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ABSTRACT

A survey of 12 medical and other health sciences schools which have implemented a standard three-year curriculum in the past few years revealed that only one of these schools is planning to revert to a standard four-year program. Some are introducing more attractive four-year curriculum options. The schools' self-ratings of the success of the three-year curriculum were generally favorable. Three- and four-year students were found to be comparable in cognitive knowledge and clinical skills, although comparison of three- and four-year students at one school showed that the four-year class rated itself far superior to the three-year class in knowledge. Faculties appeared to be somewhat dissatisfied with the three-year curriculum, but students enrolled in this program appeared generally favorable toward it. Overwork and overcrowding were cited as problems. Implementation of the three-year program provided the impetus for intensive preliminary review and reorganization of the educational program, a beneficial side effect. Because of apparent discrepancy between the schools' reported success with the three-year program and extreme caution in discussing it, as well as between reported success and general faculty dissatisfaction, clearer delineation of the impact of a three-year program is advocated. (Author/LBH)

A SURVEY OF EXPERIENCES

WITH THE THREE-YEAR CURRICULUM

by

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Table 1: Continuation and Rating of Accelerated Program

Status in 1975	Initial Curriculum	
	Three-Year Only (9 schools)	Four-Year Option (3 schools)
Continue as is.	6	3
Introduce four-year option.	2	-
Revert to four-year only.	1	-
Self-rating of three-year program. (1→5)*	3.1	4.0

* 1 = poor; 5 = excellent

Table 2: Effects of Implementation Date on Continuation and Rating

Curriculum	Time of Implementation	
	Prior to 1972 No. of Schools	1972 or Later No. of Schools
Initial Program		
Three-year only.	2	7
Four-year option.	2	1
1975 Program		
Continue three-year only.	2	4
Continue four-year option.	2	1
Revert to four-year only.	0	1
Introduce four-year option.	0	2
Self-rating of three-year program. (1→5)*	3.5	3.3

* 1 = poor; 5 = excellent

Table 3: Comparison of Scores on Part I of 1974 National Board of Podiatry Examinations

Subject	Mean Scores*	
	Three-Year Class (74 students)	Four-Year Class (68 students)
Lower Extremity	88.5	85.3
Gross Anatomy	88.5	87.0
Biochemistry	87.0	86.5
Physiology	86.9	87.7
Microbiology	88.4	87.0
Pharmacology	87.3	87.5
Over-All Mean	87.9	86.8
Failures	0	1 (Lower Extremity)

* S. E. > ± 6

Table 4: Problem Areas Associated with Three-Year Curriculum

Negative Comments	Percent of Respondents
Faculty feel vaguely dissatisfied.	60
Faculty feel they are overworked.	50
Faculty and student anger directed at federal government and school administration.	40
Expanded enrollment complicates evaluation.	40
Faculty attitude has negative effect on students.	30
Faculty feel curriculum is too compact.	30
Students feel curriculum is too compact.	30
Students develop cynical attitude.	30
Alumni vaguely dissatisfied.	20
Students lack time to pursue academic interests in the basic sciences.	20
Non-viable, four-year curriculum options.	20
Faculty want summer vacations.	20
Students must make earlier postgraduate choices.	10

Table 5: Evaluation of Three-Year Curriculum by Students at California College of Podiatric Medicine

Items	Four-Year Class (1976-A) Percent of Respondents	Three-Year Class (1976-B) Percent of Respondents
Comparison of didactic knowledge to average student in other (A or B) class:		
Better	80	25
Equal	20	62
Worse	0	13
Comparison of clinical skills to average student in other (A or B) class:		
Better	100	14
Equal	0	66
Worse	0	20
Program would select now:		
Three-year, no-option	0	44
Four-year, with three-year option	25	31
Four-year, no-option	75	25
Curriculum best for this school:		
Three-year, no-option	2	50
Four-year, no-option	98	50

A SURVEY OF EXPERIENCES WITH THE THREE-YEAR CURRICULUM

Introduction

In the early 1970's, a number of medical and other health sciences schools implemented curricular changes which would result in graduating a health practitioner after three calendar years of instruction, instead of the customary four years. The stated advantages of the three-year curriculum were that it would: (1) increase the over-all supply of health practitioners, (2) increase by one year the number of years that each graduate would expect to practice, and (3) increase the utilization of educational facilities.

