DOCUMENT RESUME

ED 203 741 HE 013 991

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TITLE University of Connecticut School of Allied Health Professions: Program Evaluation for the 1979-1980 Academic Year.
INSTITUTION Connecticut Univ., Storrs. School of Allied Health Professions.
PUB DATE [81]
NOTE 116p.

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS Accessibility (for Disabled): *Allied Health Occupations Education: Allied Health Personnel: Clinical Experience: College Students: Community Support: *Dietitians: Disabilities: Higher Education: Job Performance: Job Placement: Labor Market: *Medical Technologists: Minority Groups: Occupational Aspiration: Outcomes of Education: Program Effectiveness: *Program Evaluation: School Community Relationship: State Universities: *Therapists
IDENTIFIERS University of Connecticut

ABSTRACT

The vocational curricular evaluation model (MCC) developed by the Division of Planning and Development at the Metropolitan Community College Administration Center is used to evaluate the University of Connecticut's School of Allied Health Professions. The three undergraduate programs focused on are physical therapy, clinical dietetics and medical technology. Five of six major criteria suggested in the MCC Model were used in the program evaluation: (1) a program's relationship to the job market profile: (2) a program's success in meeting career aspirations of clientele: (3) a program's success in terms of student job performance: (4) a program's level of community support: and (5) a program's success in reaching the handicapped and disadvantaged student. Several results and recommendations are offered such as: the undergraduate programs in physical therapy, medical technology and clinical dietetics are producing students needed in the job market: areas requiring improvement are evaluation of patients, orthopedics, neurology, pharmacology, management, cardiopulmonary, professional development, and interpersonal skill training: follow-up activities should be conducted by both the medical technology and physical therapy programs with respect to supportive services: and the physical therapy program needs to examine where areas of improvement can be focused with regard to clinical skills training. Tables, appendices and a glossary are provided. (LC)

UNIVERSITY OF CONNECTICUT

SCHOOL OF ALLIED HEALTH PROFESSIONS

Program Evaluation

for the 1979-1980 Academic Year

by

Susan Rovezzi-Carroll

Program Evaluator

Extra copy for our files or to Program if needed

University of Connecticut
School of Allied Health Professions

Program Evaluation for the 1979-1980 Academic Year

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GLOSSARY

Major Criteria: Five goals upon which the undergraduate programs in physical therapy, medical technology and clinical dietetics were evaluated. (See Section 2:30.)

Sub-Criteria: Objectives, which were directly related to Major Criteria, upon which measurement was conducted. (See Section 2:40.)

Weights/Weightings: Values based upon 100% that reflect perceived importance placed on each sub-criterion or major criterion.

Proficiency Level/Attainment Level: Qualitative measure of program's ability to meet major criteria and sub-criteria. Levels include: STRONG/VERY SATISFACTORY or ADEQUATE/SATISFACTORY or WEAK/UNSATISFACTORY.

Proficiency Score/Attainment Rating: Quantitative values directly related to Proficiency Level/Attainment Level. Scores include: 3 = STRONG/VERY SATISFACTORY or 2 = ADEQUATE/SATISFACTORY or 1 = WEAK/UNSATISFACTORY.

Proportional Score: This is a weighted proficiency score. It can be obtained by multiplying the assigned weighting and the proficiency score (usually in mean $\bar{x}$ form).

TOTAL SCORES: This represents a score for the Major Criterion. It can be obtained by summing up all proportional scores.

COMPOSITE SCORE: This represents an overall program review score. It is derived by multiplying the TOTAL SCORES by the assigned Major Criterion weights and then summing the products.

1:00 INTRODUCTION

In the School of Allied Health Professions' Annual Report for the 1978-1979 academic year, it was stated that a goal for the School was "to evaluate on an ongoing basis the organizational achievement of goals." To fulfill this charge, Dean Polly A. Fitz and the Dean's Council (see Appendix A) began to discuss implementation of an undergraduate program evaluation model. The model was to be piloted on the three undergraduate programs - physical therapy, clinical dietetics and medical technology - which are offered in the School of Allied Health Professions. The same model was intended to be applied at a later date to the newly formed Graduate Program, under the direction of Priscilla D. Douglas.

1:10 The MCC Model

After a review of some evaluation models in higher education, the Dean and the Program Evaluator, Susan Rovezzi-Carroll, decided to utilize the MCC model, described in detail in Evaluation and Program Planning (Org, 1978). This model was a vocational curricular evaluation model developed by the Division of Planning and Development at the Metropolitan Community College Administration Center. Funding for its development was provided by the U.S. Office of Education, Bureau of Occupational and Adult Education. A subsequent grant was awarded to MCC to implement the evaluation model, and it was field tested on ten undergraduate programs. An excellent procedure manual for use by interested parties was a product of this project.

The MCC model is based upon six major criteria, developed from a collation of college, state and federal objectives for vocational/professional education. These are applied in the evaluation of undergraduate education and include:

A. A program's relationship to the job market profile.
B. A program's success in meeting career aspirations of clientele.
C. A program's success in terms of student job performance.

D. A program's level of community support.
E. A program's cost effectiveness.
F. A program's success in reaching the handicapped and disadvantaged student.

Each of the major criteria is operationalized through sub-criteria. In other words, each of the major criteria is addressed in terms of sub-categories directly related to the major criteria heading. For example, for major criterion C, the question - "How do we measure student performance?" - was asked. Sub-criteria developed to answer this question included:

A. Employer satisfaction with overall graduate job performance.
B. Employer ratings of the quality of performance.
C. Employer reports of spending less, equal or more time on entry training.
D. Employer reports on saving, breaking even or losing money on entry training.

The evaluation model incorporates a weighting scheme based on proportional weights, which reflect the perceived importance of both major criteria and then sub-criteria. These weights are computed using Thurstone's paired comparison methodology (Edwards, 1957, Chapter 3). In this manner, proportional weights reflect the "proportion of importance" placed on each criterion in relation to others.

Once the evaluation criteria and their weights are established, the next step is to provide a means for measuring a program's level of success in attaining each of the sub-criteria. To accomplish this task, proficiency levels which classify a program's sub-criterion attainment as STRONG, ADEQUATE or WEAK are established. Thus, each sub-criterion is assigned a unique set of proficiency levels, based on the standards of quality desired.

Next, proficiency scores are derived. Each proficiency level is associated with a numerical value: STRONG = 3; ADEQUATE = 2; and WEAK = 1. These values are actually scores. By averaging scores on each sub-criterion, a proficiency mean ($\bar{x}$) score is obtained. This mean score is then multiplied by the pre-determined weighting to obtain proportional proficiency scores. By summing all of the proportional scores on sub-criteria, the total score for a major criterion is derived.

A program's overall or composite score may also be calculated. To accomplish this, each total score for a major criterion is multiplied by assigned weightings. All proportional major criterion scores are added to obtain the composite score. Thus, the evaluation model indicates a program's score on each major criterion and an overall score on all major criteria. Comparison of scores across and within educational programs indicates program's strengths and weaknesses.

As a final step, both criterion and composite scores are plotted on an evaluation histogram. The horizontal axis is labeled with the six individual major criteria, as well as composite score. The vertical axis is defined by scores ranging from 0 to 300. Within the graph, there are three distinguishable segments: WEAK; ADEQUATE; and STRONG. Major criterion scores higher than 250 represent the designation of STRONG. Scores between 249 and 150 are classified as ADEQUATE. Below 150, the scores are WEAK. These cut-off scores are established by taking the real limits of the proficiency ratings (STRONG = 2.5; ADEQUATE = 1.5 and WEAK = less than 1.5) and averaging them across sub-criteria.

In order to make program comparisons, both criterion and composite scores for each evaluated program are illustrated on the hisotgram. Thus, inspection of both composite and criterion scores indicate a program's general need for improvement and specific areas where improvement needs to be focused.

1:20 Rationale for Using MCC Model

The intent of the MCC model is essentially to assess postsecondary educational programs of a professional orientation. Therefore, it was appropriate to the School of Allied Health Professions, which offers three undergraduate professional programs. Further, the model was attractive because:

A. The model is generally quantitative in design. Strategies, procedures, scoring and results are specific and efficient.

B. The model requires that data be collected from multiple sources - graduate, current students, employers of graduates and the occupational community at large. A large data base would be developed that could be useful in administrative decision-making.

C. The model provides for internal (within program) as well as external (between program) evaluation. Comparisons could be conducted on multiple levels.

D. The model was field tested on ten vocational education programs at the postsecondary level. Results demonstrated that the model provided discrimination between composite scores, avoiding clustering of scores within a single rating.

2:00 IMPLEMENTATION

2:10 Decision-Making Process

Efforts to adapt the MCC model to meet the needs of the School of Allied Health Professions were begun on June 4, 1979. All content, as well as procedural decisions, with respect to the evaluation process, were made collaboratively by the Dean, the Dean's Council and the program evaluator. Planning meetings were held on a regular basis during the summer months of June, July and August, where the program evaluator would make recommendations to the Dean and her Council. Then, this group would respond with confirmations, alterations or rejections. The purpose of this process was to insure representation and input from all the leadership within the School and to assure that ownership for the evaluative process was distributed.

2:20 Review of School of Allied Health Professions Literature

During the first week of June, the program evaluator reviewed documents, reports and literature in the School of Allied Health Professions. These were supplied by program directors and other administrative staff members. The literature included, but was not limited to:

- the Physical Therapy Self-Study
- the Physical Therapy Accreditation Report
- the Clinical Dietetics Self-Study
- the Clinical Dietetics Accreditation Report
- the Medical Technology Self-Study
- the Graduate Program Proposal
- the Annual Reports

2:30 Weighting of the Major Criteria for the School of Allied Health Professions Evaluation

Five of the six major criteria suggested in the MCC model were used by the School of Allied Health Professions in their program evaluation model. These were:

A. Meeting job market needs.
B. Meeting past and present student needs.
C. Graduate job performance.
D. Support from the occupational community.
E. Meeting the needs of the handicapped and disadvantaged student.

The sixth major criterion - Cost Effectiveness - was eliminated. Here, efforts would have been duplicative of a parallel assessment which was concurrently being conducted by the Consortium Project, headed by Patricia W. Gillespie.

Each of the major criteria, according to the MCC procedure manual, had to be weighted; that is, the percentage of strength that each of the major criteria carried had to be mathematically computed using Thurstone's paired-comparison methodology.

The first step in this process involved the development of a paired-comparison instrument (see Appendix B). Using each of the five criteria, all possible combinations were formed to yield items for the instrument. The formula for this was: $\frac{[n-(n-1)]}{2}$ where n equals the number of criteria - in this case, 5. Thus, there were ten (10) pairs which contributed all possible combinations (i.e., A with B, A with C, A with D, etc.). This instrument was pilot-tested on the Dean's Council (n=9), and minor revisions were made in format.

Next, the instrument had to be administered to a representative sample of educators, administrators and practitioners in allied health. As the MCC Procedure Manual states, "users of the evaluation model must establish a primary advisory committee to determine the importance of each of the model's criteria in contributing to overall evaluation of a vocational program (Harris and Eros, 1973, p.3)." The sampling list was developed by the Dean's Office and consisted of 61 subjects with varied backgrounds in allied health (see Appendix A).

The instrument was mailed on June 25, 1979, with a cover letter from Dean Fitz (see Appendix C) to the 61 subjects. The directions said:

> Below are ten pairs of items. Please indicate which of the two items is more important for Schools of Allied Health Professions to address in this evaluation by placing a checkmark ( ) next to the preferred item.

On July 31, 1979, the instruments from all respondents were collected and tabulated. From the total sample of 61, approximately 43 were returned. Three of the 43 were not usable, making for a return rate of 66%. Although an 80% return rate was desirable, the possibility of a sampling bias (respondents versus non-respondents) was not a threat due to the general homogeneity of the sample. While there is some doubt as to whether this assumption is valid, Backstrom and Hursh (1963, p.57) suggest that survey data can be interpreted based on the actual number of completed questionnaires or what they term "effective number in the sample".

The frequency count from the paired-comparison tabulations is illustrated in Table 2.1 below.

Table 2.1
Frequency Counts for Paired-Comparison Items
(f=frequency)

Pair #	Item A (f)	Item B (f)
1	1 (24)	2 (16)
2	3 (32)	1 (8)
3	2 (12)	3 (28)
4	2 (26)	4 (14)
5	1 (27)	4 (13)
6	3 (35)	6 (5)
7	4 (20)	6 (20)
8	6 (7)	2 (33)
9	3 (39)	4 (1)
10	5 (12)	1 (28)

Item 1 = Meeting Job Market Needs
Item 2 = Meeting Past and Present Student Needs
Item 3 = Graduate Job Performance
Item 4 = Support from Occupational Community
Item 5 = Reaching Handicapped and Disadvantaged Students

From these data, an F matrix, a P matrix and a Z matrix are generated. Finally, proportional weights, which are converted from paired comparison weights, are calculated to reflect the "proportion of importance" placed on each criterion in relationship to others. Table 2.2 displays both paired-comparison and proportional weights for each major criterion.

Table 2.2
Paired-Comparison and Proportional Weights
for Major Criteria

Major Criteria	Rank	Paired Comparison Weight	Proportional Weight
Graduate Job Performance	1	.92	38
Meeting Past and Present Student Needs	2	.11	22
Meeting Job Market Needs	3	.08	21
Reaching Handicapped & Disadvantaged Students	4	-.51	10
Support of Occupational Community	5	-.54	9
			100%

2:40 Development of Sub-Criteria

In the MCC model, the major criteria are operationalized through sub-criteria. That is, the question which is raised by the major criteria is answered through data collected on sub-criteria.

Development of the School of Allied Health Professions sub-criteria was based on sub-criteria used in the MCC model. Some of these were used in original form; others were revised; and some were eliminated altogether. Additionally, new sub-criteria were developed that were particularly relevant to the School of Allied Health Professions undergraduate programs.

The first draft of the sub-criteria was designed by the program evaluator. These were reviewed by the Dean on July 2, 1979, and alterations were made. On July 11, 1979, the Dean's Council made recommendations that were helpful to the evaluative process. These were:

A. that ambiguity be avoided in questionnaires mailed to the occupational community;
B. that the program evaluator determine familiarity of subjects, particularly in the occupational therapy sample, before considering data valid and useful;
C. that the program evaluator collect data on reasons that 1979 graduates could not obtain employment;
D. that major criterion #4 - "meeting the needs of disadvantaged and handicapped students" be re-titled to - "meeting the needs of special students." Furthermore, the Dean's Council defined this group as:
    1. handicapped students - or students who utilize the Office of Special Student Services under Rita Pollack.
    2. minority students - to be identified by program directors and Counseling Coordinator Ellen Darrow.
    3. disadvantaged students - as identified as students who enter The University of Connecticut through a special admittance program like CEMS, the UCSP, or the Health Science Cluster.

2:50 Weighting of Sub-Criteria

Because many of the major criteria had few sub-criteria items, Thurstone's methodology seemed both inappropriate and impractical. As an alternative approach, sub-criteria were submitted to the Dean's Council for weighting

assignment. All members of this group were asked to propose weightings for sub-criteria in advance. At a meeting on July 25, 1979, proposed weightings were discussed and concensus on final weightings was strongly encouraged by the program evaluator. This task was accomplished, and the following weights were assigned to sub-criteria:

GRADUATE JOB PERFORMANCE - MAJOR CRITERION I (38%)

		WGT
A_1	Employer's overall satisfaction with graduate job performance	9.1
A_2	Interaction skills with subordinates	9.1
A_3	Interaction skills with superiors	9.1
A_4	Research skills	9.1
A_5	Problem-solving skills	9.1
A_6	Knowledge skills	9.1
A_7	Clinical skills	9.1
A_8	Management of time	9.1
B	Employer's willingness to hire another graduate from the allied health program	27
		100

MEETING PAST AND PRESENT STUDENT NEEDS - MAJOR CRITERION II (22%)

A_1	Graduate satisfaction with preparation for employment	8.8
A_2	Graduate satisfaction with knowledge offered	8.8
A_3	Graduate satisfaction with clinical training offered	8.8
A_4	Graduate satisfaction with supportive services	8.8
A_5	Graduate overall rating of program quality	8.8
B_1	Current student satisfaction with knowledge offered	7.5
B_2	Current student satisfaction with clinical training offered	7.5
B_3	Current student satisfaction with supportive services	7.5
B_4	Current student overall rating of program quality	7.5
C	Rate of pass/fail on licensure/registry examinations	26
		100

MEETING JOB MARKET NEEDS - MAJOR CRITERION III (21%)

A	Occupational community expressed need for program graduates in job market	32
B.	Rate of job placement for program graduates	48
C.	Occupational community's expressed need for type of program offered	20
		100

MEETING THE NEEDS OF SPECIAL STUDENTS - MAJOR CRITERION IV (10%)

	WGT
A. Overall satisfaction with program by special students	59
B. Representation of special students in program population	41
	100

SUPPORT FROM OCCUPATIONAL COMMUNITY - MAJOR CRITERION V (9%)

A. Occupational community's willingness to hire program graduate	24
B. Occupational community's rating of academic/didactic segment of program	38
C. Occupational community's rating of clinical segment of program	38
	100

3:00 TARGET SAMPLES

Implementation of the MCC model requires that five distinctive populations be sampled: current students, defined as students who were enrolled in the program during program review process; past students or graduates, defined as students who have actually completed the degree requirements and have graduated from the program; employers of program graduates which is self-explanatory; the occupational community or persons who have the capacity to hire a program graduate; and the special needs students, as identified previously.

For the purposes of the School of Allied Health Professions evaluation, these strata were as follows:

A. current students - all senior students in physical therapy (n=70), medical technology (n=18) and clinical dietetics (n=21) were both the sample and population for current students. Using students at this level would provide both a stringent criterion group and assure the subject's exposure to the clinical and academic segments.

B. past students - the total populations of medical technology (n=20) and clinical dietetics (n=19) and a random sample of physical therapy students (n=29) represented the past student group. All were 1979 graduates from the School of Allied Health Professions.

C. employers - this sample was composed of supervisors of 1978 graduates on jobs related to the allied health field from which the degree was obtained. Program directors and staff at the School of Allied Health Professions were integral in providing employment sites and names of supervisors for this sample (see Appendix D). Total populations of

1978 graduates were again used in medical technology (n=15) and clinical dietetics (n=23) while a random sample was drawn for physical therapy (n=29).

