made a part of this contract.

Indirect costs shall be reimbursed at the rate of ten percent of total direct costs. Should HEW authorize the College to reimburse the University at the normal rate negotiated by the University for use on grants and contracts with the Federal Government, then the applicable rate shall be used and the budget adjusted accordingly.

Allowable costs shall be those established by the Office of Management and Budget's Circular A-21 (Revised), and Attachments,

dated September 2, 1970, together with subsequent changes thereto.

ARTICLE IV - REIMBURSEMENT

The University shall submit monthly invoices for allowable costs. The College shall promptly pay such invoices, subject to audit and adjustment following examination by either party. Any underpayment or overpayment shall be adjusted at the time of the next payment following notification of the underpayment or overpayment, and agreement as to the amount of the adjustment.

ARTICLE V - TERMINATION

Either party may terminate this contract by providing written notice to be effective at least thirty days after receipt by the other party. The University after receiving or giving such notice shall immediately cease work and shall not incur further costs except for commitments which have already been made. The University will exercise its best efforts to cancel or reduce such commitments, but will be reimbursed for costs associated with any outstanding commitments after these efforts. The College will reimburse the University for any invoices outstanding and any necessary close-out costs. Determination of the acceptability and amount of close-out costs shall be a matter for mutual agreement between the College and the University.

ARTICLE VI - COST SHARING

The University is not obligated to match any funds provided under this contract, but may do so voluntarily.

ARTICLE VII - AUTHORIZED REPRESENTATIVES

1) For the College

A. Louise B. Tyrer, MD, FACOG shall be responsible for scientific and technical matters relating to this contract.

B. C. Leonard Bedsaul shall be responsible for business and financial matters relating to this contract, and shall be the representative of the College authorized to act in matters which affect the contract amount, terms, or conditions.

2) For the University

A. Dr. Frederick P. Zuspan shall be responsible for scientific and technical matters relating to this contract.

B. Mr. Cedric L. Chernick shall be responsible for business and financial matters relating to this contract, and shall be the representative of the University authorized to act in matters which affect the contract amount, terms, or conditions.

IN WITNESS WHEREOF, the College and the University have executed this agreement as of the date first above written.

THE AMERICAN COLLEGE OF
OBSTETRICIANS AND GYNECOLOGISTS

THE UNIVERSITY OF CHICAGO

Michael Newton, MD, FACOG
Director

Cedric L. Chernick
Assistant Vice-President
for Programs and Projects

MIDWEST PHYSICIANS EDUCATION PROGRAM IN FAMILY PLANNING

For Family Practice Physicians
and Specialists Other Than Obstetricians and Gynecologists

Sponsored by The American College of Obstetricians and Gynecologists
and The University of Chicago Department of Obstetrics and Gynecology

Faculty

The lecturers listed below are faculty members of the Department of Obstetrics and Gynecology, The University of Chicago, unless otherwise indicated:

- Maysoon Al-Naqeeb, M. D., Assistant Professor
- James L. Burks, M. D., Associate Professor and Director, Outpatient Department, The Chicago Lying-in Hospital
- Luis A. Cibils, M. D., Mary Campau Ryerson Professor and Chief, Section of Maternal and Fetal Medicine
- W. Paul Dmowski, M. D., Ph. D., Assistant Professor, Michael Ree Hospital and Medical Center
- Uwe E. Freese, M. D., Professor
- Janis A. Gumpel, M. D., Assistant Professor
- Philip M. Hauser, Ph. D., Professor, Department of Sociology, The University of Chicago
- A. H. Hoqseinian, M. D., Assistant Professor
- Moon H. Kim, M. D., Assistant Professor and Chief, Section of Endocrinology and Infertility
- E. Spencer Parsons, Dean, Rockefeller Memorial Chapel, The University of Chicago
- Antonio Scommegna, M. D., Professor and Chairman, Department of Obstetrics and Gynecology, Michael Reese Hospital

Kay Sleeper, R. N., Program Coordinator, Drexel Family Planning Clinic, The University of Chicago

Joseph R. Swartwout, M. D., Associate Professor and Coordinator, Biomedical Center for Population Research

Frederick P. Zuspan, M. D., Joseph Bolivar DeLee Professor and Chairman, Department of Obstetrics and Gynecology, and Chief of Staff, The Chicago Lying-in Hospital

Program

CORE CURRICULUM

Thursday

8:30 to 9:00 p. m. Registration

Friday Morning

Moderator: Dr. Zuspan

- 9:00 to 9:15 Introduction and Welcome - Dr. Zuspan
- 9:15 to 10:00 Our Growing Numbers - Professor Hauser
- 10:00 to 10:45 Psychosocial and Religious Aspects of Family Planning and Human Sexuality - Reverend Parsons
- 10:45 to 11:00 Coffee Break
- 11:00 to 11:45 Goals of Family Planning - Dr. Swartwout
- a. Maternal and Child Health
 - b. Population Control
- 12:00 to 1:30 Luncheon Seminars
- a. Family Planning in General Practice - Dr. Freese
 - b. Family Planning in Student Health Clinic - Dr. Burks
 - c. Family Planning in an Indigent Population
- Dr. Swartwout
 - d. Problems Encountered in Family Planning Counseling
- Dr. Zuspan

Friday Afternoon

Moderator: Dr. Freese

- 1:30 to 2:15 Steroid Contraception - Dr. Kim
- 2:15 to 3:00 Mechanical Methods: Condom, Diaphragm, Foam, I. U. D.
- Dr. Burks
- 3:00 to 3:30 Coffee Break
- 3:30 to 4:15 Safe Period Method - Dr. Hosseinian
- 4:15 to 5:00 Morning-After Pill and Long-Acting Hormones
- Dr. Dmowski