In 1972, serving as Associate Dean for Curricular Affairs, I was charged with the responsibility of devising, implementing, and evaluating a three-year pre-doctoral curriculum at the California College of Podiatric Medicine in San Francisco. Until that time, this institution had a four-year program which consisted of the usual two years of basic sciences courses and two years clinical experience.

During the past three years of experience with the accelerated program, I have encountered many problems related to it. Because of these problems, I began to wonder whether my experiences were unique or whether they were common to those of other schools which had implemented a three-year curriculum.

A Medline search revealed no information relevant to analysis of this innovation. Therefore, in February 1975, I undertook this survey of schools in which a three-year program has been established as the standard curriculum to determine whether problems did exist and whether determinants of successful versus unsuccessful programs might be identified.

Methods

The chief source of information for the selection of schools to be included in the survey was the 1972-1973 edition of the Association of American Medical Colleges Curriculum Directory, which listed 16 schools having a regular, i.e., mandatory, three-year program. Through personal knowledge, other schools were added to this list, and some were dropped from it because it became evident that they did not have a regular three-year program.

The final group consisted of 12 medical schools, one dental school, and one school of podiatric medicine in which the three-year program had been established as the standard curriculum. Some of these schools also offered a four-year option. None of the schools which had a standard four-year program with a three-year option was included, since it was believed that the effects of the optional and standard three-year curricula would not be comparable.

A questionnaire was devised and mailed to each of the selected schools. This questionnaire was aimed at obtaining information concerning the success of the three-year curriculum relative to objective evidence of student performance and subjective comments and criticisms. Also asked were questions concerning modifying and continuing the program, as well as reasons for initiating it.

The questionnaires were followed by visits and/or telephone conversations with the person most closely associated with implementing or evaluating the program. In response to expressed reluctance to divulge data of a potentially sensitive nature, each respondent was assured that the results of the survey would be used and presented in a manner that would preclude identification of individual schools. Two schools were unwilling to participate in the survey; therefore, the final study group consisted of 12 schools.

Another questionnaire was devised for the 69 students in the class of 1976-A (four-year class) and the 81 students in the class of 1976-B (three-year class) at the California College of Podiatric Medicine. These two classes were selected because they had taken certain didactic courses together and were rotating through clinical assignments at the same time. The class of 1976-B is the first class to be admitted to the three-year program of this college.

The student questionnaire asked whether the college should continue the three-year program and what program (three- or four-year) the student would select now. Each student was also asked to rate his didactic knowledge and clinical skills in comparison with the average student in the other class, and he was asked to specify what he liked least and best about his own curriculum.

To obtain an objective view of the effects of the length of the curriculum on the classes of 1976-A and 1976-B, their scores on Part I of the 1974 National Board of Podiatry Examinations were compared.

Results

Advantages of Accelerated Curriculum

Most of the 12 responding schools indicated that one beneficial aspect of the three-year program was that it had resulted in a complete and thorough review of the curriculum including the development of curricular goals and course objectives. As a result of this review, material of questionable value had been deleted and areas of unintentional omission and overlap had been identified. These schools indicated that without the impetus of initiating a three-year curriculum, this type of review would have been difficult to effect.

Other cited advantages, in order of the frequency that they were mentioned, included: (1) saving the student one year of time and expense, (2) increased utilization of resources, and (3) financial benefits to the institution.

Continuation and Rating of Program

All of the 12 schools that were surveyed had implemented a standard three-year curriculum. Three of these schools also offered an optional four-year program.

Of the nine schools with a three-year, no-option curriculum, only one has decided to revert to a four-year, no-option program (see Table 1). Two of these schools have introduced the option of completing the program in four years. One of the latter has indicated that it may decide to have a faculty committee review all students after one year for the purpose of selecting the group of students who would be likely to be able to complete the program in three years.