D. occupational community - to develop a sample for this category, assistance was required of program directors in physical therapy (Joseph Smey), medical technology (Kay Renius), and clinical dietetics (Norma Huyck). They were asked by the program evaluator to compile a representative listing of occupational community members. Although this was not a scientific method for drawing a sample, it was the most practical, considering the magnitude of the population. The final number of subjects totaled 43 in physical therapy, 32 in clinical dietetics and 32 in medical technology. (See Appendix D.)

E. special students - all of the students identified as handicapped, minority and special admittance composed the population of special students (n=29).

Table 3.1 illustrates the number of subjects in the target samples by program.

Table 3.1
Target Samples by Program

Program	Current Student (n)	Past Students (n)	Employers (n)	Occupational Community (n)
Physical Therapy	70	29	29	43
Clinical Dietetics	21	20	23	32
Medical Technology	18	19	15	32
Total N	109	68	67	107

4:00 PROCEDURES

4:10 Instrumentation and Proficiency Levels

In order to determine if sub-criteria were met, and to what degree they were met, instrumentation and proficiency levels had to be developed. Basically, four survey questionnaires were needed to administer to: current students; 1979 program graduates; employers of 1978 graduates; and occupational community members (see Appendices E, F, G and H). These tools were modeled after MCC instruments which were simple, attractive and useful in collecting specific data related to sub-criteria. Consequently, the instrumentation for the School of Allied Health Professions evaluation reflected items that were directly linked to sub-criteria (see Appendix K).

Proficiency levels, needed to qualify the degree to which sub-criteria were met, were subsequently developed. Like the MCC model, these were ordinally scaled and clear for interpretive purposes (see Appendix J).

Both the instruments and the proficiency levels were presented to the Dean's Council by the program evaluator on August 9, 1979 (see Appendix I). Feedback from this group provided for refinement of the instruments whereby items were clarified or expanded upon. Generally, the proficiency levels suggested by the program evaluator were satisfactory to the Dean's Council.

A fifth instrument was also developed to be utilized by the program evaluator in the interviewing of all special students. It would serve as a guide in the line of questioning, as well as a recordkeeping device. With this form (see Appendix L), there would be consistent data collection from interview to interview. The program evaluator drafted a form for this purpose, presented it to the Dean's Council and adapted the suggestions that this body proposed.

4:20 Methodology

One of the features of the MCC model was that data were derived from multiple sources. This would provide for checks and balances on criteria and confirm results.

In the beginning of November, 1979, questionnaires were mailed to the target samples of both employers and the occupational community members. (Refer to Appendices G and H.) After a three-week period, a second follow-up mailing was undertaken. Finally, a third mailing was accomplished six weeks after the first mailing.

To avoid redundant follow-up procedures, all questionnaires were coded, and additional mailings were sent to non-respondents only. Each mailing packet contained a cover letter from Dean Fitz explaining the purpose and use of the questionnaire and a return, stamped envelope. To expedite the mailing process, address labels were developed with the cooperation of the Data Processing Department at The University of Connecticut, where labels were produced by computer technology and of the "stick on" type.

For the purposes of both efficiency and accuracy, codes were affixed to not only questionnaires, but to return envelopes and labels. These codes represented four-digit numbers. The first two digits were identification numbers; the third digit represented an allied health undergraduate program of either physical therapy (1), medical technology (2) or clinical dietetics (3); and the fourth earmarked the type of sample (i.e., occupational community, employer, etc.)

The same mailing procedure was undertaken with questionnaires to 1979 graduate or past student. The only difference was that mailings were begun at the end of December, 1979. This was to assure graduates time at employment sites before asking them to evaluate their undergraduate program. It was felt that responses would carry more validity if mailings were delayed until the end of the year.

Current students in physical therapy and clinical dietetics were located at the School of Allied Health Professions during the fall semester 1979. Thus, the questionnaire was administered to both groups as intact classes during the latter part of October and the beginning of November. Medical technology students, who were off-campus at clinical affiliations during the senior year, were mailed the survey with the same procedure as outlined previously.

Special students, who provided data to the program evaluator through the interviewing technique, had individual appointments with the program evaluator. The sessions experienced great variability in length with a range of five minutes to thirty-five minutes. This difference was attributed to a student's familiarity with the undergraduate program. Upperclass students provided much information; underclass, very little. Although logistics in contacting students and arrangement of appointments was complicated and time-consuming, all of the 29 special students met with the program evaluator during the late fall and early spring semester.

Data on employment status of 1979 graduates was, for the most part, obtained from the survey mailed to this target sample. Additional information was provided by program directors and their staff. Also, data on the performance of 1979 students on the licensure/registry exams was provided by statistics submitted to the evaluator by program directors. (These data did not reflect identification of students.)

All of the data collected were of a confidential nature - a promise given to all respondents. This was formalized by the coding system. Return rates were highly satisfactory, as most were 80% or above. This assured the program evaluator that results could be interpreted with a sense of confidence and generalizability. It was speculated that return rates were enhanced by a combination of factors: the design and appearance of instruments; the personalized cover letters from the Dean; the controllable sample sizes; three waves of mailings; and the enclosure of a return, stamped envelope.

As summary, return rates from mailed surveys resulted as follows. For current students in medical technology, only one of eighteen students did not respond, making for a 94% return rate. The 1979 graduates or past students - a difficult sample to access because of mobility - were surprisingly high in

return rates with 93% for physical therapy, 90% for clinical dietetics and 79% for medical technology. Employers were particularly supportive returning 93% of the surveys for physical therapy, 80% for medical technology and 91% for clinical dietetics. Finally, the occupational community cooperated by sending back 95% of the questionnaires in physical therapy, 97% in medical technology and 81% in clinical dietetics. Tables 4.1 through 4.5 illustrate return rates by survey and program in more detail.

Table 4.1
Current Student Returns by Program

Program	Sample Size	Non-Usables	Non-Respondents	Respondents (%)
Physical Therapy	70	-	-	-
Medical Technology	18	0	1	17 (94%)
Clinical Dietetics	21	-	-	-

Table 4.2
Past Student Returns by Program

Program	Sample Size	Non-Usables	Non-Respondents	Respondents (%)
Physical Therapy	29	0	2	27 (93%)
Medical Technology	19	1	3	15 (79%)
Clinical Dietetics	20	0	2	18 (90%)

Table 4.3
Employer Returns by Program

Program	Sample Size	Non-Usables	Non-Respondents	Respondents (%)
Physical Therapy	29	1	1	27 (93%)
Medical Technology	15	0	3	12 (80%)
Clinical Dietetics	23	0	2	21 (91%)

Table 4.4
Occupational Community Returns by Program

Program	Sample Size	Non-Usables	Non-Respondents	Respondents (%)
Physical Therapy	43	0	2	41 (95%)
Medical Technology	32	0	1	31 (97%)
Clinical Dietetics	32	0	6	26 (81%)

Table 4.5
Percentage Summary of Returns by Programs

Programs	Current	Past	Employer	Occupational Comm.
Physical Therapy	-	93%	93%	95%
Medical Technology	94%	79%	80%	97%
Clinical Dietetics	-	90%	91%	81%

4:30 Analysis of Data

From the close of February, 1980, to June, 1980, data were compiled and tabulated. This involved coding all of the responses on survey, so that proficiency scores were reflected. The data were then keypunched along with computer programs appropriate to data analysis. These programs were primarily descriptive in nature, focusing on measures of central tendency. Execution was accomplished through the Statistical Package for the Social Sciences (SPSS). All output was checked for errors and statistical accuracy. Soft data from qualitative responses were lifted from all surveys and tabulated by way of frequency counts. Both hard and soft data were analyzed and relied upon for the development of the final report. This document was written from June 1, 1980, to July 18, 1980.

5:00 RESULTS

Results for the undergraduate program evaluations in physical therapy, clinical dietetics and medical technology will be reported sequentially by weighted Major Criteria.

5:10 Major Criteria I - Graduate Job Performance (38%)

The data collected to measure graduate job performance were drawn from a survey (see Appendix G) administered to employers of 1978 graduates in physical therapy, clinical dietetics and medical technology. The instrument measured the sub-criteria of:

A_1 Employer satisfaction with overall job performance.
A_2 Employer satisfaction with graduate's ability to interact with subordinates.
A_3 Employer satisfaction with graduate's ability to interact with superiors.
A_4 Employer satisfaction with research skills.
A_5 Employer satisfaction with problem-solving skills.
A_6 Employer satisfaction with cognitive skills.
A_7 Employer satsfaction with clinical skills.
A_8 Employer satisfaction with management of time.
B_1 Employer's willingness to hire another program graduate.

Possible proficiency scores for items A_1 to A_8 were: highly satisfied (3 points); satisfied (2 points); and unsatisfied (1 point). There was also a response of "unable to judge (0 points), which was not included in mean score computations. For item B_1, the employer was requested to indicate either positively (yes) or negatively (no) as to the willingness to hire another program graduate.

Results of the data for Graduate Job Performance are illustrated in Table 5.1, where mean and modal proficiency scores and standard deviations are reported. More tables on Major Criterion I - including frequencies and percentages - can be located in Appendix M.

Table 5.1
Proficiency Scores of Sub-Criteria for Major Criteria I
GRADUATE JOB PERFORMANCE
(means, modes, standard deviations)

Sub-Criteria Items	Physical Therapy			Medical Technology			Clinical Dietetics		
	$\bar{x}$	mode	s	$\bar{x}$	mode	s	$\bar{x}$	mode	s
A_1	2.58	3.00	.58	2.67	3.00	.65	2.57	3.00	.60
A_2	2.59	3.00	.50	2.50	3.00	.76	2.33	2.00	.66
A_3	2.67	3.00	.56	2.67	3.00	.65	2.38	3.00	.67
A_4	2.29	2.00	.61	2.60	3.00	.55	2.41	2.00	.51
A_5	2.41	2.00	.57	2.33	2.00	.65	2.10	2.00	.70
A_6	2.59	3.00	.50	2.42	3.00	.67	2.57	3.00	.51
A_7	2.56	3.00	.58	2.67	3.00	.65	2.48	3.00	.60
A_8	2.52	3.00	.58	2.75	3.00	.62	2.14	2.00	.57
B_1	3.00	-	-	3.00			3.00		

These data reveal that for all programs under review, employers of graduates are highly satisfied with performance on the job. For item A_1 or overall job performance, the majority of physical therapy (61%), medical technology (75%) and clinical dietetic (62%) graduates received the highest proficiency rating possible, or a score of 3. In terms of specific skill areas, ratings were mixed between satisfied (2) and very satisfied (3) on items that related to: interactive skills; problem-solving; research; academic knowledge; clinical performance; and time management.

Furthermore, almost all of the employers indicated that they were willing to hire another School of Allied Health Professions graduate, should the opportunity present itself. On item B_1, 100% of employers of both physical therapy and medical technology graduates and 95% of those in clinical dietetics responded in the affirmative.

$\bar{x}$ represents mean; s represents standard deviation.

Qualitative data were also generated with two open-ended questions on the survey form. These were:

> "If you have noted any deficiencies in the employee's training, please specify these areas, so that our program can be more beneficial to future employees."
>
> and
>
> "Please use the remainder of this space to provide any additional comments that you may have related to this employee and his/her training."

Feedback from this important sample focused on three areas: management; the affective domain; and technical skills/content. Several employers in physical therapy and clinical dietetics registered a concern for more management skills training, particularly related to staffing, time management, budgeting, problem-solving, labor relations, supervising and conceptualizing. Employers from all of the allied health fields noted that graduates might benefit from interpersonal or affective skills training in areas such as communication, sensitivity, assertiveness and open-mindedness. Finally, skill and content issues in the technical domain were proposed for graduates' training. By program, these technical areas were:

Physical Therapy

- gait training
- chest p.t.
- prosthetics
- orthotics (2)
- manual therapy
- physical assessment
- PNF
- electronic stimulation
- care of open wounds
- more hospital experience
- knowledge of other allied health fields (2)

Medical Technology

- parasitology
- mycology
- non-fermentation
- immunology

Clinical Dietetics

- pediatrics
- experimental foods
- community education
- food quantities
- more clinical experience

Unless otherwise noted, each area was mentioned once by employer respondents.

Because of the nature of these data (qualitative), there must be judicious interpretation by program directors and staff. It does appear that some improvement may be focused on management and affective skill areas for physical therapy, medical technology and clinical dietetics, but inconsistent responses on technical areas must be regarded cautiously. The soft data, which did appear conclusive, were comments made in all three samples similar to this:

> Student X performs her job in a very superior manner. She is extremely knowledgeable and is able to communicate this effectively to those in the medical field, as well as fellow workers. All of this suggests that her training has been excellent, she is an asset to our department and a credit to UCONN.

The MCC model provides for the derivation of a TOTAL SCORE for the major criterion under investigation. This score is obtained by multiplying each proficiency mean score by the item weight. The product is a weighted or proportional score for each item. Then, by summing these proportional/weighted scores, the TOTAL SCORE is obtained. Table 5.2 depicts both proportional and total scores for Major Criterion I - Graduate Job Performance.

Table 5.2
Proportional and Total Scores for Major Criterion I
GRADUATE JOB PERFORMANCE

Sub-Criteria Items	Weight	Physical Therapy	Medical Technology	Clinical Dietetics
A_1	9.1	23	24	23
A_2	9.1	24	23	21
A_3	9.1	24	24	22
A_4	9.1	21	24	22
A_5	9.1	22	21	19
A_6	9.1	24	22	23
A_7	9.1	23	24	23
A_8	9.1	23	25	19
B_1	27	81	81	81
TOTAL SCORE		265	268	253

For Major Criterion I - Graduate Job Performance - physical therapy obtained a total score of 265, medical technology, 268, and clinical dietetics, 253. According to classification of the MCC model, these scores exceed the 250 point cut-off score for the proficiency level of STRONG. That means that employers of physical therapy, clinical dietetics and medical technology graduates are very satisfied with the job performance. It is important to note that these data can be considered with confidence. Not only were return rates for all samples high, but graduates were employed a sufficient amount of time prior to evaluation by employers. For example, the median number of months at the job prior to program review for the 1978 physical therapy graduate was 15.3 months, for medical technology, 14.0, and clinical dietetics, 12 months.

5:20 Major Criterion II - Meeting Past and Present Student Needs (22%)

The sub-criteria, upon which evaluation for Major Criterion II - Meeting Past and Present Students Needs was based, were:

A_1 Graduate satisfaction with preparation for employment.
A_2 Graduate satisfaction with professional knowledge offered.
A_3 Graduate satisfaction with clinical skills training offered.
A_4 Graduate satisfaction with supportive services offered.
A_5 Graduate overall rating of major program of study.
B_1 Current student satisfaction with professional knowledge offered.
B_2 Current student satisfaction with clinical skills training offered.
B_3 Current student satisfaction with supportive services offered.
B_4 Current student overall rating of major program of study.
C Rates for passing/failing licensure or registry exams.

To measure these items, data were collected by: administering a survey instrument to 1979-1980 current program students (see Appendix E); administering a survey instrument to 1978-1979 program graduates or past students (see Appendix F); and obtaining statistical results from registry and licensure examinations. Each of these areas will be reported separately.

5:21 Meeting the Needs of Past Students

To determine whether programs in physical therapy, medical technology and clinical dietetics were meeting the needs of 1979 graduates, the following sub-criteria were addressed:

A_1 Graduate satisfaction with preparation for employment.
A_2 Graduate satisfaction with professional knowledge offered.
A_3 Graduate satisfaction with clinical skills training offered.
A_4 Graduate satisfaction with supportive services offered.
A_5 Graduate overall rating of major program of study.

Tabulations, derived from proficiency scores on these items, are illustrated in Table 5.3, where mean and modal scores, as well as standard deviations, are reported. A further breakdown - including frequencies and percentages - on Major Criterion II relating to past students, can be located in Appendix N.

Table 5.3
Proficiency Scores for Sub-Criteria of Major Criterion II
MEETING THE NEEDS OF PAST STUDENTS
(means, modes and standard deviations)

Sub-Criteria Items	Physical Therapy			Medical Technology			Clinical Dietetics		
	$\bar{x}$	mode	s	$\bar{x}$	mode	s	$\bar{x}$	mode	s
A_1	2.20	2.00	.41	2.47	2.00	.52	2.59	3.00	.62
A_2	2.22	2.00	.58	2.27	2.00	.59	2.39	2.00	.50
A_3	2.07	2.00	.55	2.13	3.00	.92	2.67	3.00	.49
A_4	2.10	2.00	.77	1.86	2.00	.66	2.40	2.00	.63
A_5	2.15	2.00	.46	2.53	3.00	.64	2.72	3.00	.46

For comparative purposes, the proportional scores for these items are depicted in Table 5.4. These scores are calculated by multiplying each proficiency mean score by the item weighting. To reach a level of ADEQUATE, the individual proportional score must exceed 18 (8.8 X 2.00 - the mean proficiency score.

Table 5.4
Proportional Scores for Past Students
MEETING PAST STUDENTS NEEDS

Sub-Criteria Item	Weighting	Physical Therapy	Medical Technology	Clinical Dietetics
A_1	8.8	19	22	23
A_2	8.8	20	20	21
A_3	8.8	18	19	24
A_4	8.8	18	16	21
A_5	8.8	19	22	24

A. Physical Therapy. The graduates of the Physical Therapy Program were generally satisfied with components of the program and reflected this assessment with proficiency scores of mostly 2.00 or ADEQUATE. All mean proficiency scores, as well as proportional scores, were quite similar. Ratings were highest for the professional knowledge offered (A_2), where the mean proficiency score was 2.22. Lower scores were reflected on clinical skills training ($\bar{X}_{A_3} = 2.07$) and supportive services ($\bar{X}_{A_4} = 2.10$). For the latter item, some variance in opinions was reflected by respondents with 33% of the graduates describing the supportive services as very satisfactory, 43% as satisfactory, and 24% as unsatisfactory. For other items (A_1 A_5), the responses clustered around the proficiency score of 2.00 or ADEQUATE/SATISFACTORY, and resultant standard deviations were small.

In general, the Physical Therapy Program was described by 1979 graduates as ADEQUATE overall where mean scores on all items were above 2.00, and proportional/weighted scores were above the 18 cut-off score for the proficiency level of ADEQUATE.