Saturday Morning

Moderator: Dr. Cibils

- 9:00 to 10:45 Panel - Surgical Techniques of Contraception
Selection of the Patient - Dr. Gumpel
Non-Laparoscopic Surgical Techniques - Dr. Freese
Laparoscopic Techniques - Dr. Cibils
Cesarean Section Hysterectomy - Dr. Burks
- 10:45 to 11:00 Coffee Break
- 11:00 to 11:45 Complications of Contraception - Dr. Zuspan
- 11:45 to 1:00 Lunch

Saturday Afternoon

Moderator: Dr. Scommegna

- 1:00 to 1:45 Future Methods of Contraception - Dr. Scommegna
- 1:45 to 3:15 Panel - Case Presentations. Which Method is Best
for My Patient? - Drs. Burks, Cibils, Freese, Kim,
and Zuspan
- 3:15 to 3:30 Coffee Break
- 3:30 to 4:30 General Questions and Answers - Drs. Burks, Cibils,
Freese, Kim, Scommegna, and Zuspan

The Core Curriculum of the program is approved for sixteen (16) hours of credit by the American Academy of Family Physicians.

ELECTIVE CURRICULUM

(To Be Arranged on an Individual Basis)

- A. Administration of Family Planning Programs.
Drexel Clinic, Community Reproductive Health Center,
The University of Chicago - Drs. Burks and Swartwout
- B. Administration and Function of Student Health Gynecology Clinic.
Drexel Clinic and The Chicago Lying-in Hospital - Dr. Burks
- C. Mechanical Contraception: Diaphragm, I. U. D. Insertion, etc.
Drexel Clinic and The Chicago Lying-in Hospital - Dr. Burks
- D. The Role of the Nurse and Paraprofessional in Family Planning.
Drexel Clinic - Mrs. Sleeper
- E. Family Planning for Teenagers.
The Chicago Lying-in Hospital - Dr. Al-Naqeeb
- F. Endocrinological Problems After Family Planning Therapy.
The Chicago Lying-in Hospital - Dr. Kim

SEMINAR ON FAMILY PLANNING

For Family Practice Physicians
and Specialists Other Than Obstetricians and Gynecologists

Sponsored by The American College of Obstetricians and Gynecologists
and The University of Chicago Department of Obstetrics and Gynecology

Long Beach Country Club, Michigan City, Indiana

October 9, 1973

- 6:00 to 6:30 p. m. Cocktails
- 6:30 to 7:30 p. m. Dinner
- 7:30 to 7:35 p. m. Introduction - The Population Explosion
 Frederick P. Zuspan, M. D.
- 7:35 to 7:50 p. m. Oral Contraceptives
 Frederick P. Zuspan, M. D.
- 7:50 to 8:05 p. m. The Role of the I. U. D.
 James L. Burks, M. D.
- 8:05 to 8:20 p. m. Laparoscopy and Sterilization
 Luis A. Cibils, M. D.
- 8:20 to 8:35 p. m. New Developments in Contraceptive Methods
 Antonio Scommegna, M. D.
- 8:35 to 9:00 p. m. Questions and Answers
 Drs. Zuspan (Moderator), Burks,
 Cibils, and Scommegna

ACOG-HEW PHYSICIANS POSTGRADUATE TRAINING
IN REPRODUCTIVE HEALTH CARE

ESTIMATED BUDGET

July 1, 1973, through June 30, 1974

	ACOG funded
1. <u>Salaries and Wages</u>	
a. Program Coordinator	\$ 8,000
2. <u>Fringe Benefits</u>	
a. 13.5% of 1. a.	\$ 1,080
3. <u>Supplies and Materials</u>	
a. Self-instructional audiovisual material. (TV tapes, films, and rental of Sony video tape unit)	3,500
b. Educational materials (books, journals)	500
c. Postage and publicity	1,500
d. Handouts, brochures	800
e. Photoduplication, multilith, printing	500
f. Slides	780
g. Miscellaneous office supplies	200
Total Expendables	\$ 7,780
4. <u>Travel</u>	
a. Two 2-day Midwest Conferences 460 attendees @ \$20/day	9,200
b. Two 1-day local Outreach Seminars 100 attendees @ \$10/day	1,000
c. Faculty staff travel to related conferences and meetings	600
d. Travel expenses for guest speakers	400
Total Travel	\$11,200
* 5. <u>Other Costs</u>	
a. Honoraria for lectures and guest speakers	2,000
b. Rental of Center for Continuing Education and associated costs for two 2-day Conferences	540
c. Rental and associated costs for three Seminars for non-OB/GYN physicians and residents	2,000
Total Other Costs	\$ 4,540
6. <u>Total Direct Costs</u> (1. through 5.)	\$32,600
7. <u>Indirect Costs</u> (65% of Salaries and Wages)	\$ 5,200
8. <u>Total Costs</u>	\$ 37,800

* Associated costs do not include refreshments which are being paid by the Department of Obstetrics and Gynecology.