All of the three schools that had originally implemented a three-year program with a four-year option indicated a commitment to continue both the three-year curriculum and the four-year option. At none of these schools did the percentage of students who selected the four-year option exceed 50 percent. Two of the three schools indicated a desire to make the options more attractive.

Evaluated on a scale of one to five with one being equivalent to poor and five being equivalent to excellent, the three schools which originally implemented a three-year curriculum with a four-year option rated the success of their accelerated program slightly higher than did the nine schools with no four-year option.

Effects of Implementation Date (Table 2)

Plans for continuation and self-rating of the success of the accelerated program were compared in schools which had introduced this program before 1972 and those which had introduced it in 1972 or later (see Table 2). The year 1972 was selected because federal emphasis during that year was on implementation of three-year, no-option programs.

Of the four schools which had introduced a three-year program prior to 1972, two included a four-year option. Only one of the eight schools which implemented the three-year curriculum in 1972 or later offered this option.

Neither of the two schools which had implemented a no-option, three-year program prior to 1972 indicated a desire to alter their schedule to provide either an optional or mandatory four-year curriculum. Two of the seven schools that implemented a no-option, three-year program in 1972 and later have revised their curriculum to include a four-year option, and one of the seven has chosen to revert to a four-year mandatory program.

The date of implementation had no discernible effect on the schools' self-rating of their three-year program.

Modification of Curriculum Content

It was difficult to obtain specific, comparable information from the responding schools about any modifications which they may have made in the content of their original three-year curriculum. No trends could be discerned in the sketchy information which was obtained.

One modification was the extension of basic sciences courses past the first year; this was reported by three schools. None of the schools reduced the time allowed for clinical training, and two expanded this time to about 18 months -- one at the expense of didactic course time and the other by reducing elective time. No pattern regarding elective time was evident in the schools surveyed. One school increased elective time to six months, while another reduced elective time by 50 percent to six months.

Similarly, no pattern could be discerned regarding modification of the curriculum in the four-year option programs. Two schools utilized a system

which required the student to go half-time during each of the first two years. One of these schools also permitted the student another option whereby the last two years could be completed in three years. In another school an optional four-year program was implemented; this consisted essentially of one year of electives (these electives had been dropped when the school converted to the three-year program). Still another school stated that it had no time requirements for completing the pre-clinical courses but, instead, let student mastery determine the time required. Several schools indicated a desire to make the "options more attractive."

Evaluation of Student Performance

All of the seven schools which indicated that they had objective data for comparing three- and four-year students stated that these two groups had similar cognitive and clinical skills. Two schools that have already graduated a three-year class have judged these interns to be as clinically competent as interns who have graduated from a four-year program.

Comparison of their 1974 National Board of Podiatry Examinations scores showed almost no difference between the four-year class (1976-A) and the three-year class (1976-B) at the California College of Podiatric Medicine (see Table 3). The over-all mean score for the four-year class was 86.8, compared to 87.9 for the three-year class.

Problem Areas

Table 4 lists, in the order of frequency, the problems which were identified by the 12 schools as being associated with the three-year curriculum. Most frequently listed were problems of faculty dissatisfaction; these included feelings of being overworked, of compressing too much information into three years, and of vague, general dissatisfaction with the program.

Since the schools with objective data indicated that students were performing satisfactorily, these responses may seem confusing. Two of the respondents attributed this disparity to the faculty's belief that students could not possibly master the material in three years, since faculty members themselves had required four years.

Forty percent of the respondents indicated that evaluation of the three-year program was hampered by the fact that student class size had been increased concomitantly. The factor of increased enrollment could not be isolated from the factor of a temporally accelerated program.

Approximately one-third of the respondents indicated that the faculty's negative attitude toward the three-year program influenced and evoked similar feelings in students enrolled in the program.