B. Medical Technology. Responses from the sample of medical technology graduates reflected more spread or variance on items than did physical therapy. For item A_3 which measured clinical skills training, the graduate responses ranged from very satisfied (47%) to satisfied (20%) to unsatisfied (33%), with a mean

score of 2.13 and standard deviation of .92. Likewise, supportive services (A_4) reflected a spread of ratings with 14% of the graduates very satisfied, 57% satisfied, and 29% unsatisfied. The mean score of 1.86 for this item was below an adequate level; this is demonstrated by the proportional/weighted score of 16, where the cut-off score for the proficiency level of ADEQUATE is 18.

With the exception of ratings for supportive services, the Medical Technology Program graduates were generally satisfied. Preparation for employment was rated favorably ($\bar{x}A_1 = 2.47$), as was the professional knowledge offered ($\bar{x}A_2 = 2.27$). The overall rating of the program was high, where 60% of the respondents described the program as "strong." This yielded a proficiency score of 2.53 on item A_5.

C. Clinical Dietetics. The graduates of clinical dietetics emerged as the most satisfied group of 1979 graduates from the three undergraduate programs. For item A_1 through A_5, mean proficiency scores for this sample were higher than both physical therapy and medical technology. Specifically, 65% of the respondents rated job preparation as strong ($\bar{x}A_1 = 2.59$), 67% were very satisfied with clinical skills training offered ($\bar{x}A_3 = 2.67$), and 72% of the graduates registered the highest proficiency score rating (3) for overall program assessment ($\bar{x}A_5 = 2.72$). Interestingly, supportive services received more favorable scores ($\bar{x}A_4 = 2.40$) from the clinical dietetics graduates than from the other two allied health samples of graduates. Finally, professional knowledge offered (A_2), although receiving the lowest proficiency mean score for this sample - was also rated highly ($\bar{x}A_2 = 2.39$).

Open-Ended Questions

As with the employer samples (Section 5:10), this 1979 graduate sample was asked to respond to several open-ended questions to elicit qualitative data. These were:

> "Knowing what you know at this time, what, if any additional knowledge or skills training do you believe should have been provided during your training at the School of Allied Health Professions?"

"Were there any skills or knowledge that you believed were not necessary to learn in order to perform your present job?"

"We welcome your frank comments about your major program on the remainder of this sheet."

Appendix N contains all of the comments derived from these questions. Only responses raised by more than one student will be reported here. Again, judicious interpretation of these qualitative data are in order.

A. Physical Therapy. Some students in physical therapy requested areas of content for inclusion and development in the curriculum, like: pathology related courses (4); chest and cardiac PT (3); a pharmacology course (3); a neurology course (4); an abnormal psychology course (2); an interdisciplinary course (5). Regarding the last request, one student said, "It is necessary to appreciate the roles and responsibilities of other health professionals in order to work as a team."

Additional skill areas included: orthopedic training (7); patient evaluation (4); and program planning (4). Viewed as unnecessary were ID 200 (4) and Management (2). Two students also felt that two semesters of chemistry and physics were a bit too much and requested one semester of each as an alternative.

With respect to critical commentaries, 33% or nine students of the twenty-seven that composed the sample, claimed that more and better clinical affiliative work or practical experience would have been helpful. As one student relates:

> I do strongly feel that more practical experiences are essential. Especially for some of us who are less confident. The week before graduation you feel that you're not really ready to take a job.

B. Medical Technology. Some graduates felt that the course content should be expanded to include both parasitology (7 or 44%) and immunology (2). Also, MT 200, although considered to be a good course, was viewed as "hardly enough" by students (3). As possible deletions, students suggested that computer science (2), physics (2) and ID 200 (3) were unnecessary.

Overall commentaries, like the physical therapy sample, called for more clinical experience, especially during the first years in college. One student summed up concerns well by saying:

> The only medical technology course offered at UCONN - before the senior year affiliation in a hospital - was MT 200. Although helpful, such a course. . . provides only a glimpse of what the role of a medical technologist is. There's a big change when you reach your senior year affiliation. . . A lot of medical technology students don't know what they are getting into before their senior year.

C. Clinical Dietetics. Nutritional assessment (2), counseling skills (3) and parent and infant nutrition (2) were some of the content and skill areas mentioned by graduates for additions into the Clinical Dietetics Program. A heavy request was registered in the area of management by 57% or 9 students. As one student expressed:

> We could use more "hands on" management theory. Although the future trends are toward a distinction between clinical and manager dietitians, in reality, most jobs require some of both. During. . . clinical work, students could supervise the kitchen, handle some personnel problems, try out scheduling, etc. . .

There were no areas mentioned by this sample as "unnecessary."

DESCRIPTIVE INFORMATION was also collected on 1979 graduates from the survey instrument initially mailed to this sample (see Appendix F). These data were not part of the scoring for program evaluation, but rather supplemental information for individual program use. For the purposes of clarity, responses will be reported categorically. A complete breakdown of frequencies and percentages on the data can be located in Appendix N.

A. Graduate Employment. For 1979 graduates who returned surveys, there were high employment rates. In physical therapy, 25 or 93% of the respondents were employed full-time in a variety of settings: the army; hospitals; nursing homes; rehabilitation centers; orthopedic groups; regional centers; public schools; and state training schools. "Staff physical therapist" was the

most frequently reported title for these employed students. Medical technology students had a perfect placement rate of 100% for the 15 program graduates who secured jobs in hospitals, health centers, private corporations, clinical labs and clinical foundations. Similarly, the clinical dietetics graduates had a high employment rate of 89%, where the 16 full-time employees worked in hospital settings, private food services, nursing homes and governmental agencies.

B. Enrollment in College Courses. The majority of 1979 graduates are not enrolled in college courses. Percentage wise, 23% or 6 physical therapy, 0% medical technology and 6% (1) clinical dietetics students are taking courses concurrent with employment. It may be speculated that first-year employment occupies most time and energy at this early point in career development; and at a later date, percentages would be higher.

C. Association Membership. Sixty-seven percent (18) physical therapy graduates were members of the American Physical Therapy Association (APTA); 80% (12) of the medical technology graduates belonged to either the American Society of Medical Technologists (ASMT) or the American Society of Clinical Pathologists (ASCP); and 94% (17) of the clinical dietetics students joined the American Dietetic Association (ADA). All associations have national memberships.

D. Professional Journals. The percentages of students who reported receiving professional journals might be related to association membership. According to tabulations, 70% (19) of physical therapy, 87% (13) of medical technology and 94% (17) of clinical dietetics graduates receive at least one piece of literature related to their professional area of study.

E. Attendance at Workshops. Because continuing education is critical to health professionals, it was not surprising that 78% of both physical therapy (21) and clinical dietetics (14) and 100% of medical technology (15) students report having attended workshops largely held in hospital settings on a wide variety of topics.

5:22 Meeting the Needs of Current Students

To determine whether the physical therapy, medical technology and clinical dietetics programs were meeting the needs of current students (1979-80), the following sub-criteria were addressed:

B_1 Current student satisfaction with professional knowledge offered
B_2 Current student satisfaction with clinical skills training offered.
B_3 Current student satisfaction with supportive services offered.
B_4 Current student overall ratings of major program of study.

Statistics were computed on proficiency ratings to produce mean and modal scores, as well as standard deviations. Table 5.5 illustrates these data. Additional frequencies and percentages on items B_1 through B_4 can be found in Appendix O.

Table 5.5
Proficiency Scores for Sub-Criteria of Major Criterion II
MEETING THE NEEDS OF CURRENT STUDENTS
(means, modes, standard deviations)

Sub-Criteria Items	Physical Therapy			Medical Technology			Clinical Dietetics		
	$\bar{x}$	mode	s	$\bar{x}$	mode	s	$\bar{x}$	mode	s
B_1	1.84	2.00	.50	2.47	2.00	.51	2.24	2.00	.44
B_2	1.50	1.00	.58	2.18	2.00	.53	2.24	2.00	.44
B_3	2.00	2.00	.70	1.79	1.00	.80	2.38	2.00	.50
B_4	1.99	2.00	.53	2.47	2.00	.51	2.48	2.00	.51

As a further comparison, the weighted or proportional scores for these items are depicted in Table 5.6. These scores are obtained by multiplying the mean proficiency score by the item weighting. To reach a level of ADEQUATE, the individual proportional score must exceed 15 (7.5 X 2.00 mean proficiency score).

Table 5.6
Proportional Scores for Current Students
MEETING THE NEEDS OF CURRENT STUDENTS

Sub-Criteria Item	Weights	Physical Therapy	Medical Technology	Clinical Dietetics
B_1	7.5	14	19	17
B_2	7.5	11	16	17
B_3	7.5	15	13	18
B_4	7.5	15	19	19

A. Physical Therapy. The physical therapy students could be described as having a low to moderate satisfaction level with their major program of study. For all of the items B_1 through B_4, the scores border on the proficiency level of WEAK to ADEQUATE.

Specifically, results show that the physical therapy sample was generally satisfied with the professional knowledge offered ($\bar{x}B_1 = 1.84$), where 73% gave the program a proficiency score of 2.00. Yet, a critical sign of dissatisfaction emerged with ratings of the clinical skills training offered (B_2). Here, 54% of this sample assigned it a score of 1.00, or WEAK, while 42% assessed it to be ADEQUATE. The result was a low proficiency mean score of 1.50 (B_2). On both items B_1 and B_2, there was a homogeneity of responses as reflected in the standard deviations of .50 and .58, respectively.

On the contrary, the item measuring Supportive Services (B_3) experienced varied ratings ($s = .70$), ranging from very satisfied (24%) to satisfied (52%) to unsatisfied (24%). These results were similar to past students or 1979

graduates whose reponses spread from very satisfied (33%) to satisfied (43%) to unsatisfied (24%), yielding a standard deviation of .77.

The overall rating (B_4) of the Physical Therapy Program by current students was generally satisfactory, where 73% of the sample assessed the program to be altogether ADEQUATE. The lower mean score on this item of 1.99 was due to some low ratings.

In summary, the 1980 current students assessed the Physical Therapy Program to be ADEQUATE to WEAK. The proportional scores in Table 5.6 are lower for the most part than either the Clinical Dietetics or Medical Technology Programs. For items B_1 through B_4, the proportional scores are equal to or below the critical cut-off score representing the proficiency level of ADEQUATE (15).

B. Medical Technology. In general, the medical technology students representing the current sample were satisfied with their undergraduate program. For item B_4, which measured the overall program, the respondents claimed that it was STRONG (47%) to ADEQUATE (53%). The exact same ratings were given for professional knowledge offered (B_1). These results produced high mean proficiency scores (2.47) for both B_1 and B_4 with a small standard deviation (.51) reflecting agreement within the sample.

Clinical skills training (B_2), although reflecting lower ratings than the above items, was satisfactorily assessed. It achieved a mean score of 2.18. Interestingly, the past student/1979 graduate ratings on this same item displayed more dissatisfaction than did this sample.

A notable difference in responses from the med tech sample was evident with respect to supportive services (B_3). On this item, a mean proficiency score of 1.79 and a proportional score of a low 13 were attained. This item received the lowest score for all programs on all items related to current students. Examining the data further shows that 43% of the current medical

technology students were dissatisfied with supportive services. The modal score was a low 1.00.

C. Clinical Dietetics. Like the clinical dietetics students in the 1979 graduate sample, current students displayed the most favorable ratings for their undergraduate program of all three programs under review. For items B_1 through B_4, none of the current students gave a proficiency score of below 2.00; and for all items, there was homogeneity of responses as the standard deviations of .44(B_1), .44 (B_2), .50 (B_3), .51 (B_4) represent. Unlike physical therapy and medical technology students, the clinical dietetics sample rated supportive services (B_3) as satisfactory (63%) to very satisfactory (37%) with a mean proficiency score of 2.38. Interestingly, these results were quite similar to 1979 graduates evaluation of supportive services, where a mean proficiency score of 2.40 was obtained.

Professional knowledge offered ($\bar{x}B_1 = 2.24$), clinical skills training offered ($\bar{x}B_2 = 2.24$) and overall rating of the major program ($\bar{x}B_4 = 2.48$) reflected satisfaction with the undergraduate experience. All proportional scores were above 15, again indicating support.

As with the past students samples, there were a few open-ended questions intended to derive qualitative data from current students and shed additional clarity on some of the quantitative responses of items B_1 through B_4.

> "Knowing what you know at this time, what, if any, additional knowledge or skills training do you believe should be offered by your major program of study?"
>
> "As you perceive your potential job marketability, are there any skills or knowledge areas that you believe could be changed/deleted from the present curriculum?"
>
> "We welcome your frank comments about your major program on the back side of this sheet."

A. Physical Therapy. The 70 students who comprised this sample responded to the open-ended questions with a wide variety of responses. Where content was evaluated, students felt that the following areas could be added or improved:

- evaluation of patient (10)
- neurology (5)
- MMT, ROM (4)
- medicare (4)
- chest PT (6)
- pharmacology (4)
- death and dying course instead of Psych.132 (7)
- pediatrics (4)
- burns (11)
- more cardiopulmonary (11)
- combine Chem. 127-128 and Physics 121-122 to make 2 courses (8)

As expected, 50% or 35 of the students had comments that related to clinical skills training. The need was expressed for more "hands on" experience. Suggestions to this effect were: have more labs; have longer equipment use time; have patients brought into classroom; organize Clinical Arts I; and have earlier clinical exposure, like in freshman or sophomore years. As one student phrased it:

> If we could have seen more patients with problems that we were discussing - even if they had to be transported to Storrs - I wouldn't have felt so removed from what we were speaking about. I feel that I have to get through this mental exercise and out into the clinic to learn about PT.

Also, several students (10) offered critical comments about teaching the modalities. These students felt that this topic had to be covered more thoroughly in the junior year where they felt the instructor should demonstrate and then the student practice.

As possible areas for deletion, education (7) and research (11) were suggested. But further comments appeared to clarify these feelings, where students felt that they were too rushed through some of the Allied Health Core Courses. Twenty-seven percent reflected this attitude. One student claimed, "We wasted one to three years, and then, the fourth year, we crammed it all in." (As a note, this bit of data may not be representative of the Physical Therapy Program in general, as

this year was a transitional year with respect to new curricula implementation.)

Finally, there were some interesting commentaries around the area of supportive services - primarily focused on faculty advising. Of the six students who gave descriptive comments, one student represented the theme:

> This program has accepted too many students. In doing so, the amount of teacher and student time is very little. The staff members are so involved in extra-curricular activities, be it educational or personal (jogging), that their office hours seem very limited or never coincide with our schedules.

B. Medical Technology. Qualitative comments were limited, unfortunately, with this sample, especially with respect to the supportive services item. Although three students described counseling and advising as "weak," there was no further clarification for interpretive purposes. With respect to content, 29% called for parasitology as a requirement. Additionally, more training in instrumentation (3); teaching of venipuncture skills (2); more laboratory work (2); and a course in immunology (2) were registered by respondents. In a limited capacity, students claimed that some allied health courses (A.H. 100, 115, 230), I.D. 200 (3), and CS 101 (2) were a "waste of time." Other critical commentaries included claims (2) that the program was too rigid and should be expanded by either a semester or a year.

C. Clinical Dietetics. Generally, the narrative comments were sparse from current students in clinical dietetics. Six students called for more management training, especially with regard to food services. A wider range of clinical settings (3), as well as more clinical preparation (2) were also suggested. Around areas of community health, five students requested more information on this topic; one respondent asked for affiliation with A.H.E.C., and another said that Spanish would be useful as a requirement. Counseling skills (4) and assertiveness training (1) were affective skill areas that students

wanted more of. Finally, pediatrics (3), diet instruction (2), pathophysiology (3) and disease processes (2) were content areas that students wanted added or expanded to curriculum while two students asked that NUTSC 212 be deleted.

The preceding data are soft or qualitative and must be regarded cautiously. Where there are patterns from sample to sample, or corroborations with hard data, more confidence in interpretation may be taken. For all qualitative comments, look to Appendix O.

5:23 Rates of Success or Registry and Licensure Examinations

Sub-criterion C, which reflected School of Allied Health Professions program rates of success on the licensure and registry exams, composed the last part of Major Criterion II - Meeting Past and Present Student Needs. Proficiency scores were determined by comparing local rates of pass/fail with national rates. Data related to this process were supplied by Physical Therapy Director Joseph Smey, Medical Technology Director Kay Renius and Clinical Dietetics Director Norma Huyck. None of this information was identifiable with any student from the three programs.

A. Physical Therapy. The test results for 1979 graduates in physical therapy were located in a report on the Physical Therapist Licensing Examination from the Professional Examination Service. Standardized scores were listed for School of Allied Health Professions testees on each section of the exam, including: Basic Science; Clinical Science; P.T. Theory and Procedures; and a Total Score. For interpretation, the report said that "nationwide average scores of the 1979 graduates have been set to equal 50 - a score above 50 is above average and a score below 50 is below average. Sixty-eight percent (68%) of the graduates nationwide achieved a score of between 40 and 60." Unfortunately, the report does not indicate a "cut-off" score above which is

passing, below which, failing.

For the School of Allied Health Professions Physical Therapy Program, statistics were provided in the report and are depicted in Table 5.7.

Table 5.7
SAHP Results on Physical Therapist Licensing Exam

Test Section	Mean	Range	Standard Deviation
Basic Science	41.93	14-67	10.19
Clinical Science	45.54	12-70	11.06
P.T. Theory & Procedures	44.46	14-66	10.36
Total Score	43.15	12-67	10.38

To provide analytical data, the standardized scores for the School of Allied Health Professions (SAHP) on the Total Score were arranged in a frequency distribution. It illustrated that 6% of the graduate attained scores of above 60; 61% scored between 40 and 60; and 33% scored below 40. Compared to the national rates, these data are shown in the chart below.

	Below 40	Between 40-60	Above 60	Mean ($\bar{x}$)	Standard Deviation
National	16%	68%	16%	50	10
SAHP - PT	33%	61%	6%	43.15	10.38

The national rates are higher than those of the SAHP Physical Therapy Program, which experiences more scores below the mean, and particularly below -1 standard deviation. This makes the Physical Therapy Program scores a positively skewed distribution where there are relatively fewer frequencies at the high end of the horizontal axis. The lower rates of success for the Physical Therapy Program when compared to the national rates were evident from the data. Yet, interpretation was difficult due to the lack of a cut-off score for passing. Therefore, the program evaluator chose a proficiency score of 1.50 for sub-criterion C, which represented WEAK/ADEQUATE level on this item.