NARRATIVE FOR
PHYSICIAN EDUCATION PROGRAM IN FAMILY PLANNING

THE PURPOSE OF THIS CONTRACT IS:

- I. To provide two clinical skill development seminars for physicians in family planning programs, general practice, university and college health services at the Medical College of Georgia. These seminars shall include didactic and clinical training in contraceptive technology. It is anticipated that upon completion of a seminar the physician should be able to participate in the clinical operation of family planning clinics or be able to deliver comprehensive family planning services within the general office practice of medicine.
 - A. Specific skills and knowledge will include:
 1. The pelvic examination.
 2. Selection of the appropriate oral contraceptive.
 3. Selection and insertion of the appropriate intrauterine device.
 4. Counseling alternatives to contraception.
 5. Selection of other methods of contraception.
 6. The breast examination.
 7. Understanding of comprehensive family planning services.
 8. A better understanding of human sexuality.
 9. A better understanding of contraceptive method failure.
 - B. Electives will be offered the trainee in the following areas:
 1. IUD insertion
 2. Vasectomy
 3. Laparoscopy

4. Counseling in family planning for sterilization and/or problem pregnancy.
 5. Managing the adolescent in family planning.
 6. The use of outreach workers in family planning.
 7. Administration of family planning clinics.
 8. Human sexuality.
- C. Each clinical skill seminar will be a 3-day program; 2 days of core material and a day for electives. Opportunity to meet with the experts can be included as luncheon conferences to be held in the new student center which can easily accommodate the large group. This will provide the opportunity for further knowledge. A dinner program is also arranged on at least one night and this could have an educational program attached. Each program will accommodate approximately 35 physicians. The 2-day clinical skill seminar will include:
1. Discussion of methods of contraception to include the pills, intrauterine devices, sterilization and other methods of contraception. Discussion will include basic reproductive endocrinology; clinical aspects; past, present and future methods.
 2. Counseling in family planning.
 3. Physical examination and laboratory tests.
 4. Human sexuality; identification of problems and resources; and management of some sexual problems.
- D. The local resources that will be used for the above program are the following:

1. The Medical College of Georgia

- a) The Department of Obstetrics and Gynecology will participate in the educational training of the physician through presentation of didactic material and assistance in development of skills in a clinic setting. Faculty and residents will partake in the program.
- b) The Section of Maternal Health and Family Planning will fully participate in the program. This means any member of the staff of the following projects can be called on to participate:
- 1) The Maternal and Infant Care Project.
 - 2) The Family Planning Project.
 - 3) The Laparoscopy Project.
 - 4) The Community Education in Family Planning Project.
- c) The Out-patient Facility is a new facility which the department occupied in the second week of October. This facility has 16 large examining rooms; a present volume of 16,000 visits per annum; a special area for laparoscopy patients and examining areas large enough to be used comfortably for physicians to be trained.
- d) The Center for Population Studies, an inter-departmental group, will provide input into the educational program, especially in the area of basic reproductive endocrinology. Many cooperative programs already exist; include inter-

departmental conferences in the area of population.

The center is directed by Dr. Virendra Mahesh, Chairman of The Department of Endocrinology. The participation of Dr. Robert Greenblatt and Dr. Mahesh in our 2-day seminar "Current Concepts in Family Planning" was another Center contribution.

- e) The Division of Continuing Education has a very active program for physicians in the southeastern United States. Attached is a copy of a recent seminar in family planning coordinated by the section of Maternal Health and Family Planning. Full cooperation by the Division of Continuing Education is anticipated. The division handles all administrative detail of the planning, development and implementation of each continuing education program. They are also involved in the distribution of materials and evaluation for each program. The Medical School has a strong commitment to continuing education programs.
- f) The Television and Audio Visual Materials Division, under the direction of Dr. James Sutherland, has promised cooperation in the development of materials and utilization of media to enhance the family planning education program.
- g) The Learning Materials Division, in the Department of Obstetrics and Gynecology and under the leadership of Dr. Preston Lea Wilds and Dr. Virginia Zachert, has

produced many learning materials, particularly programmed instructions which can be used for physician training. The Gynny Models (there are two in the department) are already being used for instruction in pelvic examination and also in laparoscopy. APGO learning materials are presently being studied by Dr. Wilds and these will be considered for incorporation into the program.

- h) The Laparoscopy Training Program is a grant from the Statewide Family Planning Program as a center for training physicians in the State of Georgia and for the provision of patient service in laparoscopic sterilization to the residents of the State of Georgia. This program will be utilized for elective training of physicians who request such a program and who have the appropriate background.
- i) The Department of Urology will train physicians selecting the elective in vasectomy, as well as provide didactic learning experiences.

2. The Richmond County Health Department

- a) The Family Planning Project, in conjunction with the Medical College of Georgia, serves approximately 5,000 active patients per year. The clinics are held at the Health Department and operated by residents of the Department of Obstetrics and Gynecology four afternoons and one evening each week.

- b) The Mobile Vasectomy Unit is located in Richmond County and is operated by residents of the Department of Urology. Dr. Roy Witherington, Chairman of the Department of Urology, has promised cooperation in training those physicians who desire vasectomy specialization depending upon their surgical skills.
 - c) The Mobile Unit of the Family Planning Program visits 17 different sites in Richmond County and is a complete mobile unit which provides well baby care and family planning. This self-contained Winnebago can be demonstrated for physicians who are desirous of using such an approach in their programs.
 - d) Administrative Skills in Family Planning may be selected as an elective with members of the Health Department cooperating in this program.
 - e) The Mobile Unit visits sites in rural counties and approaches to rural family planning care can be described for those who request it.
 - f) The Venereal Disease Program can provide further input into the comprehensive approach to family planning provided in the seminars.
3. Planned Parenthood of East Central Georgia
- a) The Women's Health Center is located at the Planned Parenthood facility and provides comprehensive family planning. It operates one evening each week. By the first of 1974, the clinic should be expanding to two

or three evening clinics each week. The Planned Parenthood Board has promised cooperation with the training program so that physicians can be trained at this site. This will be an excellent site for training on request throughout the year. Special clinics for the trainee can be arranged in advance upon request.