Student Attitudes toward Program

The responding schools did not provide enough data to permit many specific comments about the attitudes of their three-year students toward the curriculum. As suggested in Table 4, there were indications that students felt overworked and had developed a cynical attitude toward the school.

On the other hand, one school which had collected data related to student perceptions of their medical school environment found the opposite attitude. This school had administered a questionnaire which included a "...general esteem factor which was an over-all indicator of students' positive and negative feelings about the climate for learning which exists in the educational environment." The evaluators found that the three-year class reacted "...considerably more positively toward their environment than did the other student groups." At the California College of Podiatric Medicine, 54 of the 81 three-year students and

48 of the 69 four-year students responded to their questionnaire. The results are shown on Table 5.

As noted earlier, these two classes had taken certain didactic courses together and were rotating through clinical assignments simultaneously at the time of the questionnaire. The four-year class was completing its third clerkship, and the three-year class was completing its second clerkship.

As shown on Table 3, these two classes were comparable in their scores on National Board examinations. Yet, 80 percent of respondents in the four-year class rated themselves as performing better in didactic courses when compared to the average student in the three-year class. All of the four-year student respondents believed that their clinical skills were superior to those of the three-year student. In contrast, the self-perceptions of the three-year respondents in relation to these two topics tended to show a pattern which one might expect in any group of students, with about 60 percent considering themselves "average."

When asked about the type of program they would select now, if given a choice, 75 percent of the four-year respondents would select the same no-option, four-year program; none would select a no-option, three-year program. However, only 44 percent of the three-year respondents would select the same no-option, three-year program; 25 percent of these respondents would prefer a no-option, four-year curriculum.

Almost all (98 percent) of the four-year respondents were opposed to continuation of the three-year program at this school; 50 percent of the three-year respondents concurred.

In responding to open-ended questions about what they liked and disliked

most about their own program, more than one-half of the four-year respondents indicated that they believe an additional year of training is advantageous to their professional development. About 40 percent of three-year respondents felt that they could not adequately assimilate the material in three years; however, 60 percent of these students indicated that the thing they liked most about their program was being able "to save one year."

Almost all respondents cited overcrowding as a problem (concurrent didactic courses and clinical assignments). Other comments seemed to indicate that the four-year respondents were more hostile to the general learning environment at the school.

Summary

A survey of 12 medical and other health sciences schools which have implemented a standard three-year curriculum in the past few years revealed that only one of these schools is planning to revert to a standard four-year program. Some, however, are introducing "more attractive" four-year curriculum options.

The schools' self-rating of the success of the three-year curriculum was generally favorable. Schools which had compared objective data concerning their three- and four-year students reported the two groups to be comparable in cognitive knowledge and clinical skills. Comparison of three- and four-year students at one school showed that the four-year class rated itself far superior to the three-year class in knowledge, while objective data revealed that these students were equivalent.

Faculties appeared to be somewhat dissatisfied with the three-year curriculum, but students enrolled in this program appeared generally favorable toward it. Overwork and overcrowding were cited as problems.

Implementation of the three-year program provided the impetus for intensive preliminary review and reorganization of the educational program. Most schools reported that this had been a distinctly beneficial side effect.

Although the formal picture presented by nearly all of the responding schools was favorable to the three-year program, little substantive information could be obtained from many of them. In addition, individuals at some of the schools were extremely cautious in discussing the program at all, which may reflect an underlying apprehension concerning its success.

Because of apparent discrepancy between the schools' reported success with the three-year program and extreme caution in discussing it, as well as between reported success and general faculty dissatisfaction, it would seem useful to attempt to delineate more clearly the impact that a three-year program has on students, faculty, and administrators. Research appears to be needed concerning questions such as the possible effects of major program changes which are developed by sources external to the institution, the possibility of anticipating attitudinal reactions of faculty and the effects of these reactions, and the possible correlation of the success of a new program with the institution's ability to foresee and prepare for the change.