B. Medical Technology. For medical technology students, the Board of Registry Newsletter (December 1979) reported that at the national level, 78% of the testees passed the registry exam. At the School of Allied Health Professions, 17 of the 19 medical technology examinees passed the same exam, yielding a passing rate of 89%. A proficiency score of 3.00 or STRONG was achieved by the Medical Technology Program on sub-criterion C.

C. Clinical Dietetics. The national rate of passing the clinical dietetics registration exam was 78%. Of the 20 graduates of clinical dietetics who took the test in 1979, 100% passed. A proficiency score of 3.00 or STRONG was attained by this program on sub-criterion C.

5:24 Total Criterion Scores for Major Criterion II - Meeting the Past and Present Student Needs

Sections 5:21, 5:22 and 5:23 have individually described the components of Major Criterion II - Meeting the Needs of Past and Present Students. As a summary, this section will identify these sub-criteria items, their individual weightings and proportional scores. Then, proportional scores will be summed to obtain Total Scores for Major Criterion II for physical therapy, medical technology and clinical dietetics. Table 5.8 shows these data.

Table 5.8
Proportional and Total Scores for Major Criterion II
MEETING PAST AND PRESENT STUDENT NEEDS

Sub-Criteria Items	Weights	Physical Therapy	Medical Technology	Clinical Dietetics
A_1	8.8	19	22	23
A_2	8.8	20	20	21
A_3	8.8	18	19	24
A_4	8.8	18	16	21
A_5	8.8	19	22	24
B_1	7.5	14	19	17
B_2	7.5	11	16	17
B_3	7.5	15	13	18
B_4	7.5	15	19	19
C	26	39	78	78
TOTAL SCORE		188	244	262

The Total Criterion II Score for physical therapy is 188; for medical technology, it is 244; and for clinical dietetics, it is 262. According to the MCC model, the attainment level of ADEQUATE would be applied to physical therapy, and to medical technology, a level of ADEQUATE/STRONG. Clinical dietetics achieved a level of STRONG, since its score was above 250 points. It may be concluded, therefore, that all three allied health undergraduate programs are generally meeting the needs of current and past students - some better than others. There are areas identified through quantitative and qualitative sources where improvements may be focused.

5:30 Major Criterion III - Meeting the Job Market Needs (21%)

Three sub-criteria items measured the extent to which physical therapy, clinical dietetics and medical technology were meeting the needs of the job market:

A. the need for program graduates in the job market, as perceived by the occupational community;

B. the rates of job placement for 1979 program graduates in allied allied fields related to major program;

C. the need for the type of educational programs at the School of Allied Health Professions, as perceived by the occupational community.

Measurement was conducted by mailing a questionnaire to a sample of occupational community members in physical therapy, clinical dietetics and medical technology. This instrument (see Appendix H) had items related to sub-criteria A and C. Employment rates were established through questionnaires (see Appendix F) mailed to 1979 graduates, and also from program directors and their staff members.

The tabulated results are depicted in Table 5.9 where mean and modal proficiency scores and the standard deviations are reported. Further statistics can be located in Appendix P.

Table 5.9
Proficiency Scores for Sub-Criteria of Major Criterion III
MEETING JOB MARKET NEEDS
(mean, modes, standard deviations)

Sub-Criteria Items	Physical Therapy			Medical Technology			Clinical Dietetics		
	$\bar{x}$	mode	s	$\bar{x}$	mode	s	$\bar{x}$	mode	s
A	2.25	2.00	.59	2.27	2.00	.45	2.28	2.00	.54
B	3.00	-	-	3.00	-	-	3.00	-	-
C	2.51	3.00	.60	2.44	2.00	.58	2.46	2.00	.51

For comparisons, the weighted or proportional scores for these items are depicted in Table 5.10. These scores are calculated by multiplying the mean proficiency score by the weighting for each item. Total scores for Major Criterion II are obtained by summing the proportional scores for each program.

Table 5.10
Proportional and Total Scores for Major Criterion III
MEETING JOB MARKET NEEDS

Sub-Criteria Items	Weights	Physical Therapy	Medical Technology	Clinical Dietetics
A	32	72	73	73
B	48	144	144	144
C	20	50	49	49
TOTAL SCORES		266	266	266

Need for Graduates. The proficiency mean scores for item A show that there is a medium to high need for graduates from physical therapy ($\bar{x}A = 2.25$), medical technology ($\bar{x}A = 2.27$) and clinical dietetics ($\bar{x}A = 2.28$) in the job market, as perceived by the occupational community.

Type of Program. Likewise, the samples representing occupational community members felt that the "type" of educational programs generated a medium to high need in terms of the job market. On this rating, physical therapy had a mean proficiency score of 2.51; medical technology, 2.44; and clinical dietetics, 2.46. Strongest support was elicited for the type of program offered in physical therapy, where 56% of the sample claimed that there was a "high need".

The job placement rate for all allied health programs was STRONG, as proficiency levels of 3.00 indicate. In physical therapy, 90% of the graduates of the 1979 class were able to locate jobs related to their major field. Of the other 10%, the majority of these students (9%) chose to work outside of the major field. Medical technology graduates had a perfect job placement rate of 100%. Lastly, the 1979 graduates of clinical dietetics were also very successful with 90% of these students securing employment related to their field of study.

For Major Criterion III - Meeting the Needs of the Job Market - the total scores, as illustrated in Table 5.10, were 266 for all of the undergraduate programs. Because a total criterion score of above 250 designates an attainment

level of STRONG, it may be concluded that physical therapy, medical technology and clinical dietetics are meeting job market needs in a very satisfactory or STRONG manner.

As supplemental data, the questionnaire mailed to the occupational community requested additional feedback on their perceptions or visions of job market needs. Although not part of the evaluation process, this information was deemed helpful to program directors and their staff. All of these data are listed in Appendix H, but a summary of comments will follow:

A. Physical Therapy. The occupational community members of physical therapy felt that there would be less turnover of physical therapy positions in the future because of a combination of factors - child care opportunities and economic constraint on families. Therefore, new graduates would have to be willing to go where the jobs were. One respondent said that physical therapy jobs were plentiful, but outside of the state of Connecticut. Within Connecticut, possible employment sites were listed as: home health care centers; neo-natal centers; cardipulmonary units; sports clinics; and public school systems. Finally, one respondent claimed that private physical therapy practice would decrease over the next few years.

B. Medical Technology. The only comments from the medical technology sample were that the northeast section of the country holds a high premium on medical technology jobs.

C. Clinical Dietetics. Like physical therapists, this sample said that graduates would have to be willing to travel to obtain jobs, as they would be scarce in Connecticut. One respondent advised that undergraduates get as much practical experience as possible, particularly during the summer, while pursuing the undergraduate degree.

5:40 Major Criterion IV - Meeting the Needs of Special Students

The sub-criteria for Major Criteria IV - Meeting the Needs of Special Students - were:

A. Satisfaction of special students with program;

B. Representation of minority students in program, as compared to representation of minorities in Connecticut higher education at the undergraduate level.

5:41 Satisfaction of Special Student with Program

The sample was identified through: the Office of Special Student Services; the Division of Minority Affairs; and the administration at the School of Allied Health Professions. Status in the undergraduate programs was verified by Ellen Darrow, Assistant to the Dean.

To measure this sub-criterion, private and confidential interviews were conducted by the program evaluator with the twenty-nine special students identified. Table 5.11 shows these special students by program.

Table 5.11
Special Students by Program

Special Students	Physical Therapy	Medical Technology	Clinical Dietetics
Black	11	4	1
Hispanic	6	0	0
Other Ethnic Group	1	0	2
Handicapped	2	0	2
TOTAL	20	4	5

Interviews were based on predetermined questions listed on an instrument that can be found in Appendix L. A number of special students were unable to respond to those questions, because: (1) they were underclassmen who had limited or no exposure to the professional program and could not assess it; or (2) they were classified as

a minority group member, but had no identification with a minority group and could not assess the program as a "special student." Elimination of these students from the sample left the folowing participants - numerically exhibited in Table 5.12.

Table 5.12
The Total Usable Sample of Special Students

Special Students	Physical Therapy	Medical Technology	Clinical Dietetics
Total Population	20	4	5
Non-Usable Sample	9	2	1
-no ethnic identity	4	0	0
-no exposure to program	5	2	1
Usable Sample	11	2	4
-freshmen	1	0	0
-sophomores	3	2	1
-juniors	5	0	1
-seniors	2	0	2

One item on the interview instrument asked that students - <u>from their perspectives as special students</u> - rate their undergraduate program as: STRONG or ADEQUATE or WEAK. Results from these responses were tabulated to obtain a proficiency score for sub-criterion A - Satisfaction of Special Students With Program, and are illuatrated in Table 5.13.

Table 5.13
Proficiency Scores On Sub-Criterion of Major Criterion IV

Program	n	Mean Proficiency Score	STRONG	ADEQUATE	WEAK
Physical Therapy	11	2.27	3	8	0
Medical Technology	2	2.00	0	2	0
Clinical Dietetics	3	2.00	0	3	0

Mean proficiency scores for physical therapy (2.27), medical technology (2.00) and clinical dietetics (2.00) reflect a general satisfaction on the part of special students toward their major programs of study. Although the sample sizes are very small, they must be considered valid and representative until the population size or composition changes.

Qualitative data were generated through the interview process and will be reported as part of this narrative. Because of the small number of special students, the sensitive nature of these responses and confidentiality, the comments will be presented in a general fashion to be used as supplemental information by all programs.

A. A handicapped students felt that it might be helpful to have undergraduate programs tape record the more difficult courses like anatomy and neuro-anatomy for students who have hearing or language difficulties.

B. Several minority students asked that advisors/counselors provide them with more input into the decision-making process around course selection and course sequence.

C. More Black faculty were desired by a few students.

D. A special student wanted to see allied health students take a course that dealt more specifically with handicapped populations. A suggestion was to eliminate Psychology 132 and require the course, "The Exceptional Child."

E. Some minority students wanted more recruitment and retention of students from multi-ethnic groups. To implement this, students suggested: more supportive services; more tutoring services; more social activities geared to multi-ethnic groups; a Big Brother/Big Sister program between upperclass and underclass minority students; and more faculty support. As one student said, "I could get better grades here, if there were more students like me."

F. A few minority students requested that faculty and administration resist categorizing special students as "minorities." One student complained, "You want us to integrate, then you keep labelling us minorities both in and out of class. We're just like other students."

G. A couple of students, whose first language was not English, looked to faculty and staff to be more patient and understanding. As one student replied, "It takes me three hours to write a paper that it takes other students one hour to write, and then I get marked off for grammar."

5:42 Representation of Minority Students in Program

The sub-criterion B of Major Criterion IV - Meeting Special Student Needs - was intended to compare local percentages of minority students with state percentages at the undergraduate level. To assist in this process, a report from the Board of Higher Education entitled, Enrollment of Minority Students at Institutions of Higher Education in Connecticut (Frankel and Hagan, 1979) was utilized. It stated that the percentage of minority students enrolled as full-time undergraduates at public and private institutions of higher education in Connecticut was 9.1% in 1978 (p.4). Consequently, this percentage was used for comparative purposes with the School of Allied Health Professions undergraduate programs, as Table 5.14 reflects.

Table 5.14
Percentage of Minority Students by Program

Program Students	Physical Therapy(%)	Medical Technology(%)	Clinical Dietetics(%)
Total Program Population	302 (100%)	68 (100%)	70 (100%)
Special Student Sample	20 (7%)	4 (6%)	5 (7%)
Minority Student Sample	18 (6%)	4 (6%)	3 (4%)

As the percentages reveal, minority students are under-represented in physical therapy (6%); medical technology (6%); and clinical dietetics (4%), when compared to the statewide percentage of 9.1%. A proficiency score of 1.00 or WEAK was assigned to each program. As a note, this attainment level is not unusual for The University of Connecticut in general, which Hagen and Frankel (1979) point out is under-represented with respect to both Black and Hispanic students (p.8).

5.43 Total Scores for Major Criterion IV - Meeting the Needs of Special Students

To obtain total scores on Major Criterion IV - Meeting the Needs of Special Students - proportional scores had to be derived by multiplying the mean proficiency scores by item weights. Then, the calculated proportional scores were added to equal TOTAL SCORES for physical therapy, medical technology and clinical dietetics. Table 5.15 exhibits these results.

Table 5.15
Proportional and Total Scores for Major Criterion IV
MEETING THE NEEDS OF SPECIAL STUDENTS

Sub-Criteria Items	Weights	Physical Therapy		Medical Technology		Clinical Dietetics	
		$\bar{x}$ score	proportional score	$\bar{x}$ score	proportional score	$\bar{x}$ score	proportional score
A	59	2.27	134	2.00	118	2.00	118
B	41	1.00	41	1.00	41	1.00	41
TOTAL SCORES			175		159		159

The total scores for Major Criterion IV - Meeting the Needs of Special Students - was 175 for physical thearpy and 159 for both medical technology and clinical dietetics. For physical therapy, this total score falls into the attainment level of ADEQUATE, but in medical technology and clinical dietetics, the rate is ADEQUATE/LOW. This means that physical therapy, medical technology and clinical dietetics are adequately meeting the needs of special students. But, because all scores are at the lower end of the range, improvement is signalled for all three programs, particularly in the efforts to increase multi-ethnic participation.

5.50 Major Criterion V - Occupational Community Support (9%)

The thrust of Major Criterion V was to determine if physical therapy, medical technology and clinical dietetics were supported by their respective occupational communities. Three sub-criteria tested this:

A. The occupational community's willingness to hire a program graduate.

B. The occupational community's rating of the academic segment of the program.

C. The occupational community's rating of the clinical segment of the program.

Data were collected through a questionnaire (see Appendix H) mailed to occupational community members. Statistics were derived including means, modes and standard deviations, and these are depicted in Table 5.16. Frequencies and percentages on these sub-criteria are found in Appendix P.

Table 5.16
Proficiency Scores for Sub-Criteria of Major Criterion V
SUPPORT FROM OCCUPATIONAL COMMUNITY
(means, modes and standard deviations)

Sub-Criteria Items	Physical Therapy			Medical Technology			Clinical Dietetics		
	$\bar{x}$	mode	s	$\bar{x}$	mode	s	$\bar{x}$	mode	s
A	3.00	-	-	3.00	-	-	2.79	-	-
B	2.28	2.00	.51	2.59	3.00	.50	2.44	2.00	.59
C	2.15	2.00	.63	2.54	3.00	.51	2.26	2.00	.62

Comparison can further be made by examining the weighted/proportional scores for Items A, B and C. These scores, which are illustrated in Table 5.17, are calculated by multiplying the mean proficiency scores by their item weightings. Total scores for Major Criterion V are obtained by summing the proportional scores for each program.

Table 5.17
Proportional and Total Scores for Major Criterion V
SUPPORT FROM THE OCCUPATIONAL COMMUNITY

Sub-Criteria Items	Weightings	Physical Therapy	Medical Technology	Clinical Dietetics
A	24	72	72	63
B	38	87	98	93
C	38	82	97	86
		241	267	246

A. Willingness to Hire a Graduate. The occupational communities were very willing to hire program graduates. One hundred percent of physical therapy, 100% of medical technology and 79% of clinical dietetics samples responded to item A in the affirmative. Of the clinical dietetics sample who were unwilling to hire a program graduate (21% or 5), the qualitative data showed that the basis for these responses was a perceived lack of administrative experience. As one member said:

> Lack of administrative courses and experiences produce individuals with a one-sided view of dietetics. . . the absence of applicable administrative courses and experiences produces a dietitian whose background is very impractical in a majority of working situations.

B. Academic Segment Ratings. Regarding the quality of the academic segments of undergraduate programs, ratings were between HIGH and ADEQUATE as the mean proficiency scores indicate in physical therapy ($\bar{x}$ = 2.28), medical technology ($\bar{x}$ = 2.59) and clinical dietetics ($\bar{x}$ = 2.44). Strongest support from the occupational community for the academic component was registered for medical technology, where 59% of the respondents described this program has having HIGH QUALITY.

C. Clinical Segment Ratings. Similar scores of between ADEQUATE and HIGH were given to physical therapy ($\bar{x}$ = 2.15), medical technology ($\bar{x}$ = 2.54) and clinical dietetics ($\bar{x}$ = 2.26) on their clinical components, although each proficiency mean was slightly lower than the ratings of the academic components. Medical technology again received the strongest support with 54% of the sample describing the clinical segment as having HIGH QUALITY. In both physical therapy and clinical dietetics, mean proficiency scores were lowered because of some low ratings from respondents. Thirteen percent or five (5) of the respondents in physical therapy described the program as having low quality in the clinical segment, and nine percent or two (2) of clinical dietetics occupational community felt similarly about clinical dietetics.

The occupational community was encouraged to comment further on the quality of the undergraduate allied health programs by using space provided at the end of the questionnaire. The following comments, because of their qualitative nature, must be regarded with prudence. For a complete listing of all comments, refer to Appendix P.

A. In physical therapy, several respondents (6) called for more clinical application and more of a variety of affiliations (3) with a balance between specialized and general settings. Particularly, evaluation skills (4) were mentioned as a skill area needings improvement. As one respondent said:

> I do not feel that the current time allotted for instruction in clinical arts is sufficient given the amount of material that should be covered. Generally, it seems that students are basically acquainted with treatment techniques and must learn them more thoroughly in the clinic. I feel that students should not only have a grasp of how to perform various techniques, but of the purpose, and cause and effect, behind treatment.

Content and skill area in physical therapy to be added or improved included: neuroanatomy, neurophysiology and neuropathology (3); communication (3); problem solving (2); and professional development (3).

B. Medical technology was overall described favorably by the occupational community respondents, one of whom said:

> ...we have become increasingly confident that a certain quality typifies your applicants. Having closely observed their performance in classes with mixed academic backgrounds, I am convinced that whatever is being done at UCONN is the correct course for medical technology preparation...

C. As anticipated, most of the constructive criticism for clinical dietetics focused around the development of management and supervisory skills (8). Generally, these areas needing more attention were: assuming responsibility; decision-making; assertiveness; communication; food management systems; motivation; time management; and team work.

The total scores for Major Criterion V - Occupational Community Support - are found in Table 5.17. Physical therapy achieved a score of 241; clinical dietetics, 246; and medical technology, 267. According to the MCC model attainment ratings, the physical therapy and clinical dietetics programs' scores could be described as STRONG/ADEQUATE. Medical technology is clearly within the designation of STRONG, because its total score exceed the cut-off score for this attainment level of 250. All of the undergraduate programs have scored highly on the Major Criterion V, demonstrating support from their respective occupational communities.