- b) The Outreach Family Planning Program utilizing low income people trained as family planning counselors. Information about the training program and family planning counselor activity can be provided for the trainees. This may be useful in the physician's community.
- c) The Community Education in Family Planning Program is a multimedia approach to bringing about changes in behavior and attitudes among people in the community regarding family planning and related areas. Information, materials and techniques can be described to the participating physicians for use in their own communities. Materials will be available at later dates and may be useful for the trainee physician to use in stimulating family planning activities in the trainee's community. Planned Parenthood has developed a Center for Family Planning Education materials which would be accessible to the trainees.

II. To develop curriculae that will encompass all pertinent and necessary facets of family planning, necessary for the training of physicians in each of the following categories:

A. Medical Students

This curriculum will be directed at medical students well versed in the basic sciences (Phase II) and preferably during their clinical training in Obstetrics and Gynecology (Phase III). Family Planning clinical experiences will be as extensive in range and quantity of services as allowed.

1. Students in the Phase II curriculum who have completed the block of "Reproductive Endocrinology" and "Reproductive Physiology" have requested special training in family planning. They are to be utilized after training for counseling in the hospital and the local school system. The group will be provided additional educational materials and knowledge to develop skills in family planning.
2. The curriculum of Phase II students in the "Reproductive Endocrinology" section will be enhanced by special lectures in the area of non-surgical methods of contraception and sexuality.
3. Didactic and seminar information in family planning as well as additional experiences in the clinical aspects of family planning will be provided.
4. A program to supplement the Phase II and Phase III medical student curriculum will include five consultants during the fiscal year in the area of non-surgical methods of contraception. These consultants with special expertise in family planning will provide a lecture and seminar for the medical students and also participate in a conference; either in

conjunction with the Center for Population Studies or in an interdepartmental conference in Family Planning.

B. Interns and Residents not in the Obstetrics and Gynecology training program:

1. Additional lectures and conferences will be directed toward those interns in general rotating internships and residents in general practice residencies.
2. Clinical experience will provide proficiency in all non-surgical family planning methodology.
3. Opportunities for clinical training and work experience in family planning clinics will be planned.
4. Interdepartmental conferences with Pediatrics, Medicine, Endocrinology, Psychiatry and Family Practice will bring educational materials in the area of comprehensive family planning to these physicians.
5. Special programs through the Center for Population Studies at the Medical College of Georgia will also enhance this aspect of the education. The Center for Population Studies is an interdepartmental cooperative venture to enhance studies in the area of population. Members of the Center hold weekly seminars and provide input into lectures in the basic sciences in "Reproductive Endocrinology" and "Reproductive Physiology" (see attachments).
6. Additional family planning education and training to Family Practice Residents who rotate through Ob-Gyn and to Physician Assistants who are being trained with them will be provided.

C. Residents in Obstetrics and Gynecology

The curriculum will take cognizance of general training currently being received and specifically deal with filling gaps in the current training. Specifically training for this group of trainees will deal with:

1. The expanded role of allied health personnel in the operation of family planning programs.
2. Emphasis on comprehensive interconceptional care as part of the practice of obstetrics and gynecology.
3. Reasons for contraceptive failure.
4. Human Sexuality.

D. Physicians in Family Planning Programs, General and University Health Service.

This curriculum will be developed to provide such extensive training as to allow each participant to become proficient in the delivery of comprehensive family planning services. This will include work with physician assistants as well. Family Planning for the Medical College Health Service is done by the residents and faculty of the Department of Ob-Gyn.

III. The curriculum will include but will not be limited to the following subject matters:

- A. Personal health and social benefits derived from fertility regulation.
- B. Pertinent reproductive anatomy, physiology and biochemistry.
- C. Methods of contraception including sterilization. (Sterilization procedures currently available and their associated

indications, contra-indications, mortality and morbidity.)

- D. The rational use of history, physical and laboratory examinations necessary for providing contraceptive services and infertility diagnosis.
- E. The role of the paraprofessional and related disciplines necessary for high quality delivery of family planning care.
- F. Emotional and social factors and their relationship to fertility regulation.
- G. Special considerations appropriate to the provision of services to adolescents, minority groups and the indigent including information concerning the knowledge, attitudes and practices of these groups.
- H. General orientation to sexuality and sex education.

BUDGET

<u>Personnel</u>	<u>Annual</u>	<u>6 Mos. 1973 - 1974</u>	<u>Year 2 1974 - 1975</u>
Administrative Assistant	8,054.00	4,027.00	8,496.97
Fringe @ 17%	1,369.18	684.59	1,444.84
Overhead @ 45%	3,221.60	1,812.15	3,823.64
Secretary - 1/2 time	3,000.00	1,500.00	3,000.00
Consultants (12 X \$400)	<u>4,800.00</u>	<u>4,800.00</u>	<u>4,800.00</u>
Subtotal	\$20,444.78	\$12,823.74	\$21,565.45
Training per diem @ \$26 X 12	10,146.00	10,146.00	10,146.00
Continuing Education Costs	1,500.00	1,500.00	1,500.00
Equipment	1,000.00	1,000.00	500.00
Travel, materials and supplies	4,813.51	5,049.24	4,088.55
Regional Training Center (committed)	<u>7,281.02</u>	<u>7,281.02</u>	<u>- 0 -</u>
		\$37,800.00	\$37,800.00

PHYSICIAN EDUCATION PROGRAM IN FAMILY PLANNING

SUBCONTRACTOR CONTRACT

Agreement of Contract

This agreement entered into as of August 31, 1972, including all attachments and conditions annexed hereto (which are expressly made part hereof), shall govern certain activities of the Physician Education Program in Family Planning under D.H.E.W. Contract No. HSM 110-72-276 during the period June 1, 1972 until May 31, 1973, to be carried out by Emory University hereinafter referred to as the Subcontractor, on behalf of The American College of Obstetricians and Gynecologists, hereinafter referred to as the Contractor.