DISCUSSION

When I was collecting data for this study, I encountered much reluctance in college officials to discuss the problems associated with the three year curriculum. Several, in fact, directly stated that they were hesitant to discuss any matters associated with the curriculum unless they could be assured that their statements would be utilized in a manner which would preclude the identification of the institution or the source. As a result, I have had to generalize about the data just presented to assure each institution's anonymity. These data may be summarized:

1. The curriculum in many schools appears to have been reviewed and reorganized in an intensive and comprehensive manner. The review probably was initiated by the imminent implementation of a three-year program.

2. As judged by objective data, students completing the three-year undergraduate health-sciences curriculum are equivalent in knowledge and skills to students completing the four-year program.

3. Most colleges are either continuing the three year program or are introducing more "attractive" four-year curriculum options.

4. Faculty appear to be somewhat dissatisfied with the three-year curriculum.

5. Students enrolled in the three-year curriculum are generally favorable to that curriculum, although they express some dissatisfaction with the over-crowding.

If the above summary is a representative evaluation of the three-year curriculum, why are the schools hesitant to discuss the program and its associated problems ? Why would the Associate

Dean of one institution refuse to comment at all upon the curriculum or its success ?

Perhaps I am biased because I was responsible for implementing a three-year curriculum, but I do believe that another dimension of knowledge is required to evaluate the success of the three-year program . I believe that that dimension requires an understanding of how and why the three-year curriculum originally was implemented at most colleges . It is my hope and belief that by reviewing and analyzing this type of data, inferences can be made which will be important to the planning of future curricula.

The following is a fictionalized account of how one three-year program was implemented at Needum Sam University. Any similarity to actual events is purely coincidental.

In 1970, Dr. Faustus, Dean of Needum Sam University heard through the grapevine that the government would be providing 30-50 per cent more in capitation funds if colleges would increase enrollment and provide a way for students to graduate after three calendar years.

Dr. Faustus thought that the rationale for the program was almost as good as motherhood and apple pie. He remembered that Dr. Deadwoods, the President's Under Secretary of Health, indicated that the nation needed more physicians and better utilization of facilities. Dr. Faustus became enthused with the idea of how a temporally accelerated curriculum, with an increased class size , could meet the criteria of increasing the number of health practitioners, increasing their expected clinical longevity, and utilizing resources more efficiently. In addition, he thought

that it would provide a mechanism whereby faster learners could graduate sooner.

Excited also with the prospect of at last balancing his budget, Dr. Faustus began to dream of that meeting with his President; the one in which he would explain how he had the funds to pay for the increased number of faculty which were hired because the student population had recently increased in size. Thus motivated, Dr. Faustus sat down to write a proposal for a three-year curriculum which had an option for an additional year of undergraduate training. He was glad that the government recognized that different students learned at differing rates and that, accordingly, the curriculum should also vary in time.

Concurrent with the writing of his proposal, Dr. Faustus began to consider the new three-year curriculum. Realizing that he needed faculty support, Dr. Faustus convened the Curriculum Committee and charged them with the responsibility of reviewing and revising the curriculum. The Committee, knowing little of Dr. Faustus's plans, met and discussed the same, perennial issues: clinicians indicated that basic sciences were taking too much of the students' valuable time, while the basic scientists indicated that more time was needed if the quality of the learning experience were considered as a criterion.

After six months of intensive meetings, the Curriculum Committee presented its final report to the Dean. Eager to hear the proposed changes, Dr. Faustus listened to the following key recommendations of the report, that is, the ones that were essential to the revised curriculum:

1. Free time should be changed from Friday afternoons to Wednesday afternoons.

2. Electives should be offered Friday mornings instead of Wednesday afternoons.

Presented with these earth-shattering innovations, Dr. Faustus worried silently about the already submitted grant application and its effect on Needum Sam. Unfortunately, he could think of no alternative to the government funded grant.