6:00 SUMMARY OF RESULTS

6:10 Total Scores for Major Criteria

For The University of Connecticut School of Allied Health Professions, a comprehensive program review was conducted during the 1979-1980 academic year. The three undergraduate programs of physical therapy, medical technology and clinical dietetics were evaluated, based upon the following major criteria:

A. Graduate Job Performance - Major Criterion I

B. Meeting the Needs of Past and Present Students - Major Criterion II

C. Meeting the Job Market Needs - Major Criterion III

D. Meeting the Needs of Special Students - Major Criterion IV

E. and, Occupational Community Support - Major Criterion V

Weighted sub-criteria, which operationalized and measured major criteria, contributed to the computation of TOTAL SCORES on each of the five major criteria above. Major criterion TOTAL SCORES higher than 250 indicated a program which "averaged" an attainment rating of STRONG across all sub-criteria. Scores between 249 and 150 indicated a program which "averaged" ADEQUATE attainment ratings, while scores lower than 150 represented a program which averaged WEAK ratings.

For Major Criterion I - Graduate Job Performance - TOTAL SCORES were:

265 for the physical therapy program

268 for the medical technology program, and

253 for the clinical dietetics program.

All of the programs scored above the 250 point cut-off score which indicates an attainment level of STRONG. Thus, TOTAL SCORE data for physical therapy, medical technology and clinical dietetics can be interpreted to mean that employers are very satisfied with graduate job performance and view it as STRONG overall.

For Major Criterion II - Meeting Past and Present Student Needs, TOTAL SCORES were:

188 for physical therapy

244 for medical technology, and

262 for clinical dietetics.

For physical therapy, this score signifies an attainment level of ADEQUATE; for medical technology, STRONG/ADEQUATE; and for clinical dietetics, STRONG. Essentially, all of the undergraduate programs are basically meeting the vocational aspirations of their clientele, both current and past. There are qualitative or differential levels of attainment, as the scores reflect, whereby clinical dietetics has achieved this goal to the highest degree and other programs to lesser degrees. The minimal level of ADEQUATE is met, however, by all of the undergraduate programs.

For Major Criterion III - Meeting Job Market Needs, TOTAL SCORES were:

266 for physical therapy

266 for medical technology, and

266 for clinical dietetics.

These TOTAL SCORES are exactly the same for the three undergraduate programs and represent an attainment level of STRONG. For interpretative purposes, the scores of 266 mean that physical therapy, medical technology and clinical dietetics are meeting the expressed needs of the job market in a very satisfactory or STRONG fashion.

For Major Criterion IV - Meeting the Needs of Special Students, the TOTAL SCORES were:

175 for physical therapy

159 for medical technology, and

159 for clinical dietetics.

For physical therapy, this score falls into the attainment level of ADEQUATE; for both medical technology and clinical dietetics, the attainment levels of ADEQUATE/WEAK are indicated by scores of 159. For all three programs, these scores represent the lowest TOTAL SCORES achieved by any program on any major criterion. Generally speaking, it can be stated that the programs of medical technology and clinical dietetics need to improve in terms of meeting this goal; and physical therapy, while achieving a relatively higher score, achieved a score that falls in the lower half of the range for ADEQUATE. Improvement with respect to this goal is signalled overall for these three undergraduate programs.

For Major Criterion V - Occupational Community Support, the TOTAL SCORES were:

241 for physical therapy

267 for medical technology, and

246 for clinical dietetics.

For medical technology, the score of 267 signifies an attainment level of STRONG; for both physical therapy and clinical dietetics, the attainment levels achieved were STRONG/ADEQUATE. Generally speaking, the occupational community has demonstrated that they are satisfied to very satisfied with the undergraduate programs offered at the School of Allied Health Professions and support both the academic and clinical components.

In Table 6.1, these data are portrayed for visual comparisons, by program and major criterion. Also, a histogram is provided for further review in Appendix Q.

Table 6.1
Total Scores for Major Criteria I-V
by Program

Major Criterion	Physical Therapy		Medical Technology		Clinical Dietetics	
	Total Score	Attainment Level	Total Score	Attainment Level	Total Score	Attainment Level
I	265	STRONG	268	STRONG	253	STRONG
II	188	ADEQUATE	244	STRONG/ADEQUATE	262	STRONG
III	266	STRONG	266	STRONG	266	STRONG
IV	175	ADEQUATE	159	ADEQUATE/WEAK	159	ADEQUATE/WEAK
V	241	STRONG/ADEQUATE	267	STRONG	246	STRONG/ADEQUATE

6:20 Composite Scores for Programs

In utilizing the MCC Model, a COMPOSITE SCORE or overall program score can be derived. It is calculated by applying the predetermined major criterion weightings (see Section 2:30) to TOTAL SCORES to obtain a PROPORTIONAL or WEIGHTED major criterion score. By adding the PROPORTIONAL/WEIGHTED SCORES, a COMPOSITE SCORE is produced. The COMPOSITE SCORES are illustrated in Table 6.2, along with their respective PROPORTIONAL/WEIGHTED SCORES.

Table 6.2
Proportional/Weighted Scores and Composite Scores
by Program

Major Criterion	Major Criterion Weighting	Proportional Score Physical Therapy	Proportional Score Medical Technology	Proportional Score Clinical Dietetics
I	38%	101	102	96
II	22%	41	54	58
III	21%	56	56	56
IV	10%	18	16	16
V	9%	22	24	22
COMPOSITE SCORE		238	252	248

According to the MCC model attainment levels, the COMPOSITE SCORES are:

ADEQUATE (238) for physical therapy

STRONG (252) for medical technology, and

STRONG/ADEQUATE (248) for clinical dietetics.

This means that the three undergraduate programs are adequately fulfilling the goals (i.e., major criteria) espoused by the MCC program evaluation model for professional programs. The degrees of attainment vary upward with medical technology achieving the highest COMPOSITE score of STRONG, followed by clinical dietetics of STRONG/ADEQUATE, and finally, physical therapy, ADEQUATE. All three programs' COMPOSITE scores range within 14 points of each other from a high of 252 with medical technology to a low of 238 with physical therapy. All COMPOSITE scores point to satisfactory performance overall in meeting the goals of professional programs. (Please refer to the histogram in Appendix Q.)

In summary, sound "report cards" have been achieved by the physical therapy, medical technology and clinical dietetics programs at the School of Allied Health Professions at The University of Connecticut. This has been documented by the COMPOSITE scores which are based on quantitative data from multiple sources - 1980 program students, 1979 program graduates, the occupational communities, employers of 1979 graduates, performance or certification examinations, job placement rates, handicapped, minority and special admitted students. In a word, the goals of all programs are being met - SATISFACTORILY - with qualitative differences. Where there are differences, improvements involve both follow-up and corrective activities, as deemed appropriate by administrative and program staff.

7:00 DISCUSSION OF RESULTS

According to the occupational community members, The University of Connecticut undergraduate programs in physical therapy, medical technology and clinical dietetics

are producing students who are needed in the job market. This was further documented by the high job placement rates for 1979 graduates of 90% for physical therapy, 100% for medical technology and 90% for clinical dietetics. In addition, the occupational community registered support for both the academic and clinical segments of all programs, as well as the "types" of programs that the School of Allied Health Professions offered. Finally, the majority of this sample group was very willing to hire a program graduate from the University of Connecticut, if the opportunity presented itself in the future.

Similarly, actual employers of program graduates in physical therapy, medical technology and clinical dietetics were very satisfied with performance on the job. Not only were overall attainment ratings high, but particular skill areas like interaction, clinical research, cognitive, problem-solving and time management were described as very satisfactory. Furthermore, employers - almost without exception - indicated a willingness to hire another University of Connecticut program graduate, should a vacancy arise.

As a note, the data from the employer sample was weighted heavily (38%) in the overall undergraduate program evaluations. It may be considered some of the most important and valid data in evaluating program effectiveness, as job performance could likely be the strongest criterion for measuring program outcomes, and employers, the most legitimate evaluator.

The most variance among the three programs emerged with respect to students, both current and past, and meeting their needs. The Clinical Dietetics Program reflected strongest support from both current and past students where there were high ratings on both the academic and clinical segments, preparation for employment and supportive services. Performance on the certification exams was also exemplary.

Medical technology students rated this program lower by comparison; but, again, there was a great deal of support for the academic and clinical segments and preparation for employment from both current and past students. There was a slight but noteworthy difference with respect to the rating of clinical skills training. Current students, for the most part, registered a satisfaction with training in this area, while past students, on the other hand, were somewhat dissatisfied. A question of validity could be raised as to whether or not current students in medical technology - a program where little clinical training occurs prior to affiliation - can accurately evaluate this segment. This area deserves follow-up, particularly because of the dissatisfaction that emerged from the past student group. Also, the past and current students in medical technology expressed dissatisfaction with supportive services offered, where 29% of the past students and 43% of current students evaluated this area as WEAK. Again, follow-up is in order to determine if a problem does, in fact, exist, the scope of the potential problem and related corrective mechanisms. Finally, the past student performance on the certification exams was excellent for medical technology.

The physical therapy students were overall satisfied with the academic segment of the program and preparation for the job, but were sharply critical on other components. There was notable dissatisfaction with the clinical skills training offered, where 54% of the current students were dissatisfied. From qualitative data, this evaluation was corroborated by 33% of the past students who expressed the desire for more and better clinical experience. Secondly, the area of supportive services was rated low by 24% of the past and 24% of current students. Like medical technology, the Physical Therapy Program would benefit by implementing some follow-up with respect to these two potential problem areas. Finally, the performance of 1979 graduates on the certification exam was lower than the national averages, again indicating corrective attention.

Special students in the School of Allied Health Professions were generally satisfied with the treatment they encountered from each of the three undergraduate programs. But, the small number of students from multi-ethnic backgrounds remains a complicated issue where questions of applicant availability, recruitment techniques and retention methodologies need to be reviewed.

From the open-ended questions on the survey instruments, there were some qualitative responses that deserve mentioning because they emerged from more than one sample group within the programs.

Physical Therapy. Generally speaking, employers, occupational community members, 1979 graduates and current students in some form called for more and better clinical skills training, both in the academic and clinical affiliative components. Areas where improvements could be focused were: evaluation of patients; orthopedics; chest p.t.; neurology; pharmacology; management; cardiopulmonary; professional development and interpersonal skills training. A few students from the 1979, as well as the 1980 classes, requested that one semester of chemistry and physics be required instead of two. Also, a few students from the current, past and special student samples suggested that Psychology 132 be replaced by a course in either abnormal psychology, death and dying, or the exceptional child. Both employers of graduates and 1979 graduates themselves expressed the need to expose students to interdisciplinary health care. Finally, comments regarding supportive services seemed to focus on faculty advising where students called for punctuality, availability and commitment.

Medical Technology. The occupational community, employers of graduates and past and current students agreed that two content areas need to be improved or added to the medical technology curricula: parasitology and immunology. Computer Science 101 was, on the other hand, labeled unnecessary. From both the employer and occupational community samples, there was a call for more interpersonal skill development like communication and assertiveness training. Not much qualitative data shed light on the weak evaluation of supportive services

by the medical technology student samples.

Clinical Dietetics. All samples - employers, the occupational community, past and present students - agreed that the Clinical Dietetics Program could benefit by improving and adding management content in areas such as: food systems; budgeting; directing; staffing; and supervising. Like the other programs, some qualitative comments called for improved clinical skills training. Also, counseling skills were identified by employers, past and current students as needing more emphasis. The content areas of community health and pediatrics were mentioned as possible additions to the present course of study.

8:00 RECOMMENDATIONS

As a result of the findings that were generated from this program review of physical therapy, medical technology and clinical dietetics, the following recommendations are presented:

A. Follow-up activities should be conducted by both the medical technology and physical therapy programs with respect to supportive services. The intent of this process would be to determine: if, in fact, a problem exists; the nature of the problem; the scope of the problem; and corrective action. Implementation could involve adding several items to the past and current student questionnaire instruments and then collecting data via program evaluation efforts.

B. The Physical Therapy Program needs to examine where areas of improvement can be focused with regard to clinical skills training. From qualitative data, it appears that both the academic component (Clincal Arts I, modalities, patient evaluation and other skill-focused areas) and clinical affiliations (the variety, the number, the quality) need to be further evaluated by the physical therapy staff to determine where weaknesses lay. Some follow-up activity may be appropriate with students, as well as occupational community samples, to assist in potential improvement efforts around clinical skills training.

C. The Medical Technology Program needs to conduct follow-up activities to determine the adequacy of clinical skills training offered in the undergraduate program prior to affiliations. This recommendation is based on the divergent assessment - albeit subtle - between past and current students. Additional data could assist the program in determining: (1) whether clinical skills training is sufficient; and (2) if not, where could improvements be directed.

D. The physical therapy, medical technology and clinical dietetics programs need to develop affirmative action plans to identify: (1) the availability of multi-ethnic program applicants; (2) the variety of recruitment techniques; and (3) the methods of retention, so that the population of this group of special students will - at the minimum - be commensurate with state percentages in higher education.

E. The Clinical Dietetics Program should assess management skills training to assure that required and relevant topics are addressed in both the academic and clinical components. Topics might involve, but are not limited to: food systems; budgeting; directing; staffing; and supervising. Follow-up activities may be in order to determine what skills are deemed appropriate by the occupational community at large.

F. The Physical Therapy Program should enter into discussion regarding the possible inclusion or development of the following topics into the major course of study:

- evaluation of patients
- orthopedics
- neurology
- pharmacology
- management
- cardiopulmonary skills
- professional development
- interpersonal skills
- interdisciplinary health care
- chest p.t.

Also, the program should consider the possibility of replacing Psychology 132 with a more suitable psychology course. Finally, the necessity of offering two semesters of chemistry and two semesters of physics should be reviewed.

G. The Medical Technology Program should enter into discussion regarding the possible inclusion or development of the following topics into the major course of study:

- parasitology
- immunology

Also, the possible replacement of Computer Science 101 should be reviewed with the intention of substituting a computer course that more appropriately meets the needs of medical technology students.

H. The Clinical Dietetics Program should enter into a discussion regarding the possible inclusion or development of the following topics into the major course of study:

- counseling skills
- community health
- pediatrics

I. Physical therapy, medical technology and clinical dietetics programs should maintain accurate and up-to-date records of job placement efforts for graduated students on an annual basis.

J. Physical therapy, medical technology and clinical dietetics programs should maintain accurate and up-to-date records on pass/fail rates or performance rates on certification examinations for graduated student bodies.

9:00 MISCELLANEOUS

The 1979-1980 University of Connecticut School of Allied Health Professions undergraduate program review was completed in final report form on July 18, 1980. For further evaluation efforts, the following recommendations are:

A. that program evaluation be conducted annually with past and current samples only, using the current survey instruments with whatever revision, addition or deletion deemed appropriate;

B. that job placement rates of undergraduate program graduates be evaluated annually;

C. that performance rates on certification examinations of physical therapy, medical technology and clinical dietetics be evaluated annually;

D. that recruitment and retention of special students be evaluated annually with numerical comparative data drawn from BHE reports;

E. that comprehensive program evaluation be conducted every five years with the next planning efforts undertaken in the summer of the 1983-1984 academic year.

COSTS OF PROGRAM EVALUATION

Printing	$ 51.00
Postage	7.00
Envelopes (1 box-white, legal size)	4.41
Envelopes (self-addressed)	4.12
Phone (2 long-distance phone calls)	4.00
Supplies (pads and pencils)	16.00
Duplication	25.00
Total	$221.53

PERSONNEL REQUIREMENTS

2/5 to 3/5 Professional Staff Person with research, computer programming and writing skills

Part-Time Secretary*

Part-Time Work-Study or Graduate Student with data processing/keypunching skills and some management skills if possible

*30 hours to type final report

TIMETABLE

Month	Personnel	Activities
JULY	Professional Staff	Planning efforts
AUGUST	Advisory Committee	- Develop major criteria
SEPTEMBER	Secretary	- Develop major criteria weights
		- Develop sub-criteria
		- Develop sub-criteria weights
		- Design instruments
		- Develop sampling lists
SEPTEMBER	Professional Staff	- Finalize sampling lists
OCTOBER	Work-Study Student	- Code subjects
		- Prepare mailing labels
		- Obtain supplies for mailing
NOVEMBER	Professional Staff	- Administer surveys to current students
DECEMBER	Work-Study Student	- Implement first mailing
		- Implement second mailing
		- Conduct special student interviews
		- Record returns
JANUARY	Professional Staff	- Implement third mailing
FEBRUARY	Work-Study Student	- Finish recording interviews
		- Code all surveys with proficiency levels
		- Obtain performance data on certification exams
		- Obtain job placement data
MARCH	Professional Staff	- Write computer programs
APRIL	Work-Study Student	- Keypunch all data
		- Execute all computer programs
		- Analysis of certification data
		- Analysis of job placement data
JUNE	Professional Staff	- Analyze all data from computer output
JULY	Secretary	- Write evaluation final report

SAMPLE OF RESPONDENTS TO MAJOR CRITERIA
(N=61)

Dean's Council

Polly Fitz
Priscilla Douglas
Bill Doiron
Cindy Adams
Ellen Darrow
Patty Gillespie
Verne Gordon
Norma Huyck
Joseph Smey

Faculty Members

Melanie Polk
Art Cosmas
Dottie Cobb
Jim Bauer
Kay Renius
Pam Roberts
Pat Packer
Vera Kaska

Committee on Allied Health (Consortium)

Jack C. Lylis, Hartford Hospital
Paul Scannell, Institute of Living
Ms. Sandra Venzon, Newington Children's Hospital
Mrs. Betty Riley, St. Francis Hospital
Robert Mooney, St.Francis Hospital
Mary Meaney, New Britain Genral Hospital
Linda Wierenga, Mt.Sinai Hospital
James Fleming, Health Center
Mrs. Patricia McLean, Veterans Admin. Hospital

Also

Cornell Scott, Hill Health Center
James Cornish, Dir. of Educ. MLT Windham Memorial Hospital
William Woods, RPT, Meriden
Robert Bergeron, Conn. Hospital Assn.
Evelyn Scholtz, M.T. Educ.Coordinator, Hartford Hospital
Osa Jackson, Rehab.Director, Hartford Hospital
Linda Crane, Hartford Hospital
Arlene Kenney, R.D., Hartford Hospital
Dr. Simone Adams, Health Center, Nutrition
Carrie Mukaida, Health Center, Family Medicine
Dr. Fred Adams, V.P. for Student Affairs, UConn
Barbara Brewington, Jewish Home, Dir. Food Services
Susan Davis, Manchester Hospital

Dean Arthur Schwarting, Pharmacy
Dean Eleanor Gill, Nursing
Dean Raymond Massey, School of Medicine, Health Center
Dean H. Loe, School of Dental Medicine, Health Center
Vice President for Academic Affairs, Kenneth G. Wilson

Dottie McIvor, Norwalk Hospital Educ.Coordinator
Don Engalls, State Dept. of Health, Hartford
Susan Addis, State Dept. of Health, Bureau Chief, Hartford

APPENDIX A

Also

Stanley Katz, Dean, SAH & Natural Sciences, Quinnipiac
Dr. Marlin Deardin
Dr. Elliot Sicklick, Dir. Dept. of Lab.Medicine, St.Francis Hospital
Kenneth Gertz, Cheshire
Richard Jackman, Physical Therapy Services, Waterbury
Nancy Zyla, Szabo, Mass.
Dr. John Glasgow, Assoc.V.P. for Health Affairs
Dr. John DiBiaggio, V.P. for Health Affairs
James Malloy, Administrator, John Dempsey Hospital
Paul Simosa, Asst.Director, Hartford Hospital
Joanne Blackley, Foods & Nutrition Service Director, Yale New Haven
Reivan Zlesniak, Dir. Rehab., Yale New Haven Hospital
Mary Cuddy, R.D., Veterans Hospital, Newington
Dr. Herbert Silver, Medical Director, School of AH, M.T. Program, Hartford Hospital

THE UNIVERSITY OF CONNECTICUT
SCHOOL OF ALLIED HEALTH PROFESSIONS

Storrs, Connecticut 06268

Weighting Criteria for Program Evaluation

DIRECTIONS: Below are ten pairs of items. Please indicate which of the two items is more important for Schools of Allied Health Professions to address in this evaluation by placing a check mark (✓) next to the preferred item.

