FACULTY PERCEPTIONS OF INSTITUTIONAL NEEDS AND GOALS IN AN OSTEOPATHIC MEDICAL EDUCATION PROGRAM

DISSERTATION

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By

Linda Stoll Fazio, M.S.

Denton, Texas

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The purpose of this study was to determine and compare faculty perceptions of areas of concern that have been identified by osteopathic medical education administrators as having a relationship to institutional needs and goal setting. Specifically, a Delphi research technique was used to examine faculty perceptions of osteopathic perspective in relation to (a) the philosophical and functional orientation of the curriculum; (b) actual design, structure, and implementation of the curriculum; (c) location and design of the physical facilities and the campus environment; (d) faculty issues of tenure, promotion, salary, and merit; (e) teaching, and the evaluation of teaching; (f) student characteristics and admissions policies; and (g) administrative structure and communication networks.

The population of this study is restricted to the full-time faculty of the New Jersey School of Osteopathic Medicine who were employed between May and October of 1983. Demographic variables include faculty rank, tenure status,

academic or professional degree, and department affiliation. The three rounds of the Delphi procedure produced faculty consensus on the majority of institutional variable items. In addition, the study identified similarities and differences in faculty perception of the institutional variable categories identified in Round I of the Delphi. These categories are compared by the demographic variables.

A one-way analysis of variance, plus post-hoc comparisons using the Duncan's new multiple range test, identified significant differences and trends toward significance for the institutional variable categories of osteopathic perspective and identity; administration; teaching and evaluation; physical campus and curriculum; tenure, promotion, salary, and merit; and students and admissions. No significant differences were found for the institutional variable categories of future growth and missions and goals, and curriculum and laboratory space. Significant differences were found among the institutional categories by the demographic variables of tenure status, academic or professional degree, and department. No significant differences were found among the institutional categories for the demographic variable of faculty rank.

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CHAPTER I

INTRODUCTION

Almost all observers of American higher education agree that the time has arrived for higher education to take a close, careful, and critical look at itself. While it is true that there has always been the need for institutions to conduct ongoing programs of self-evaluation, the external pressures for evaluation and accountability are greater now than ever before.

According to Hartnett (11, p. 3), one of the most important reasons for self-scrutiny, especially in the public sector, is the increase in consolidated systems of higher education. During the past two decades many states began to realize that voluntary academic planning and coordinating efforts were not going to be sufficient. Several states either enacted legislation which created mandatory coordinating and planning agencies or strengthened the power of existing ones.

Many educational theorists have argued for some time that any evaluation of an institution's effectiveness must take into consideration the institution's goals. The problem is that too few institutions have seriously considered what

their goals are, and those that have often find that the various members of the college community disagree over what should be the purposes of the institution.

Further complications in goal setting are likely when colleges and universities are combined into networks of interdependent institutions. An inevitable conflict is produced between the competing interests of the total network and those of its component parts, which is a phenomenon educators describe as the tension between central authority and local campus autonomy (11, p. 31). The point is also made that all networks of institutions share a common set of statewide planning problems about which critical decisions need to be made; namely, these are the determination of statewide goals for higher education, the establishment of patterns of cooperation among institutions, the allocation of resources consistent with long-range plans, and the promotion of innovation and change throughout a system.

The primary factor in the development of organizational goals is planning. Since the concept of planning has been variously defined and used, it has no precise meaning although there are various definitions. Blair defines planning as simply "the rational determination of where you are, where you want to go, and how you are going to get there" (4, p. 17). Planning must include procedures for revision of the means and for reevaluating the ends as the program evolves over time.

It is thereby responsive rather than rigid and, as such, is much harder to formulate but more likely to be justifiable and feasible.

A successful planning process depends upon a clear sense of institutional identity. Of increasing importance are institutional purpose, or mission, and the perceived correlation between this mission and the operating goals of the institution.

Etzioni (9, p. 6) indicates that as an organization grows, many persons may influence its goals. It is necessary, he believes, to offer all individuals in the organization an opportunity to participate in goal setting so that they may have the opportunity to attain personal goals through the group goal of the organization. In his study of the educational change process, Cooper concludes that the "more widely the faculty can become involved, the more will they be committed to innovation and its success" (6, p. 80).

The self-study process is perhaps the most significant vehicle for institutional planning through faculty involvement. Although procedures vary, all are designed to help institutions reassess their objectives, measure success in attaining objectives, explore ways and means by which educational efficiency may be improved, and prepare for the ever-increasing demands by society.

Parekh (16, p.7) defines the components of an educational institutional's goal structure as (a) instruction, (b) research,

(c) public service, (d) academic support, (e) student support, and (f) institutional support. These components represent, then, the broad areas of the self-study process.