Word slowly began to leak out that Faustus was planning a major curriculum revision at the University. After several months of gossip, the following questions were heard among the faculty: "How could the same teaching and research schedules be maintained? You know, the one in which unscheduled time was placed in the summer quarter." A variation of this question was, "How could the administration even consider all-year teaching schedules?". The ultimate question that was inevitably asked of Faustus was, "Aren't you concerned about the quality of the medical education?". Dr. Omnipotent, Chairman of the Department of Medicine, was outraged about the whole idea of a three-year curriculum. He was often heard saying, "Students, like good wine, must age. The three-year program would be a disaster if it were adopted."

In August of 1971, much to Dr. Faustus' chagrin and the faculty's delight, Needum Sam University was notified that its proposal for an accelerated curriculum had not been funded. The faculty settled down and had only one minor problem left to consider. That was the problem of trying to teach a freshman c lass that had been increased in size by forty per cent.

In August of 1972, the Dean, via his Washington contact, was notified that the key words for the 1972 fiscal year grant

application were "mandatory three-year curriculum" and "increased enrollment."

In earnest now, Faustus set to work and wrote another grant proposal. Concurrently, he again convened his Curriculum Committee and charged them with the responsibility of defining the goals of the undergraduate education and the objectives of each course. These definitions would be necessary if Needam Sam were to convert to a mandatory three-year curriculum.

Whenever a recalcitrant faculty member, such as Dr. Omnipotent, began to question the need for curriculum revision, he was quickly and thoroughly informed about the need for more physicians and increased utilization of facilities. When Dr. Omnipotent commented that after the initial class graduated, there would still be only one graduation per year, which could not increase greatly the number of physicians, Dr. Faustus would counter with the concept that since each practitioner could expect one additional year of clinical practice, the number of physicians indirectly would be increased.

The Curriculum Committee still expressed grave doubts about the advisability of a three-year curriculum. Faustus, in turn, tried to convince them that the three-year curriculum would increase the utilization of the facilities -- a point very important to Mr. Tombslash, the President's financial advisor. This, however, did not satisfy the faculty who remembered the comments that Faustus had made the previous year in reference to a three-year curriculum with a four year option. They persisted in asking

questions such as: "Whatever happened to the belief in individualized learning rates?" and "Where is the University's concern about their projected teaching and research schedules?"

After many heated discussions with the Curriculum Committee, Faustus was able to get its support for a three-year curriculum. It wasn't so much that the Committee educationally approved of the program. Rather, it was that they believed that the money Needum Sam would receive from the grant would be essential for the support of the new faculty that was hired to teach to the increased number of students.

In mid-1972, Needum Sam was notified that its three-year grant application for FY 1972-1975 had been approved. With less than one year of start-up time, the Curriculum Committee went to work to develop a new three-year curriculum. Basic Sciences agreed to drop the required 600 hour course on the gyrations of the hemoglobin molecule, while the Department of Medicine agreed that students did not have to complete 4,000 hours of basic sciences before they would be permitted to place a stethoscope in their ears. It indeed was an atmosphere of detente!

But rumblings began to be heard. Dr. Huck Finn looked at the new schedule and realized that it would be 18 months before he would be able to take that summer raft trip. Dr. Omnipotent did not really feel that it was possible to teach any clinical sciences before the basic sciences were completed. But, as he told anyone who would listen, he would be magnanimous and let the disaster awaiting the first three-year class speak for itself. The four-year freshman class looked at the schedule for the three-year curriculum and figured out that there would be at least 30 students making rounds in each of their ten-bed

wards. These students became slightly upset. They did not want to graduate with any outsiders, especially with those who had usurped their classes and patients.

Faustus rose to the occasion. He met with any group that had questions about the program. As a result, his day began at 5 am and ended at 9 pm. He constantly prodded his challengers for viable alternatives which could provide a balanced budget. When none were forthcoming, all accepted the inevitability of a three-year program.

In July 1973, the first students who had enrolled in the three-year curriculum began their studies at Needum Sam. The faculty, however, began to have more doubts about the program. They were aware that Tombslash had advised the President not to release the funds appropriated by Congress. Some faculty asked about the usefulness of a program designed to bring money into a financially needy institution with an overworked staff, if in reality that program additionally increased the workload of the staff without providing additional funding. Other, more optimistic faculty were not concerned about the financial aspects of the program. Instead, they were thoroughly excited about the new curriculum and its concomitant teaching innovations.