Pair Number	Item A	A	Item B	B
Pair 1	Meeting Job Market Needs		Meeting Student Needs	
Pair 2	Job Performance of Graduates		Meeting Job Market Needs	
Pair 3	Meeting Student Needs		Job Performance of Graduates	
Pair 4	Meeting Student Needs		Occupational Community Support	
Pair 5	Meeting Job Market Needs		Occupational Community Support	
Pair 6	Job Performance of Graduates		Reaching Handicapped & Disadvantaged Students	
Pair 7	Occupational Community Support		Reaching Handicapped & Disadvantaged Students	
Pair 8	Reaching Handicapped & Disadvantaged Students		Meeting Student Needs	
Pair 9	Graduate Job Performance		Occupational Community Support	
Pair 10	Reaching Handicapped & Disadvantaged Students		Meeting Job Market Needs	

APPENDIX C

THE UNIVERSITY OF CONNECTICUT
SCHOOL OF ALLIED HEALTH PROFESSIONS

June 25, 1979

Dear Colleague:

The University of Connecticut School of Allied Health is in the process of designing program evaluations both at the graduate and undergraduate levels. Presently, we have identified five (5) major criteria upon which overall evaluation will be based. These are:

A. Meeting Job Market Needs

B. Graduate Student Job Performance

C. Meeting Student Needs (current/past)

D. Reaching Handicapped/Disadvantaged Students

E. Level of Occupational Community Support (i.e., support for the programs from field of allied health)

At this point in the evaluation process we need to determine the relative importance of each of the above criterion. Your knowledge and expertise in the field of allied health professions can assist us in accomplishing this objective.

To do this we ask that you take about five or 10 minutes to complete the attached instrument. It contains ten possible combinations of the five aforementioned criteria. For each pair we would like you to choose which of the two criteria is more important for schools of allied health professions to address.

For example, in Pair #1 you are asked to indicate (with a check mark) whether Item A (Meeting Job Market Needs) or Item B (Meeting Student Needs) is more important for schools of allied health to address. If you feel Item B is more important, place a check mark next to the space reserved for that item. You will proceed in similar fashion for all ten pairs. At the end of the instrument you should have ten check marks registered.

Please return the instrument to me in one week. Thank you in advance for assisting us in developing our evaluation efforts. Your input will be invaluable to the outcome. My thanks in advance for your time. Enjoy the remainder of the summer!

Cordially,

Polly A. Fitz
Dean

PAF:beh

Enclosures

APPENDIX D

Office Memo

STO-199 REV. 9-75 (Stock No. 6938-052-01)

TO: Program Directors	DATE thursday 7/19
FROM: Susan Rovezzi-Carroll	TELEPHONE

SUBJECT

Program Evaluation Sample

Attached are names of students that will be involved in program evaluation samples (1978 + 1979).For each name there a space to the right reserved for names of employers and their addresses.

I realize that you are quite busy this summer, but your assist: in providing this infomation will be critical to successful implementation of the evaluation model. It is important for us to get as much information as possible so that our return rate from surveys is substantial and that we have a representative sample. (We are starting with small sample sizes due to small classes in MT &Cd; so, we have to avoid losing persons if possible.) Possibly, other faculty and/or administrative staff can assist you in obtaining these data.

At the risk of sounding totally outrageous I have a second request. I will also be in need of the listing of occupationa community persons and their addresses in the next couple of weeks. So, if you could continue to develop this listing, it would be most helpful.

The great statistician in the sky will reward you for all of these labors. Seriously, thank you for your time and diligence.

APPENDEX E

CURRENT STUDENT QUESTIONNAIRE

You are important in assisting the School of Allied Health Professions to improve its undergraduate program. Please take a moment to fill out this form. Your input is most valuable to our efforts.

YOUR EDUCATIONAL EXPERIENCE

The educational community often makes the distinction between the knowledge and skills training offered to its students. Knowledge is traditionally thought of as instruction through academic coursework, whereas skills training allows the individual to perform tasks at the job site (clinic.)

1. At this time, how satisfied are you with the professional knowledge offered by your major program of study? (Check one.)

   ___very satisfied
   ___satisfied
   ___unsatisfied

2. At this time, how satisfied are you with the skills training offered by your major program of study?

   ___very satisfied
   ___satisfied
   ___unsatisfied

3. How would you rate the supportive services (counseling, advising, tutoring, financial aid) provided by the School of Allied Health Professions?

   ___strong
   ___adequate
   ___weak
   ___not able to judge

4. In general, what overall rating would you give to your major program of study in the School of Allied Health Professions?

   ___strong
   ___adequate
   ___weak

5. Knowing what you know at this time, what, if any, additional knowledge or skills training do you believe should be offered by your major program of study?

   Specify_____

   _____

   _____

6. As you perceive your potential job marketability, are there any skills or knowledge areas that you believe could be changed/deleted from the present curriculum?

   Specify_____

   _____

   _____

We welcome your frank comments about your major program on the back of this sheet. The information will be used only as guidelines for program improvement and your comments will be considered STRICTLY CONFIDENTIAL. The space on the back may also be used to explain some of the answers that you gave on this page.

THANK YOU VERY MUCH

STUDENT FOLLOW-UP QUESTIONNAIRE

As a graduate of the University of Connecticut School of Allied Health Professions you are important in assisting us to improve our undergraduate programs. Please take a moment to fill out this form. Your input is both critical and invaluable to our efforts.

ABOUT YOU

1. Are you currently employed in a field related to your major program of study? (Check what best describes you.)

   ___employed ___fulltime ___part-time
   ___unemployed
   ___employed, but not in major field of study

2. If employed in major field of study please indicate:

   Job title_____

   Name of organization_____

3. If employed in major field of study, please indicate the degree of job preparation that your program of study at the School of Allied Health Professions provided.

   ___strong preparation
   ___adequate preparation
   ___little preparation

4. If currently unemployed in your major field of study, please indicate that reason. (Check all that apply to you.)

   ___cannot find a job in my field
   ___do not desire job in my field
   ___temporarily out of work in my field, but plan to return
   ___raising a family
   ___poor health
   ___serving in military
   ___other (specify)_____
   _____
   _____

YOUR UNDERGRADUATE EXPERIENCE

The educational community often makes the distinction between the knowledge and skills training offered to its students. Knowledge is traditionally thought of as instruction through academic coursework, whereas skills training allows the individual to perform tasks at the job site (clinic).

5. Looking back, how satisfied are you with the professional knowledge offered by your major program of study?

   ___very satisfied
   ___satisfied
   ___unsatisfied

6. Again, looking back, how satisfied are you with the skills training offered by your major program of study?

   ___very satisfied
   ___satisfied
   ___unsatisfied

7. Again, looking back, how would you rate the supportive services (counseling, tutoring, financial aid) provided by the School of Allied Health Professions?

   ___strong
   ___adequate
   ___weak
   ___not able to judge

8. In general, what overall rating would you give to your major program of study in the School of Allied Health Professions?

   ___strong
   ___adequate
   ___weak

(Continued on reverse side)

STUDENT FOLLOW-UP QUESTIONNAIRE

9. Knowing what you know at this time, what, if any, additional knowledge or skills training do you believe should have been provided during your training at the School of Allied Health Professions?

   Specify_____

   _____

   _____

10. Was there any knowledge or skills training that you believe was not necessary to learn in order to perform your present job duties?

    Specify_____

    _____

    _____

CONTINUING EDUCATION

11. Are you currently enrolled in a college course of study related to your field?

    ___Yes ___No

12. Do you belong to a professional organization or association related to your field of study?

    ___Yes ___No

    If yes, _____
    (Name)

13. Have you attended a workshop or conference during the past year related to your field of study?

    ___Yes ___No

14. Do you subscribe to a professional journal related to your field of study?

    ___Yes ___No

15. Do you participate in other kinds of continuing education? If so, please describe.

    _____

    _____

    _____

We welcome your frank comments about your major program on the remainder of this sheet. The information will be used only as guidelines for program improvement and your comments will be considered STRICTLY CONFIDENTIAL. The space remining may be used to explain some of your answers given on these pages.

THANK YOU VERY MUCH

APPENDIX G

GRADUATE JOB PERFORMANCE QUESTIONNAIRE

DIRECTIONS:

Please indicate your satisfaction with this employee as compared with other workers in the same work group who have been employed an equal amount of time. If the employee is the only person working in your organization, compare him/her with others who have worked in the same position. Please respond to all questions. The responses you give will be kept strictly confidential and will in no way affect the employee.

1. How many months has the employee been working with your organization? _____months

2. How satisfied are you with the overall job performance of this employee? (Please check one)

_____very satisfied
_____satisfied
_____unsatisfied

3. How satisfied are you with the following skills of this employee? (Please check appropriate box)

SKILL	VERY SATISFIED	SATISFIED	UNSATISFIED	UNABLE TO JUDGE
interaction with subordinates				
interaction with superiors				
research				
problem-solving				
knowledge within field				
clinical application of knowledge				
management of time				

4. From the knowledge and skills demonstrated by the employee, how would you rate the overall quality of his/her program training?

_____high quality
_____average quality
_____poor quality

CONTINUED ON THE REVERSE SIDE

5. If you have noted any deficiencies in the employee's training, please specify these areas so that our program can be more beneficial to future employees.

_____

_____

_____

6. Considering the experience you have had with this employee, if a position were to open in your department, would you be willing to hire another graduate of the University of Connecticut School of Allied Health program?

_____Yes _____No

If no, please specify reasons why._____

_____

_____

Please use the remainder of the space to provide any additional comments that you may have relating to this employee and/or his or her training.

PLEASE RETURN THIS QUESTIONNAIRE TO US IN THE ENCLOSED ENVELOPE. THANK YOU.

APPENDIX G

ALL RESPONSES YOU GIVE WILL BE KEPT STRICTLY CONFIDENTIAL

EMPLOYER QUESTIONNAIRE

DIRECTIONS:

Please complete ALL sections of this form even if the employee no longer works for your organization. When you have completed the form, return it in the enclosed, return-addressed, stamped envelope. Your responses will IN NO WAY affect the employee.

I. BACKGROUND INFORMATION

A. Employee name _____
(last) (first)

B. Indicated Employer* _____
(name)

_____
(organization)

II. ABOUT YOU (appropriate supervisor of employee)

A. Name _____

B. Position _____

C. Do you directly supervise the employee named above? ___Yes ___No

If no, please state the relationship _____

_____

_____

*If the employee is presently supervised by someone other than yourself, please have the appropriate supervisor fill out the attached questionnaire.

PLEASE COMPLETE THE ATTACHED QUESTIONNAIRE. THANK YOU VERY MUCH.

APPENDIX A

OCCUPATIONAL COMMUNITY QUESTIONNAIRE

DIRECTIONS:

To the best of your ability please respond to ALL of the following questions by placing a checkmark in the appropriate space. Courses and competencies for this allied health program at the University of Connecticut have been included for your reference. When you have completed this form, return it in the return-addressed, stamped envelope that we have enclosed for your convenience. All questionnaires will be held in strict confidentiality. Thank you for your time.

1. How familiar are you with this allied health program at the University of Connecticut?

   _____very familiar
   _____adequately familiar
   _____not familiar at all

2. Have you ever hired a graduate from this allied health program at the University of Connecticut?

   _____Yes
   _____No

   Within the last 5 years? _____Yes Estimate of number of graduates hired _____
   _____No

3. Based on your knowledge of the job market, what is your best estimate of the existing need for UConn School of Allied Health Professions graduates in this allied health profession?

   _____high need
   _____medium need
   _____low need
   _____no need

4. Given the list of program courses and competency outcomes, what is your best estimate of the existing need for the type of educational program offered by the School of Allied Health Professions at UConn?

   _____high need
   _____medium need
   _____low need
   _____no need

5. Given the list of program courses and outcomes, if you were in a position to hire and your department had an opening, would you consider hiring a graduate of this program?

   _____Yes
   _____No

   If no, please specify reasons why_____

   _____

   _____

CONTINUED ON THE REVERSE SIDE OF THIS PAGE THANK YOU.

6. Given the list of program courses and competencies, please indicate your rating of the quality of this program's content (academic-didactic segment) as it is currently being taught.

_____high quality
_____adequate quality
_____low quality
_____not able to judge

7. Given your familiarity with the clinical experiences of School of Allied Health Professions students in training, please indicate your rating of the quality of this program's clinical segment as it is currently being implemented.

_____high quality
_____adequate quality
_____low quality
_____not able to judge

Please use the following space to provide any additional comments that you may have relating to the University of Connecticut School of Allied Health Professions' programs and/or job market projections in this field.

PLEASE RETURN THIS QUESTIONNAIRE IN THE ENVELOPE ENCLOSED. THANK YOU.

APPENDIX I

UNIVERSITY OF CONNECTICUT
School of Allied Health Professions

TO: Dean's Council & Pam Roberts

FROM: Susan Rovezzi-Carroll

DATE: July 31, 1979

RE: Evaluation Questionnaire and Proficiency Scores

The attached represents the final stage in developing the model for program evaluation. It is imperative that you review the proposed questionnaires (pp. 7-14) and proficiency scores (pp. 3-6) prior to our meeting on 9 August.

As you will note, pages 1 and 2 are attempts to pull things together. Here, the major criteria, sub-criteria, populations sampled, and criterion measures are listed. I hoped that this section would assist you in locating the criterion measures that DIRECTLY responded to sub-criteria items which we finalized at our 11 July meeting.

Thank you for your generous contribution of time.

SRC:kmv
Attachment

APPENDIX J

PROFICIENCY SCORES

	STRONG (3 points)	ADEQUATE (2 points)	WEAK (1 point)
I.	**Graduate Job Performance**		
	A1. The majority of employers rate overall performance as strong.	adequate	weak
	A2. The majority of employers are very satisfied wity ability to interact with subordinates.	satisfied	unsatisfied
	A3. The majority of employers are very satisfied wity ability to interact with superiors.	satisfied	unsatisfied
	A4. The majority of employers are very satisfied with research skills.	satisfied	unsatisfied
	A5. The majority of employers are very satisfied with problem-solving skills.	satisfied	unsatisfied
	A6. The majority of employers are very satisfied with cognitive skills	satisfied	unsatisfied
	A7. The majority of employers are very satisfied with clinical skills	satisfied	unsatisfied
	A8. The majority of employers are very satisfied with management of time	satisfied	unsatisfied
	B. At least 90% of the employers are willing to hire another graduate	at least 75%	less than 75%
II.	**Past and Present Student Needs**		
	A1. The majority of past students rate the program's job preparation as strong.	adequate	weak
	A2. The majority of past students are highly satisfied with the knowledge offered	satisfied	unsatisfied
	A3. The majority of past students are highly satisfied with the clinical training offered	satisfied	unsatisfied
	A4. The majority of past students are highly satisfied with the supportive services offered	satisfied	unsatisfied
	A5. The majority of past students rate the program overall as strong	adequate	weak

PROFICIENCY SCORE (continued)

	STRONG (3 points)	ADEQUATE (2 points)	WEAK (1 point)
II.	Past and Present Student Needs (continued)		
	B1. The majority of current stu are highly satisfied with t knowledge offered	satisfied	unsatisfied
	B2. The majority of current students are highly satisfied with the training offered	satisfied	unsatisfied
	B3. The majority of current students are highly satisfied with the supportive services offered	satisfied	unsatisfied
	B4. The majority of students rate the overall program as strong	adequate	weak
III.	Job Market Needs		
	The majority of occupational community indicate a high need for SAHP graduates	medium need	low need
	B. At least 90% of the graduates are finding jobs related to program training	at least 75%	below 75%
	C. The majority of occupational community indicate a high need for the type of educational program offered by SAHP	medium need	low need
IV.	Reaching the Students with Special Needs		
	A. The majority of students with special needs rate the program as strong	adequate	weak
	B. More than 9.1% of the program is composed of students with special needs	at least 9.1% of the program is composed of students with special needs	Less than 9.1% of the program is composed of students with special needs
V.	Occupational Community Support		
	A. At least 90% of the occupational comm. willing to hire program graduate	at least 75%	less thatn 75%
	B. The majority of occupational community rate the didactic segment of the program as strong	adequate	weak
	C. The majority of occupational community rate the clinical segment as strong	adequate	weak