The Contractor and Subcontractor agree as follows:

1. WORK TO BE PERFORMED. All activities authorized by this agreement will be performed in accordance with the approved work program as in attachment 'A', the approved budget identified as Attachment 'B', the D.H.E.W. contract conditions and relevant D.H.E.W. guidelines.
2. COMPLIANCE WITH APPROVED PROGRAM. All activities authorized by this agreement will be performed in accordance with the approved work program as in Attachment 'A', the approved budget, the contract conditions and relevant D.H.E.W. directives.
3. REPORTS, RECORDS AND EVALUATION. The Contractor shall supervise, evaluate, and provide guidance and direction to the Subcontractor in the conduct of activities delegated under this contract. The Subcontractor agrees to submit to the Contractor such reports as may be mutually agreed upon by the parties hereto.

The Subcontractor also agrees to prepare and retain, and permit the Contractor to inspect as it deems necessary those records that are required by D.H.E.W. directives. The Subcontractor further agrees that the Contractor may carry out monitoring and evaluation activities and will effectively ensure the co-operation of the Subcontractor's employees and board members in such efforts.

4. COMPLIANCE WITH LOCAL LAWS. The Subcontractor shall comply with all applicable laws, ordinances, and codes of the state and local governments.
5. SCHEDULE OF PAYMENT. Subject to receipt of funds from D.H.E.W., the Contractor agrees to reimburse the Subcontractor for authorized expenditures. The Subcontractor shall submit quarterly financial reports to support payment under Contractor's accounting procedures established or approved by the Contractor's accountant. Within 10 days the Contractor will approve or disapprove payments of the statement and will make payments equal in the amount of such approved expenditures to the Subcontractor.

6. TERMINATION. The Contractor may, by giving reasonable written notice specifying the effective date terminate this contract in whole or in part for cause, which shall include: (1) failure, for any reason, of the Subcontractor to fulfill in a timely and proper manner, its obligations under this contract, including compliance with the approved program and attached conditions, with statutes and Executive Orders, and with such D.H.E.W. directives as may become generally applicable at any time; (2) submission by the Subcontractor to the Contractor of reports that are incorrect or incomplete in any respect; (3) ineffective or improper use of funds provided under this contract; and (4) suspension or termination by D.H.E.W. of the contract to the Contractor under which this contract is made or the portion thereof delegated by this contract. The Contractor may also assign and transfer this contract to another Contractor if required to do so by D.H.E.W. directive.

If the Subcontractor is unable or unwilling to comply with such additional conditions as may be lawfully applied by D.H.E.W. to the Contractor, the Subcontractor shall terminate the contract by giving reasonable written notice to the Contractor signifying the effective date thereof. In such cases adequate arrangements will be made for the transfer of the delegated activities to another Subcontractor.

In the event of any termination, all property and finished or unfinished documents, data, studies, and reports purchased or prepared by the Subcontractor under this contract shall be disposed of according to D.H.E.W. directives, and the Subcontractor shall be entitled to compensation for any unreimbursed expenses reasonable and necessarily incurred in satisfactory performance of the contract. Notwithstanding the above, the Subcontractor shall not be relieved of liability to the Contractor for damages sustained by the Contractor by virtue of any breach of the contract by the Subcontractor and the Contractor may withhold any reimbursement to the Subcontractor for the purpose of set-off until such time as the exact amount of damages due the Contractor from the Subcontractor is agreed upon or otherwise determined.

7. NON-FEDERAL SHARE. The Subcontractor is under no obligation to use matching funds, but may do so voluntarily.
8. COMPENSATION. Total cost of performance to Contractor will not exceed the estimated budget of \$37,800, except as this agreement may be subsequently modified.
9. PERIOD OF PERFORMANCE. This contract shall commence on August 31, 1972 and shall terminate on May 31, 1973.
10. REVIEW OF NEW DIRECTIVES. The Contractor will submit promptly to the Subcontractor for comment those proposed additional directives that it receives from D.H.E.W. for comment.

In witness whereof, the Contractor and the Subcontractor have executed this agreement as of the date first above written.

EMORY UNIVERSITY

BY: *Hugh E. Hilliard*
Hugh E. Hilliard
Vice President for Finance and
Treasurer

AMERICAN COLLEGE OF OBSTETRICIANS
AND GYNECOLOGISTS

BY: *Michael Weston, D.O.*
Position DIRECTOR

DEPARTMENT OF GYNECOLOGY AND OBSTETRICS OF
EMORY UNIVERSITY SCHOOL OF MEDICINE

Objectives

- (1) To motivate physicians to serve patient's needs in family planning including the special needs of teenagers, the unmarried, etc.
- (2) To increase the skills of physicians in:
 - (a) contraceptive technology
 - (b) sterilization procedures, tubal ligation, including laparoscopy, vasectomy
- (3) To make physicians comfortable with their own sexuality and that of their patients.