By late 1973, President Veritas still had not released money for funding the grants. In addition, recent statements issued by Deadwoods indicated that additional physicians were not needed. "It is a distribution problem, and not a numbers problem", he was quoted as saying.

In partial response to these developments, faculty and students became confused and a little despondent about the advisability of the

three-year curriculum. Questions raised by the faculty included, "Why am I teaching 18 months straight?", or "How can the freshman class master their undergraduate training in three years?. Four-year students inquired as to why they were required to share classroom clinical facilities with students in the three-year program. They also confronted Faustus with the question of informed consent; i.e., why weren't they informed at the time of their acceptance that the school would be converting to a three-year curriculum and that they would be required to share the facilities with a three-year class? Needless to say, Faustus' replies did not satisfy either the faculty or the students.

By 1974, the situation was becoming worse and the faculty were becoming more cynical. An increasing number stated that the three-year curriculum student was clinically incompetent when compared to the four-year curriculum student. Although no test could demonstrate this difference, the faculty were thoroughly assured of the accuracy of their observations. Money for the program still was not forthcoming and the faculty were called upon to spend additional time in tutorials and assisting the slower learner. More and more, they inquired about the quality of the learning experience at Needum Sam.

Students assigned to clinical rotations played poker while they waited for patients. They complained that the school had sold them out.

Taking classes and clinic with a doubled enrollment was not their concept of a medical education.

By late 1974, Dr. Faustus was becoming worried because of the lack of financial assistance. Since the students were already

paying $6,000 per year in tuition, he could not raise tuition further. His contact in Washington had advised him that the key words for the next year would be "Interdisciplinary Training". Needing money for the school, Faustus began to write a new grant proposal. As word of the new proposal spread, it was met with minimal faculty enthusiasm. As far as the faculty were concerned, the three-year program had brought increased work-loads, over-crowded conditions, and no benefits to them. "So why", they argued, "should any new grant be different?".

Talk against the three-year curriculum began to mount. It was argued that the curriculum had increased faculty workload, decreased patient-student exposure, and brought little benefits to the school. With these points in mind, Dr. Faustus began to consider reverting to a four-year program. "But what a headache that would be", he thought. "It not only would necessitate the third major curriculum change in three years, but also would result in decreasing cash-flow at Needum Sam". Dr. Faustus began to write his interdisciplinary grant proposal at a faster rate.

Then, he heard that the Government was planning to discontinue capitation awards and, instead, was contemplating having the students pay the actual costs of their education. Faustus tried to anticipate the effect that this would have on the educational programs at Needum Sam. The more he thought, the more he became confused. "Would this greatly facilitate the educational process by enabling programs to be tested for long periods of time? Or would this type of funding make it more difficult to impliment

an educationally innovative program?", he wondered. As we leave Needum Sam University, we can see a group of faculty and students meeting with Dean Faustus while all are pulling out their hair. We can barely hear the words they're shouting: "...tutorials..., back-to-back teaching...,not enough patients..., too many students..., too many doctors..., not enough doctors...,poorly distributed doctors..., another curriculum revision?..., educational objectives?..., When do I teach my class, anyway?..., time for research..., quality of education..., interdisciplinary programs?...

Perhaps I have seemed to digress from the topic of the evaluation of a three-year curriculum. This was not my intent. Instead, I wished to raise the issue of how we, as medical education specialists, can incorporate the above set of "hypothetical" events into a study which will more accurately reflect the impact that the three-year curriculum has had on students, faculty, and administrators. I also wished to stimulate thought regarding the effects that a major program can have upon an institution when that program is developed by sources external to the institution. And finally, I wished to provoke discussion regarding whether it is possible to anticipate major changes in the directions of health-sciences education and, if so, whether the success of the new programs is, in any way, correlated to the ability of the institution to foresee and prepare for that change.