APPENDIX K

Major Criteria, Sub-Criteria, Target Samples and Measures

MAJOR CRITERIA	SUB-CRITERIA	TARGET SAMPLES	CRITERION MEASURE
1. THE PROGRAM DEMONSTRATES SUCCESSFUL PERFORMANCE OF ITS GRADUATES	A. Employers are satisfied with graduate overall job performance	Employers of 1978 Grads.	Employer quest. #2
	- with interaction with subordinates	"	Employer quest. #3
	- with interaction with superiors	"	"
	- with research	"	"
	- with problem-solving	"	"
	- with knowledge of field	"	"
	- with clinical application	"	"
	- with time management	"	"
	B. Employers of graduates are willing to hire another graduate	Employers of 1978 Grads.	Employer quest. #6
2. THE PROGRAM IS SUCCESSFUL IN MEETING THE NEEDS OF PAST AND PRESENT STUDENTS	A. Program graduates view their vocational training as adequate	1979 Prog. Grads.	Past Student quest.#3
	- knowledge offered as satisfactory	1979 Prog. Grads.	Past Student quest.#5
	- clinical training offered as satisfactory	1979 Prog. Grads.	Past Student quest.#6
	- supportive services as satisfactory	1979 Prog. Grads.	Past Student quest.#7
	- the quality of program as adequate	1979 Prog. Grads.	Past Student quest.#8
	B. Current students are satisfied with the knowledge offered	Current Students	Current Students quest.#1
	- satisfied with the clinical training offered	Current Students	Current Students quest.#2
	- satified with the supportive services offered	Current Students	Current Students quest.#3
	- the program quality is adequate	Current Students	Current Students quest.#4
3. THE PROGRAM MEETS THE NEEDS OF THE JOB MARKET	A. The program meets the employment needs as expressed by the occupational community	Occ. Comm.	Occ. Comm. quest. quest.#3
	B. Program students are employed in the area of training or a related field.	1979 Prog. Grads.	Reports of Program Director
	C. The type of program meets the training needs expressed by occ. comm.	Occ. Comm.	Occ. Comm. quest.#4

MAJOR CRITERIA	SUB-CRITERIA	TARGET SAMPLES	CRITERIOM MEASURE
4. THE PROGRAM RECEIVES THE SUPPORT OF THE OCCUPATIONAL COMM. FOR WHICH TRAINING IS PROVIDED	A. Occ. Comm. supports the program through their willingness to hire its graduates	Occ. Comm.	Occ. Comm. quest. #5
	B. The program's academic segment is rated satisfactory by occ. comm.	Occ. Comm.	Occ. Comm. quest.
	C. The program's clinical segment is rated satisfactory by the occ. comm.	Occ. Comm.	Occ. Comm. quest.
5. PROGRAM IS SUCCESSFUL IN MEETING THE NEEDS OF SPECIAL STUDENTS	A. Program is rated satisfactory by students with special needs	Students with special needs	Interview form
	. Program adequately represents the percentage of students with special needs who attend post-secondary institutions in Connecticut	Students with special needs	BHE report

Appendix L

_____
NAME

_____
MINORITY HANDICAP SPECIAL ADMITTANCE

SPECIAL STUDENTS
INTERVIEW SHEET-EVALUATION

Because the SAHP would like to determine whether it is meeting the needs of special students, you have been requested to participate in an interview as part of our evaluation process. Special students have been defined as:

a. handicapped/special service students
b. minority students
c. special admittance students

Please be assured that all discussions will be strictly confidential and used only to improve our undergraduate programs.

QUESTIONS:

1. What undergraduate program are you enrolled in? ____ ____ ____ _____
PT MT CD unknown

2. What class are you presently in? ____ ____ ____ _____
fresh soph jnr senior

3. For how many years have you been a student at the SAHP (UCONN, Storrs) _____
years

4. From your perspective as a special student what do you like best about the ____ program?

5. From your perspective as a special student what do you like least about the ___ program?

6. Have you experienced any problems while in the ____ program because of your special student status?

7. Were those problems above resolved to your satisfaction?

8 Considering your experience with the ____ program, what recommendations would you make for improvement?

9. If you had to choose, would you describe the ____ program as
strong___ adequate___ weak___

10. Are there any additional comments you would like to make about ____ program?

Appendix M
Responses from Employers of Graduates
MAJOR CRITERION I

Months on Job

Central Tendencies and Variability	PT (N=27)	MT (N=12)	CD (N=21)
Mean	.26	12.5	11.7
Median	15.33	14.0	12.0
Mode	18	12.0	12.0
Standard Deviation	7	4.6	5

Overall Performance of Graduates
(A_1)

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	16 (61%)	9 (75%)	13 (62%)
2	9 (35%)	2 (17%)	7 (33%)
1	1 (4%)	1 (8%)	1 (5%)
0*	-	-	-
Mean	2.58	2.67	2.57
Median	2.69	2.83	2.69
Mode	3.00	3.00	3.00
Standard Deviation	.58	.65	.60

*No response

Interaction with Subordinates
(A_2)

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	16 (59%)	5 (63%)	9 (43%)
2	11 (41%)	2 (25%)	10 (48%)
1	-	1 (12%)	2 (9%)
0	-	4*	-
Mean	2.59	2.50	2.33
Median	2.66	2.70	2.35
Mode	3.00	3.00	2.00
Standard Deviation	.50	.76	.66

Interaction with Superiors
(A_3)

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	19 (70%)	9 (75%)	10 (48%)
2	7 (26%)	2 (17%)	9 (43%)
1	1 (4%)	1 (8%)	2 (9%)
0	-	-	-
Mean	2.67	2.67	2.38
Median	2.79	2.83	2.44
Mode	3.00	3.00	3.00
Standard Deviation	.56	.65	.67

Research Skills
(A_4)

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	5 (36%)	3 (60%)	7 (41%)
2	8 (57%)	2 (40%)	10 (59%)
1	1 (7%)	-	-
0	11*, 2	5*, 2	2*, 2
Mean	2.29	2.60	2.41
Median	2.25	2.67	2.35
Mode	2.00	3.00	2.00
Standard Deviation	.61	.55	.51

Problem Solving Skills
(A_5)

Proficiency Scores	PT (%)	MT(%)	CD (%)
3	12 (44%)	5 (42%)	6 (29%)
2	14 (52%)	6 (50%)	11 (52%)
1	1 (4%)	1 (8%)	4 (19%)
0	-	-	-
Mean	2.41	2.33	2.10
Median	2.39	2.33	2.09
Mode	2.00	2.00	2.00
Standard Deviation	.57	.65	.70

*"Unable to Judge" response

Knowledge Skills
(A_6)

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	16 (59%)	6 (50%)	12 (57%)
2	11 (41%)	5 (42%)	9 (43%)
1	-	1 (8%)	-
0	-	-	-
Mean	2.59	2.42	2.57
Median	2.66	2.50	2.63
Mode	3.00	3.00	3.00
Standard Deviation	.50	.67	.51

Clinical Skills
(A_7)

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	16 (59%)	9 (75%)	11 (52%)
2	10 (37%)	2 (17%)	9 (43%)
1	1 (4%)	1 (8%)	1 (5%)
0	-	-	-
Mean	2.56	2.67	2.48
Median	2.66	2.83	2.55
Mode	3.00	3.00	3.00
Standard Deviation	.58	.65	.60

Time Management
(A_8)

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	15 (55%)	10 (84%)	5 (24%)
2	11 (41%)	1 (8%)	14 (67%)
1	1 (4%)	1 (8%)	2 (9%)
0	-	-	-
Mean	2.52	2.75	2.14
Median	2.60	2.90	2.11
Mode	3.00	3.00	2.00
Standard Deviation	.58	.62	.57

Willingness to Hire Another Graduate
(B_1)

Proficiency Scores	PT (%)	MT (%)	CD (%)
Yes	27 (100%)	10 (100%)	19 (95%)
No	-	-	1 (5%)
No Response	-	2	1

Appendix N
Responses from Past Students/1979 Graduates
MAJOR CRITERION II

Assessment of Job Preparation
(A_1)

Proficiency Scores	PT (N=27)	MT (N=15)	CD (N=18)
3	5 (20%)	7 (47%)	11 (65%)
2	20 (80%)	8 (53%)	5 (29%)
1	-	-	1 (6%)
0*	2 -	-	1 -
Mean	2.20	2.47	2.59
Median	2.13	2.44	2.73
Mode	2.00	2.00	3.00
Standard Deviation	.41	.52	.62

Satisfaction with Professional Knowledge Offered
(A_2)

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	8 (30%)	5 (33%)	7 (39%)
2	17 (63%)	9 (60%)	11 (61%)
1	2 (7%)	1 (7%)	-
0	-	-	-
Mean	2.22	2.27	2.39
Median	2.18	2.22	2.32
Mode	2.00	2.00	2.00
Standard Deviation	.58	.59	.50

*0 = No response

Satisfaction with Clinical Skills Training
(A_3)

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	5 (19%)	7 (47%)	12 (67%)
2	19 (70%)	3 (20%)	6 (33%)
1	3 (11%)	5 (33%)	-
0	-	-	-
Mean	2.07	2.13	2.67
Median	2.05	2.33	2.75
Mode	2.00	3.00	3.00
Standard Deviation	.5	.92	.49

Satisfaction with Supportive Services
(A_4)

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	7 (33%)	2 (14%)	7 (47%)
2	9 (43%)	8 (57%)	7 (47%)
1	5 (24%)	4 (29%)	1 (6%)
0	6 -	1 -	3
Mean	2.10	1.86	2.40
Median	2.11	1.88	2.43
Mode	2.00	2.00	2.00
Standard Deviation	.77	.66	.63

Overall Rating of Program
(A_5)

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	5 (18%)	9 (60%)	13 (72%)
2	21 (78%)	5 (33%)	5 (28%)
1	1 (4%)	1 (7%)	-
0	-	-	-
Mean	2.15	2.53	2.72
Median	2.10	2.67	2.81
Mode	2.00	3.00	3.00
Standard Deviation	.46	.64	.46

Appendix N

1979 Graduates - Qualitative Responses

Physical Therapy

ADDITIONS (content and skill areas)

- management
- interdisciplinary (5)
- pathology courses (4)
- pediatrics
- better organization of P.T. 203 (2)
- neurology course (4)
- pharmacology (3)
- chest and cardiac problems (3)
- post-op[illegible] topics
- burns
- more pert[illegible]nt psychology course like abnormal (2)
- orthopedics (7)
- athletic training
- evaluation (4)
- program planning (4)
- progress notes
- modalities
- TENS

DELETIONS

- Anatomy II
- C.A. I
- I.D. 200 (4)
- SOAP notes
- two semesters of chemistry and physics (2)
- A.H. 200
- management (2)
- ROM
- electronic stimulation

COMMENTS

- develop more and better affiliations (9)
- more community exposure
- more time on surface anatomy
- gear chemistry, physics and psychology to allied health
- C.A. labs are a waste of time
- more guest lectures
- excellent staff
- too few people in p.t. handle all work

Appendix N

1979 Graduates - Qualitative Responses

Medical Technology

ADDITIONS (course and skill areas)

- pathology
- parasitology (7)
- hematology
- immunology (3)
- mycology
- medical ethics
- patient interaction
- management
- more instrumentation in chemistry
- more computer work
- more M.T. 200

DELETIONS

- computer science (2)
- physics (2)
- I.D. 200 (3)
- A.H. courses

COMMENTS

- more clinical experience during years 1 and 2 (3)
- have 2+2 instead of 3+1
- M.T. 200 good, but not enough

Appendix N

1979 Graduates - Qualitative Responses

Clinical Dietetics

ADDITIONS (content and skill area)

- communication skills
- counseling skills (3)
- management (9)
- practice at writing menus
- nutritional assessment (2)
- enteral nutrition
- production training
- parental and infant nutrition (2)
- food sanitation
- nutritional biochemistry
- physiology
- geriatric nutrition

DELETIONS

- too much time on care plans
- anatomy
- Physics 101
- Statistics 101
- organic chemistry lab
- dietary interviews

Appendix N
SUPPLEMENTAL/DESCRIPTIVE DATA ON 1979 GRADUATES

Enrollment in College Course

Response	PT (%)	MT (%)	CD (%)
No	20 (77%)	15 (100%)	17 (94%)
Yes	6 (23%)	-	1 (6%)
No Response	1 -	-	-
Total	27 (100%)	15 (100%)	18 (100%)

Association Membership

Response	PT (%)	MT (%)	CD (%)
No	9 (33%)	3 (20%)	1 (6%)
Yes	18 (67%)	12 (80%)	17 (94%)
No Response	-	-	-
Total	27 (100%)	15 (100%)	18 (100%)

Workshop Attendance

Response	PT (%)	MT (%)	CD (%)
No	6 (22%)	-	4 (22%)
Yes	21 (78%)	15 (100%)	14 (78%)
No Response	-	-	-
Total	27 (100%)	15 (100%)	18 (100%)

Receive Professional Journal

Response	PT (%)	MT (%)	CD (%)
No	8 (30%)	2 (13%)	1 (6%)
Yes	19 (70%)	13 (87%)	17 (94%)
No Response	-	-	-
Total	27 (100%)	15 (100%)	18 (100%)

Appendix O
Responses from Current Students
MAJOR CRITERION II

Satisfaction with Professional Knowledge Offered
(B_1)

Proficiency Scores	PT (N=70)	MT (N=17)	CD (N=21)
3	4 (6%)	8 (47%)	5 (24%)
2	51 (73%)	9 (53%)	16 (76%)
1	15 (21%)	-	-
0	-	-	-
Mean	1.84	2.47	2.24
Median	1.89	2.44	2.16
Mode	2.00	2.00	2.00
Standard Deviation	.50	.51	.44

Satisfaction with Clinical Skills Training
(B_2)

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	3 (4%)	3 (23%)	5 (24%)
2	29 (42%)	12 (71%)	16 (76%)
1	38 (54%)	1 (6%)	-
0	-	-	-
Mean	1.50	2.18	2.24
Median	1.42	2.13	2.16
Mode	1.00	2.00	2.00
Standard Deviation	.58	.53	.44

Satisfaction with Supportive Services
(B_3)

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	16 (24%)	3 (21%)	6 (37%)
2	34 (52%)	5 (36%)	10 (63%)
1	16 (24%)	6 (43%)	-
0	4	3	5
Mean	2.00	1.79	2.38
Median	2.00	1.70	2.30
Mode	2.00	1.00	2.00
Standard Deviation	.70	.80	.50

Overall Rating of Program
(B_4)

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	9 (13%)	8 (47%)	10 (48%)
2	50 (73%)	9 (53%)	11 (52%)
1	10 (14%)	-	-
0	1	-	-
Mean	1.99	2.47	2.48
Median	1.99	2.44	2.46
Mode	2.00	2.00	2.00
Standard Deviation	.53	.51	.51

Appendix O

1979/1980 Current Students

Physical Therapy

ADDITIONS (content and skill areas)

- teach ROM, MMT (6)
- more day trips to clinic
- teach modalities more thoroughly (10)
- Medicare (3)
- more tests like EMG
- chest p.t. (6)
- pharmacology (4)
- more clinical experience (35)
- orthopedics (10)
- more lab time (2)
- more mental health pscyhology course - not Psychology 132 (7)
- kinesiology
- more cyreax material
- develop and organize Clinical Arts I (16)
- back evaluations
- lengthen research module
- more cardiopulmonary (10)
- exposure to burns (11)
- exposure to amputation (2)
- exercise program information
- neurological information (5)
- uses of equipment (2)
- combine physics and chemistry to two instead of four courses (8)
- communication skills
- problem-solving skills
- areas of specialization
- sports medicine
- joint diseases
- joint manipulation (2)
- more evaluation (10)
- more program planning (2)

Physical Therapy

ADDITIONS (continued)

- community health
- massage
- hand anatomy
- how health care systems work
- how to get jobs
- pediatrics (4)
- specialized anatomy, physiology
- legal topics

DELETIONS

- education (7)
- research (11)
- material on bracing seems outdated (4)
- don't emphasize SOAP notes
- less time on bed transfers
- Bio. 264/265
- some faculty
- wheelchair prescriptions
- less time on ADL activities in C.A. II

COMMENTS

- too much time in C.A. I and II on common sense items
- too much cramming in year #4 (19)
- Track B should be changed
- develop first two years of program (4)
- organize PPC I
- Susan Rovezzi-Carroll and Inge Reaviel are assets
- advisors should be on time and accessible (4)
- honors students are catered to
- reliance on objective tests only, but no room for creative answers (3)
- Hemlock program good (2)
- have summer work experiences (2)
- supplement lectures with handouts
- more quizzes instead of 2-3 mind-blowing exams (2)

Physical Therapy

COMMENTS (continued)

- academic coursework outstanding (2)
- keep Dr. Baird
- staff responsive to criticism (2)
- staff is superior
- too competitive with respect to grades
- offer mini-courses on burns, orthopedic procedures, neonatal, etc.
- more advice about financial aid
- more teacher/student relationships

Appendix O

1979/1980 Current Students

Medical Technology

ADDITIONS (content and skill areas)

- parasitology requirement (5)
- venipuncture skills (2)
- more clinical experience
- more training in instrumentation (3)
- background in genetic immunology
- more practical chemistry lab (2)
- M.T. 200 should be two semesters
- course
- immunology course (3)
- 3 credits on histology, urology
- module on job descriptions

DELETE

- A.H. 100, 115, 230 (2)
- I.D. 200 (3)
- C.S. 101 (2)

COMMENTS

- don't treat us like chemistry majors
- individualize allied health courses to us
- advising and counseling is weak (3)
- extend program a semester or a year (2)
- program is too rigid
- financial aid is weak
- need support with fee structure

Appendix P
Responses from Occupational Community
MAJOR CRITERIA III & V

Need for Program Graduates in Job Market

Proficiency Scores	PT (N=41)	MT (N=31)	CD (N=26)
3	13 (33%)	8 (27%)	8 (32%)
2	24 (60%)	22 (73%)	16 (64%)
1	3 (7%)	-	1 (4%)
0	1	1	1
Mean	2.25	2.27	2.28
Median	2.21	2.18	2.22
Mode	2.00	2.00	2.00
Standard Deviation	.59	.45	.54

Need for Type of Program
at School of Allied Health Professions

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	22 (56%)	13 (48%)	11 (46%)
2	15 (39%)	13 (48%)	13 (54%)
1	2 (5%)	1 (4%)	-
0	2	4	2
Mean	2.51	2.44	2.46
Median	2.61	2.46	2.43
Mode	3.00	2.00	2.00
Standard Deviation	.60	.58	.51