Targets

- (1) The physician in private practice
- (2) The physician in health departments, voluntary agencies.
- (3) The physician in training: medical students, interns, and residents.

Please Note: Funding for medical students is covered by a grant from the Noyes Foundation.

Needs Assessed by:

- (1) Survey of Region IV, DHEW in December, 1971 and January, 1972.
- (2) Seventy-two personal interviews in April and May, 1972.
- (3) Personal contact in preparation of state training proposals with the eight Southeastern states of DHEW Region IV.

Courses

Under the terms of this contract, the following courses will be presented:

*Nine two-day courses for 3 physicians (22 hours) (through Planned Parenthood of Atlanta).

Curriculum: Philosophy of family planning
 Contraceptive Technology: indications for each method
 contraindications
 side-effects
 clinical experience

Techniques of interviewing
 Interpersonal relationships

*Four two-day courses in Tubal Ligation (laparoscopy technique) for three physicians

Curriculum: selection of patients, counselling
indications, contraindications, complications
technique demonstration
clinical experience

*Ten half-day courses in Vasectomy for one physician

Curriculum: selection of patients, follow-up
indications, contraindications, complications
technique demonstration
clinical experience

*Nine two-day courses in Tubal Ligation (Laparoscopy) for three physicians (University Hospital, Jacksonville, Florida)

Curriculum: selection of patients
indications, contraindications, complications
technique
clinical experience

*Three three-day courses in Human Sexuality for 15 physicians

Please Note: No additional cost for conducting 5-8 courses/year for medical students and House Staff.

In addition we propose to provide orientation to family planning for physicians by means of a film. A 16 mm film in three segments (12-15 minutes) is to be planned and developed. Content will include:

- (a) philosophy of family planning, motivational aspects
- (b) contraceptive technology
- (c) sterilization

Funds and contract time permitting, 24 prints for distribution to students, House Staff and physicians will be made, and printed materials to accompany and supplement the film will also be provided.

*Proceedings of "Family Planning In The South" conference. 4,500 copies to be printed and distributed.

	SUMMARY	<u>Emory</u>	<u>Contracted</u>	<u>Emory-Planned Parenthood Combined</u>
Total Number of Courses:	35	17	9	9
Total Number of Participants:	121	67	27	27
Total Days of Training:	58	22	18	18

Five-eight courses in "Human Sexuality" for unspecified number of medical students and residents not included.

Evaluation

An evaluation will be made of each course during and immediately after by the participants.

An evaluation will be made of the participants six-twelve weeks after the course.

EMORY UNIVERSITY FAMILY PLANNING PROGRAM
 TRAINING PROPOSAL FOR THE PHYSICIAN EDUCATION PROGRAM

I. Personnel	
One part-time secretary for six months	\$1,712
II. Travel	
(a) Staff out-of-town	1,700
(b) Per diem allowances for course participants	5,798
TOTAL	\$7,498
III. Consultants and Contracts	
(a) Sub-contract to University Hospital in Jacksonville, Florida (See Attachments A & B)	\$6,000
(b) Use of Planned Parenthood clinic facilities and physicians	3,645
(c) Consultants' fees	500
TOTAL	\$10,145
IV. Educational Supplies and printing	\$7,245
V. Production of Family Planning Orientation film	8,400
Sub-Total	\$35,000
VI. Indirect Costs @ 8%	<u>2,800</u>
<u>TOTAL</u>	<u>\$37,800</u>

BUDGET JUSTIFICATION

I. Personnel

One part-time secretary will be needed for approximately a six-month period to assist in preparing course materials and handling mail-outs.

II. Travel

(a) Staff out-of-town travel is requested to provide educational opportunities for the present staff who will conduct the physicians' courses. Approximately four staff members will attend seminars which will be related to physicians' courses that they will later teach. This money will also be used to travel to Florida to observe the training courses to be held there. (See III part (a))

(b) Per diem maximum allowances of \$26.00 per day per course participant are requested.

III. Consultants and Contracts

(a) A sub-contract for nine two-day courses in tubal ligations for three physicians is requested to be given to University Hospital in Jacksonville, Florida. The \$6,000 requested is for the following items:

(1)	Per diem allowances for course participants	\$1,400
(2)	Consultant fees	1,000
(3)	Anesthesiologist services (\$200 per day, 18 days)	3,600

(b) Use of Planned Parenthood Clinic facilities and physicians is needed to conduct the nine two-day courses in clinical procedures for three physicians because Planned Parenthood has evening clinic sessions. Course participants will be in class during the day. The charge for both the clinic facilities and physicians is \$405 per course.

(c) Consultants fees are requested to pay a private physician to conduct the two half-day courses in vasectomy.

IV. Educational supplies money will be used to prepare course materials, to rent films, and to buy consumable supplies. Approximately \$4,000 of the requested money will be used to print 4,500 copies of "Family Planning In The South" conference proceedings. These booklets will be distributed to all course participants and to all ACOG members.

V. Funds are requested for the development of an orientation to family planning film for physicians as explained on page 2 of the proposal. Twenty-four prints are to be made to be distributed to others involved in physician training, including other ACOG sub-contractors, funds and contract-time permitting.

VI. Emory University requests indirect costs at the rate of 8% of the total direct costs.

APPENDIX C

FAMILY PLANNING PROGRAM - NEEDS ASSESSMENT

Age _____

Marital Status: Single Married Widowed Divorced
 Separated

Type of community in which practicing:

- Less than 50,000
 50,000 - 100,000
 100,000 - 250,000
 250,000 - 500,000
 500,000 - 1,000,000
 more than 1,000,000

Religion: Catholic Protestant Jewish Other NoneReligiosity: Do you consider yourself religious? Yes NoDo you go to church, temple? Yes No

How often?