Educational goal setting and accompanying concerns are, of course, shared by those institutions engaged in the education of physicians. Medical education is subjected to extensive controls by both state and federal agencies. A 1976 Carnegie Report (5, p. 3) recommends that state and federal governments take decisive steps to control the development of new medical schools in the United States. Their report indicates that in the face of rapid increases in the supply of physicians graduating from existing schools, the present critical needs are to overcome uneven geographic distributions of health manpower and to increase the proportion of physicians who are engaged in primary care. Planning in existing schools, not the development of new ones, is the recommended priority. Later, in 1980, the Department of Health and Human Services (22, p. 2), the Congressional Office of Technology Assessment (21, p. 3), and the Graduate Medical Education National Advisory Commission (GMENAC) (10, p. 2) all published forecasts of an excess of physicians by the year 1990, but with a projected deficit in primary-care physicians.

The future of medicine and the resulting direction of medical education is of significant concern to the area of

osteopathic medicine. Osteopathic medicine as an entity has struggled through a painful evolution; it continues to struggle for an identity in an economic and social period when consolidation and strengthening of goals is critical to insuring professional survival. However, the historical and philosophical attachment to a health orientation and primary care, according to Jonas (12, p. 11), may offer options for the growth of osteopathic medicine that are not realized by those areas of medicine which emphasize a more traditional disease orientation and specialty medical care.

There are currently fourteen schools and colleges of osteopathic medicine in the United States as compared to 124 allopathic medical schools (3, p. 1). Future planning for the field of medical education, and specifically for osteopathic medical education, is neither an entertainment nor a luxury.

A thorough self-study will be necessary in order to formulate institutional goals that are appropriate to the future of medical practice in the United States. The participation of both clinical and basic science faculties in the planning process of medical education, and the use of their expertise in the recognition of their personal goal structure as it relates to the institution, is of vital importance.

Statement of the Problem

The problem with which this study is concerned is to assess faculty perceptions of issues and concerns related to needs and goals in an institution of osteopathic medical education.

Purpose of the Study

The purpose of this investigation is to determine and compare faculty perceptions of areas of concern that have been identified by osteopathic medical education administrators as having a relationship to institutional needs and goal setting. Specifically, a delphi research technique is used to examine (a) faculty perceptions of osteopathic perspective as it relates to the philosophical and functional orientation of the curriculum; (b) the actual design, structure, and implementation of the curriculum; (c) the location and design of the physical facilities and the campus environment; (d) faculty issues of tenure, promotion, salary, and merit; (e) teaching, and the evaluation of teaching; (f) student characteristics and admissions policies; and (g) administrative structure and communication networks.

Research Questions

The following specific questions have been formulated in order to accomplish the purposes of this study.

1. What are the major issues and concerns in regard to institutional needs and goals as perceived by osteopathic medical education administrators?

2. What are the faculty perceptions of issues and concerns related to needs and goals at one educational institution of osteopathic medicine?

3. What are the similarities and differences in faculty perceptions of issues and concerns related to institutional needs and goals as compared by the characteristics of (a) faculty rank, (b) tenure status, (c) academic or professional degree, and (d) institutional department of employment.

Limitations and Delimitations

The results of the study are subject to those limitations recognized in the necessary cooperation of voluntary respondents in a three-round question process as is represented in the delphi survey approach to research. The study is delimited to the New Jersey School of Osteopathic Medicine (NJSOM) and to the responses from full-time faculty who were employed at this institution during the established timeframe (May-October, 1983).

Basic Assumptions

It is assumed that the selection of the initial panel of experts, (presidents and deans from the schools and colleges of osteopathic medicine) as well as the general

and specific issues generated by them (with the further validation by the administrators and Self-Study Committee at NJSOM) are appropriate concerns for faculty response in the first round of the study.

It is further assumed that the verbal generation of these issues at the first meeting of the American Association of Colleges of Osteopathic Medicine in 1981 (1, p. 2) and the second meeting in 1982 (2, p. 2) constituted an appropriate format for Round 1 rather than the more customary short-form mailed questionnaire. The small number of osteopathic schools (fourteen) and their 100 per cent representation at these meetings provided information and consensus through program emphasis on the selection of topics for inclusion in the study. This information would have been difficult to obtain in the more conventional manner.

The administrators and Self-Study Committee of NJSOM provided a more exacting panel of experts for the final compilation of Round 1 items for responses by the full-time faculty. As is customary, individual faculty members were provided with the opportunity to make additions to the instrument for response by colleagues on all rounds of the study.

It is assumed that the selection of the particular research procedure is the most appropriate manner by which to solicit a broad anonymous response to selected issues

and to obtain consensus. Further, it is assumed that this is the most appropriate procedure to use for identification of present and future needs and to encourage unity and participation in future planning.

Definition of Terms

The following terms are utilized in the description of this study:

Administrators refer to institutional presidents and deans.

Medical education is defined as the program of professional study in medicine that follows the granting of a baccalaureate degree.

NJSOM is the acronym for the New Jersey School of Osteopathic Medicine and is used interchangeably to denote this school.

UMDNJ is the acronym for the University of Medicine and Dentistry of New Jersey, and is used interchangeably to denote this school.

NJMS is the acronym for the New Jersey Medical School, and is used interchangeably to denote this school,

RMS is the acronym for the Rutgers Medical School, and is used interchangeably to denote this school.