Willingness to Hire Program Graduate

Proficiency Scores	PT (%)	MT (%)	CD (%)
Yes	41 (100%)	28 (100%)	19 (79%)
No	-	-	5 (21%)
No Response	-	3	2
Mean	3.00	3.00	2.79

Rating of Academic Segment

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	12 (31%)	16 (59%)	11 (48%)
2	26 (67%)	11 (41%)	11 (48%)
1	1 (2%)	-	1 (4%)
0	2 -	4	3
Mean	2.28	2.59	2.44
Median	2.21	2.66	2.46
Mode	2.00	3.00	2.00
Standard Deviation	.51	.50	.59

Rating of Clinical Segment

Proficiency Scores	PT (%)	MT (%)	CD (%)
3	11 (28%)	14 (54%)	8 (35%)
2	23 (59%)	12 (46%)	13 (56%)
1	5 (13%)	-	2 (9%)
0	2	5	3
Mean	2.15	2.54	2.26
Median	2.13	2.57	2.23
Mode	2.00	3.00	2.00
Standard Deviation	.63	.51	.62

Appendix P

Support from Occupational Community

Physical Therapy

COMMENTS

- more clinical application needed (6)
- more emphasis on professionalism
- more emphasis on therapist role as an educator
- more communication skills (3)
- more updating on research in field
- more training in evaluation and form revision (4)
- more exercise physiology and electrotherapy
- more variety in affiliations (balance of general/specialized) (3)
- more respiratory and orthopedics training
- more problem-solving (2)
- coordinate clinical arts and PPC
- offer death and dying course
- teach quality care review
- teach budgeting
- students need to develop more advanced skills
- weakness in neuroanatomy, neurophysiology, neuropathology (3)
- weak in positioning, gait training
- need to treat whole patient
- should be based at Farmington
- students uncomfortable with sensory testing
- lack depth of study on Brunstrom, Bobath, PNF
- more work around geriatrics
- offer courses in kinesiology, pediatrics
- more community-related courses

Appendix P

Support from Occupational Community

Medical Technology

COMMENTS

- weak background in immunology
- good background in chemistry
- good background in microbiology
- weak exposure to hematology
- have to tie didactic to clinical more
- M.T. 200 should be required
- course in medical technology terminology would be helpful
- offer course on instrumentation
- Bio.Sci. 203 and Elec. Eng. 101, 120 are not practical

Appendix P

Support from Occupational Community

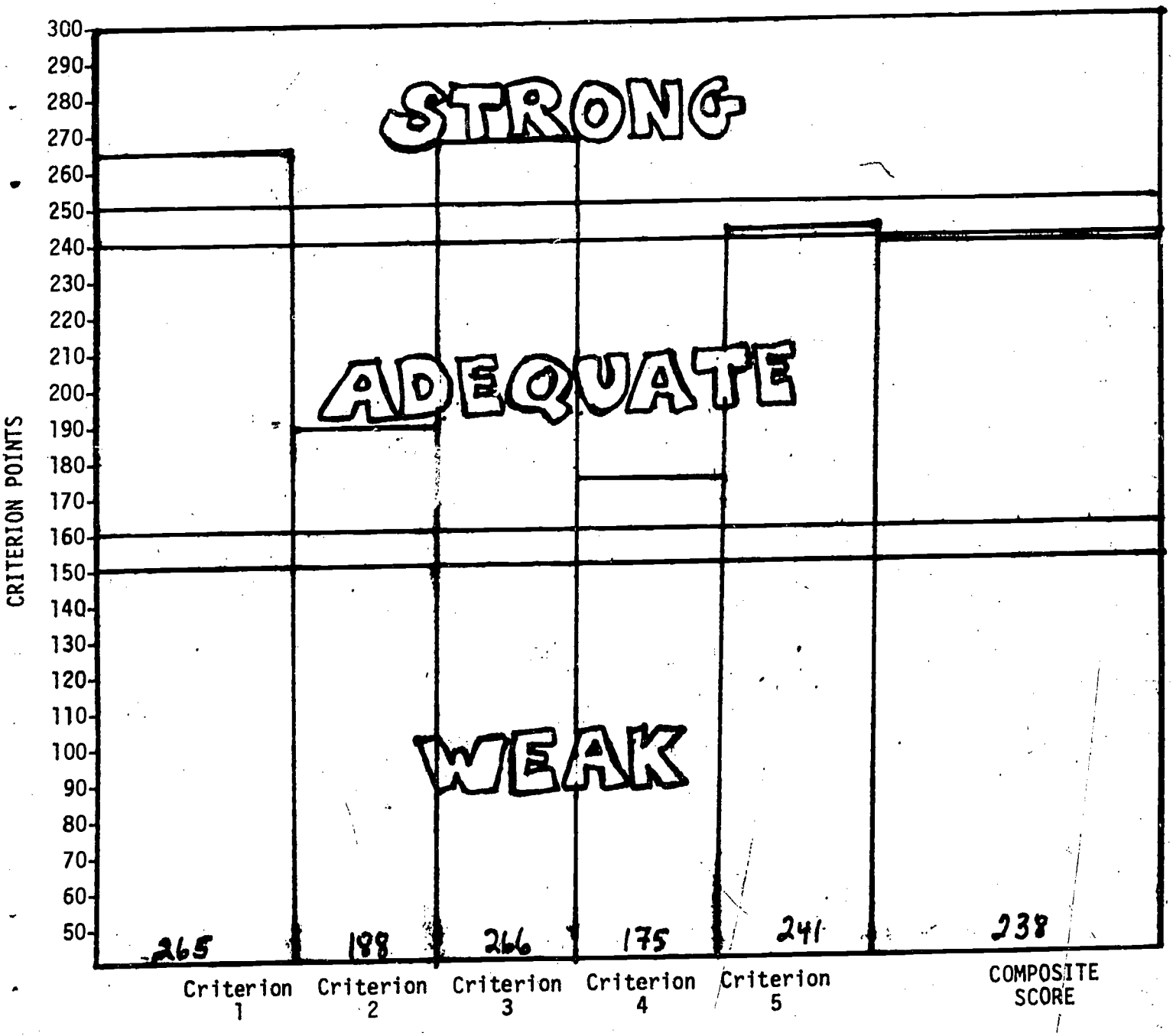
Clinical Dietetics

COMMENTS

- more administration needed (3)
- time management in establishing priorities of patient loads
- stress everyday tools more (diet manual, diet, menus)
- more supervisory skills
- add course on pharmacology and pathology
- offer course on teaching
- offer course on motivation
- more assertiveness training (2)
- more exposure to health field concept
- need year internships
- more nutritional assessment instruction
- instruct about quality care
- more exposure to food management systems
- have students get experience in summer employment
- concentrate on science and nutrition therapy
- students are spoon-fed, can't assume responsibility, can't make decisions, immature

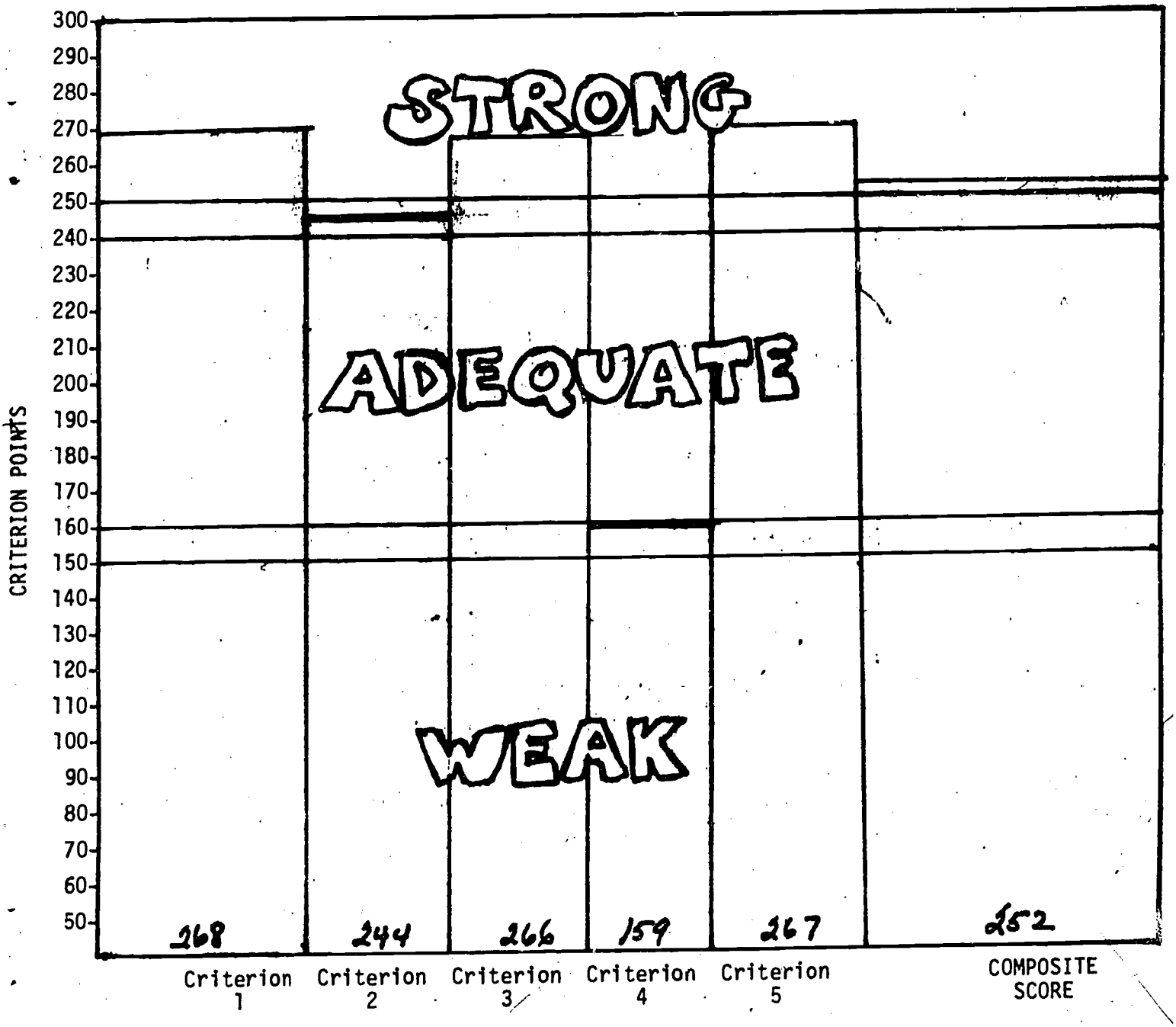
APPENDIX Q

PHYSICAL THERAPY PROGRAM



APPENDIX Q

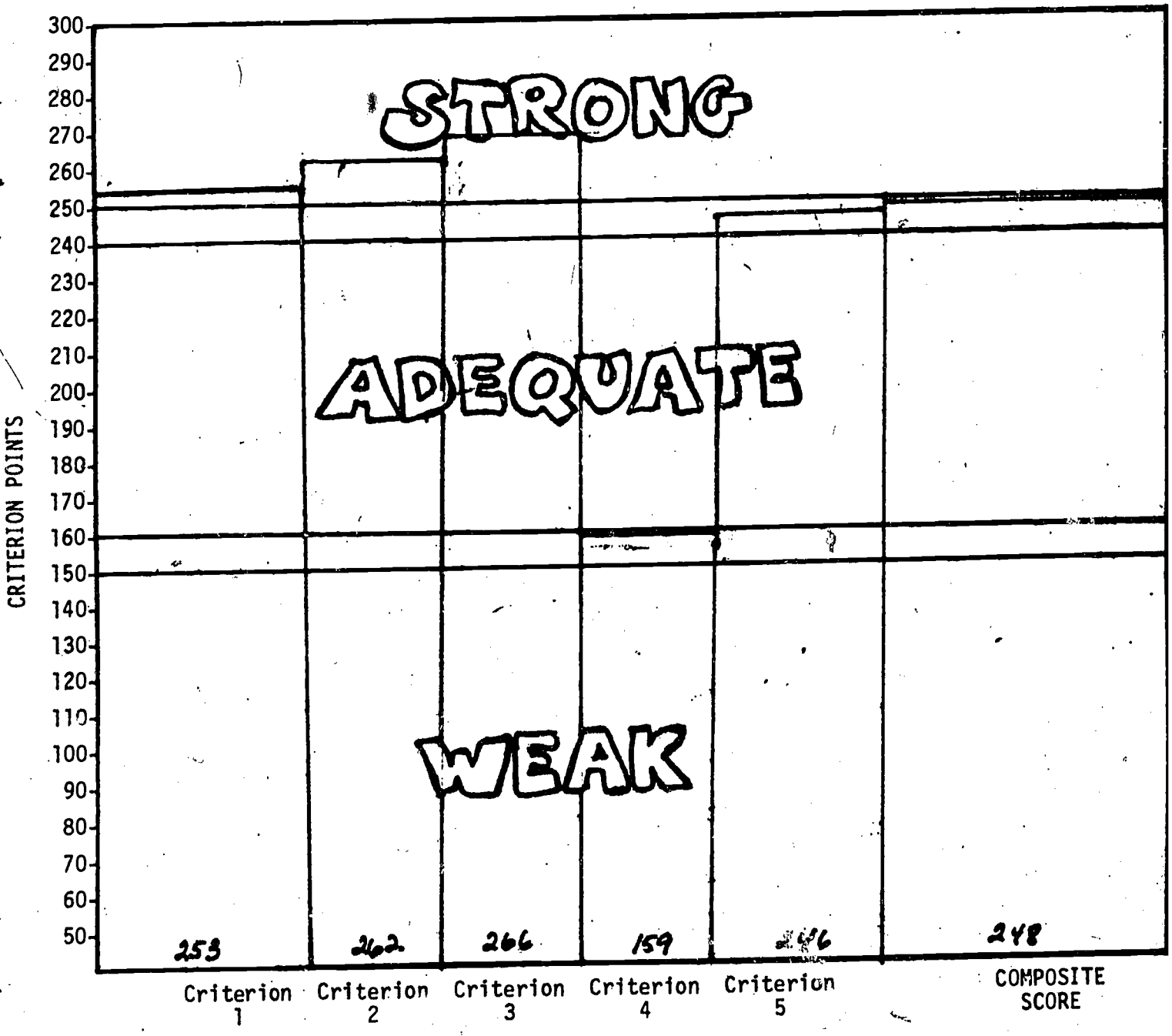
MEDICAL TECHNOLOGY PROGRAM



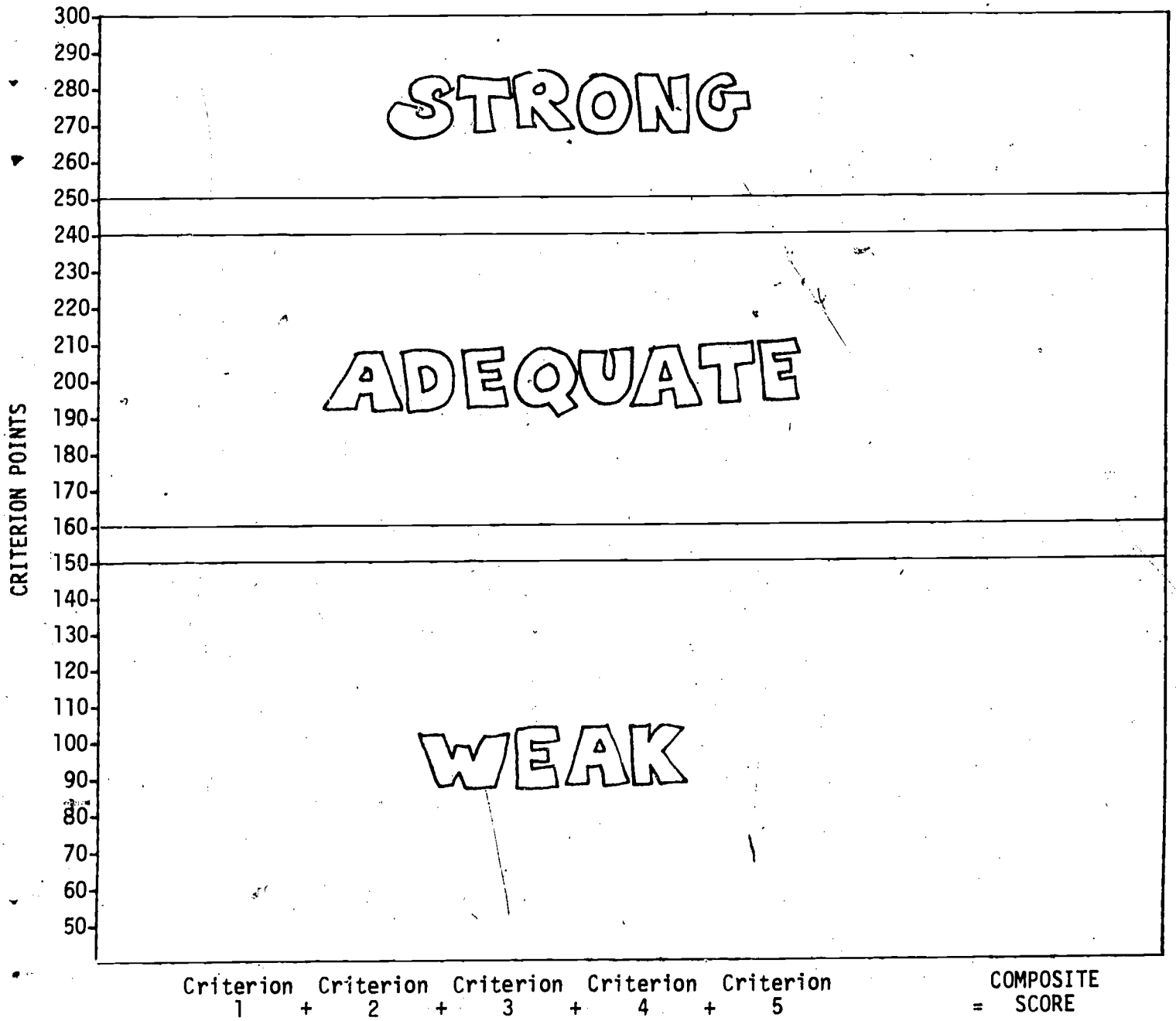
APPENDIX Q

CLINICAL DIETETICS

PROGRAM



APPENDIX Q


CRITERION POINTS
300
290
280
270
260
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
STRONG
ADEQUATE
WEAK
Criterion 1 + Criterion 2 + Criterion 3 + Criterion 4 + Criterion 5
COMPOSITE SCORE =

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