- At least once a week
 At least once a month
 At least twice a year
 At least once a year
 Less than once a year

Type of Practice:

- Solo private practice
 Group practice
 Geographic full time
 Academic full time
 University Health Service
 Community program
 Health agency
 Other

Percentage of patients of following types: (circle)

Private: Paying 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Nonpaying 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Medicaid: 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Third party insured: 10% 20% 30% 40% 50% 60% 70% 80%

90% 100%

General views about family planning:

1. In your private practice, do you provide family planning service? Yes No. (If the answer to this question is "Yes", please answer questions 2 and 3.)
2. Which of the following family planning methods do you provide:

<input type="checkbox"/> pill	<input type="checkbox"/> IUD	<input type="checkbox"/> tubal ligation
<input type="checkbox"/> rhythm	<input type="checkbox"/> condom	<input type="checkbox"/> a. abdominal
<input type="checkbox"/> jelly	<input type="checkbox"/> vasectomy	<input type="checkbox"/> b. vaginal
<input type="checkbox"/> foam	<input type="checkbox"/> diaphragm	<input type="checkbox"/> c. via laparoscopy
		<input type="checkbox"/> other
3. Estimate the number of patients each year served with each of these methods:

<input type="checkbox"/> pill	<input type="checkbox"/> condom	<input type="checkbox"/> tubal ligation
<input type="checkbox"/> rhythm	<input type="checkbox"/> vasectomy	<input type="checkbox"/> a. abdominal
<input type="checkbox"/> jelly	<input type="checkbox"/> IUD	<input type="checkbox"/> b. vaginal
<input type="checkbox"/> foam	<input type="checkbox"/> diaphragm	<input type="checkbox"/> c. via laparoscopy
		<input type="checkbox"/> other

4. Areas in which you feel that additional education would be helpful during the conference:
 - A.

<input type="checkbox"/> pill	<input type="checkbox"/> condom	<input type="checkbox"/> tubal ligation
<input type="checkbox"/> rhythm	<input type="checkbox"/> vasectomy	<input type="checkbox"/> a. abdominal
<input type="checkbox"/> jelly	<input type="checkbox"/> diaphragm	<input type="checkbox"/> b. vaginal
<input type="checkbox"/> foam	<input type="checkbox"/> abortion	<input type="checkbox"/> c. via laparoscopy
<input type="checkbox"/> IUD		<input type="checkbox"/> other
 - B. Issues related to prescribing contraceptives:
 1. Patient motivation
 2. Methods of establishing community programs and problems needing resolution
 3. Immunologic methods and problems (complications)
 - C. Governmental directions in family planning.
 - D. Future techniques in family planning.
 - E. Sensitivity to patients and their problems.

If you personally do not provide Family Planning Services under what circumstances do you feel particular forms of contraception should be provided.

	For Health Reasons	For Economic Reasons	If The Woman Desires It	To Space Births	To Prevent Pregnancy For Unmarried Female
Pill					
Rhythm					
Jelly					
IUD					
Condom					
Vasectomy					
Diaphragm					
Foam					
Tubal Ligation:					
Abdominal					
Vaginal					
Via Laporoscopy					

If you personally do not provide Family Planning Services, which of the following categories of patients do you feel should be able to obtain particular forms of contraception?

Married Female with Children	Married Female without Children	Single Female over the age of 21	Single Fe- male over the age of 18-with Parental Consent	Single Fe- male over the age of 18-without Parental Consent	Single Female under the age of 18 with Parental Consent	Single Female under the age of 18 without Parental Consent
---------------------------------------	--	--	---	--	---	--

Pill

Rhythm

Jelly

IUD

Condom

Vasectomy

Diaphragm

Foam

Tubal

Ligation:

Abdominal

Vaginal

Via Lapo-

roscopy

If you provide Family Planning Services, under what circumstances do you prescribe particular forms of contraception?

	For Health Reasons	For Economic Reasons	If the Woman Desires It	To Space Births	To Prevent Pregnancy For Unmarried Female
Pill					
Rhythm					
Jelly					
IUD					
Condom					
Vasectomy					
Diaphragm					
Foam					
Tubal Ligation:					
Abdominal					
Vaginal					
Via Laporoscopy					

If you provide Family Planning Services, for which of the following categories of patients will you prescribe particular forms of contraception?

Married Female with Children	Married Female without Children	Single Female over the age of 21	Single Female over the age of 18-with Parental Consent	Single Female over the age of 18-without Parental Consent	Single Female under the age of 18 with Parental Consent	Single Female under the age of 18 without Parental Consent
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Pill

Rhythm

Jelly

IUD

Condom

Vasectomy

Diaphragm

Foam

Tubal

Ligation:

Abdominal

Vaginal

Via Lapo-

roscopy

APPENDIX D

THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS

June 20, 1974

Dear Doctor:

The enclosed questionnaire was designed to elicit important information concerning the value to you of the course in family planning sponsored by The American College of Obstetricians and Gynecologists which you took at some time during the last two years. This course and others like it, offered in various parts of the country, were pilot studies. The purpose was to discover the best means by which continuing education in this field, as well as other fields, could be delivered to the practicing physician.

Some data have already been collected and analyzed to help determine how successful, or unsuccessful, certain aspects of the courses have been in giving physicians the continuing education they want and need. Only you, however, can make the final determination in this regard. Will you, therefore, take the time to answer the questionnaire? Your answers will not only help to evaluate these courses, but also assist in planning future courses now being considered.

Please send your answer in the enclosed return envelope.

Sincerely,

William A. Granzig, Ph.D.
Administrator
Department of Medical Education

WAG:lf

Enc.

EVALUATION OF COURSE ON FAMILY PLANNING SPONSORED
BY THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS

PART I

Please respond to each of the items in Part I, except Item 3, by putting an "X" or a checkmark in the space that designates the answer most appropriate to your situation. For item 3, write in the name of the state only, as directed.

1. Which medical school offered the course you took?

- a. U.C.L.A.
- b. University of Chicago
- c. Emory University
- d. Medical College of Georgia
- e. Louisiana State University
- f. Temple University

2. When did you take the course?

- a. September-December, 1972
- b. January-April, 1973
- c. May-July, 1973
- d. September-December, 1973
- e. January-April, 1974
- f. May-July, 1974

3. In what state do you practice? (Please write in the name of the state only) _____

4. Are you a licensed physician?

- a. Yes
- b. No (Please specify your work) _____

5. What is your age?

- a. Under 35
- b. 36-45
- c. 46-55
- d. 56-65
- e. Over 65

6. What is your sex?
- a. Male
 - b. Female
7. Were you certified, or were you studying to become certified, in obstetrics and gynecology at the time you took the course?
- a. Yes
 - b. No
8. What type of practice do you engage in? (Please respond to more than one, if appropriate)
- a. Solo private
 - b. Group
 - c. Academic
 - d. University health service
 - e. Community program
 - f. Health agency
 - g. Other (Please specify) _____

9. Did you receive a per diem when you took the course?
- a. Yes
 - b. No
10. Would you have taken the course even if a per diem had not been offered?
- a. I did not receive a per diem
 - b. Yes
 - c. No
11. What is your estimate of the dollar-cost to you for taking the course in terms of time lost from practice, travel expenses, etc.?
- a. Less than \$100
 - b. \$101-\$200
 - c. \$201-\$300
 - d. \$301-\$400
 - e. \$401-\$500
 - f. Over \$500

12. In which of the following areas did you want additional education when you came to the course? (In all cases respond to as many as are appropriate)

A. Contraceptive methods other than surgical

1. Pill
2. Rhythm
3. Jelly
4. IUD
5. Condom
6. Diaphragm

B. Surgical procedures as contraception

1. Tubal ligation via the abdomen
2. Tubal ligation via the vagina
3. Tubal ligation by means of laparoscopy
4. Other (Please specify) _____

C. Abortion techniques

D. Issues related to prescribing contraception

1. Patient motivation
2. Patient needs
3. Methods of establishing community programs
4. Immunologic methods and problems (complications)

E. Governmental directives in family planning

F. Future techniques in family planning

G. Sensitivity to patients and their problems

13. Were your wants met in this course?

- a. Yes
- b. No

14. Approximately what percentage of the course was devoted to areas that had no bearing on your needs or interests?

- a. None
- b. Less than 20%
- c. 21-40%
- d. 41-60%
- e. 61-80%
- f. More than 80%

15. Did you leave before the course ended?
- Yes, because I was bored with the presentations
 - Yes, because the course involved too much material of no interest to me
 - Yes, but only because of prior commitments, or an emergency
 - No
16. Did you receive help in areas of practice other than that of family planning?
- NO
 - Yes (Please specify the areas) _____

17. If you did receive such help, how did it come about? (Please respond to as many as are appropriate)
- I did not receive such help
 - Through material presented as part of the course
 - Through conversations with the course presenters
 - Through conversations with others taking the course
 - Through a formal lecture given by a course presenter in response to a request from several members of the audience
 - Other (Please specify) _____

18. Has your practice with regard to family planning changed since you took the course?
- No
 - Yes
 - Not sure
19. If your practice has changed, do you attribute that change primarily to what you learned in the course?
- No
 - Yes
 - Not sure
 - My practice has not changed

20. Do you do more family planning now than you did before you took the course?

- a. Yes
b. No

21. If you do more family planning now, has this fact increased your practice?

- a. I do not do more family planning
b. Yes
c. No

22. Have you taken other courses in any aspect of family planning since you took this course?

- a. No
b. Yes (Please specify) _____

23. Have you increased your reading of the medical and other scholarly literature concerning family planning since you took this course?

- a. Yes
b. No

PART II

Please respond as fully as you want to the following questions. Should the space allowed not be sufficient, please use the other side of the page to complete your comments.

24. In what ways, if at all, have you changed your manner of practice in family planning since taking the course? (For example, do you now take a sexual history, base your prescriptions of the pill on different factors than before, etc.)

25. In what ways, if at all, have you helped change your community's standards in family planning since taking the course? (For example, have you aided in planning a family planning clinic, etc.)

26. In what ways, if at all, have you tried to influence your colleagues regarding family planning since taking the course? (For example, have you spoken on the subject at local medical meetings, etc.)

27. What do you think were the weaknesses of the course you took?

28. What do you think were the strengths of the course you took?

APPROVAL SHEET

The dissertation submitted by Ruth Hunt has been read and approved by the following Committee:

Dr. Samuel T. Mayo, Chairman
Professor, Foundations of Education, Loyola

Dr. John M. Wozniak
Dean, School of Education, Loyola

Dr. Steven I. Miller
Assistant Professor, Foundations of Education, Loyola

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

January 13, 1975
Date

Samuel T Mayo
Director's Signature