Osteopathy is, classically, "that school of medicine based on the theory that the body is a vital mechanical organism whose structural and functional integrity are coordinate.

Therapeutic procedure has chiefly been manipulative correction" (18, p. 24). A more contemporary definition might also include emphasis on primary care and a holistic health-oriented approach to medical treatment and illness.

Allopathy is a term "erroneously used for the regular practice of medicine" (18, p. A-39). However, it is in common use to distinguish between the practice of the M.D. (doctor of medicine) and D.O. (doctor of osteopathy); allopathic (or M.D.) medicine is generally more disease-oriented.

Description of the Delphi Research Method

This study was conducted by using a data collection technique called the Delphi method. The Delphi method is the name of a research technique that is designed "to elicit opinions with the goal of obtaining a group response from an initial panel of expert topic selection" (7, p. 2). Delphi replaces direct confrontation and debate with a carefully planned, orderly program of sequential individual interrogations, most often conducted by a conventional questionnnaire format. The series of questionnaires is interspersed with feedback derived from the responses. The technique emphasizes informed judgment. It attempts to improve the panel or committee approach by subjecting the views of individual experts to the criticism of fellow experts without face-to-face

confrontation, and by providing anonymity for the opinions and arguments that are advanced in defense of those opinions (7, p. 15).

Background and Significance of the Study

Goal is a central concept in the study of organizations. Goal attainment is an aspect of all systems which, in order to survive, must attain whatever goals they set for themselves. Etzioni (9, p. 6) defines an organizational goal as a "desired state of affairs which the organization attempts to realize" (9, p. 6), but this formulation immediately raises the question of who decides which one is the desired state of affairs. Theoretically, there could be as many desired states as there are persons in an organization. It is necessary for the organization, the educational institution, to encourage all individuals who are connected with the institution to participate in goal setting so that they may attain their personal goals through the group goal. Although an organizational goal is not necessarily the same thing as a personal goal (nor a goal that a particular person desires for an organization), the nature of organizational goals is evident to some extent in the assertions of its members about their perceptions of the organization's goals (9, p. 6).

Keeton (13, p. 1) reports that planning has long been regarded in American education as a responsibility of institutional management. Prior to 1970, he states, planning

in colleges and universities was generally characterized as informed, and it was primarily concerned with expected growth.

In the 1980s educational institutions entered a dynamic era wherein they encountered fluctuating environmental conditions and yearly changes. The difficulties attendant to managing continuing change have generated a new interest in formal planning procedures and processes.

Keeton (13, p. 10) asserts that faculty, administrators, statewide coordinators, legislators, and governors share responsibility for planning in higher education. Each group has a unique perspective, type of expertise, and particular contribution to make toward statewide planning.

One of the most significant changes in higher education planning, according to Pfnister (17, p. 111), is the great growth of faculty power coupled with rapid faculty professionalism. This is, of course, particularly true in the medical school environment where professional expertise is the basis for instruction. Keeton (13, p. 17) identifies the college or university faculty as the teachers, the researchers, and the specialists who provide the various forms of service required by the institution. Even though there is considerable mobility, this faculty represents the "largest element of continuity and experience with the tasks and problems of the campus" (13, p. 18).

The medical school environment presents an even more complicated issue in that faculties are composed of two groups of somewhat autonomous professionals--the clinicians and the basic science researchers. Research is limited that addresses the cooperative institutional functioning of these two groups.

Palola (14, p. 598, 15, p. 7) states that faculty tend to view planning as an administrative task and are generally more preoccupied with faculty-administration and faculty conflicts, and with concerns that are related to their own disciplines. However, this information is not specific to medical school faculties.

The New Jersey School of Osteopathic Medicine (where this study was conducted) is a part of the larger University of Medicine and Dentistry of New Jersey (UMDNJ). UMDNJ, the state-wide health sciences university for the State of New Jersey, operates three medical schools. This system is an excellent example of a state-wide planning network in higher education.

Osteopathic medical education is subject to many of the same dilemmas evidenced in other medical schools in New Jersey and elsewhere. Issues shared by all institutions of medical education are maintaining the quality of instruction, assuring the existence of a strong curriculum, and encouraging quality in faculty and student performance.

Osteopathic medical education is complicated somewhat further by internal conflicts over the nature and function of their professional theories of practice and the resulting curricular integration. The representation of osteopathic principles and philosophy as a viable contribution to both medicine and the public is perhaps less of an immediate concern to osteopathic educators than is the need to resolve internal confusion and conflict over these same principles and their relationships to the curriculum. Students realize this conflict very early in their academic careers when they are faced with the so-called differential approaches to learning between basic science and clinical education (19, p. 3). Very often these two facets are separated or split philosophically so that the basic science portion of the curriculum precedes the clinical education phase (20, p. 9). At NJSOM this split is geographical as well as philosophical where separate campuses exist for the two phases of the curriculum. Dressel (8, p. 2) comments on the difficulties of maintaining consistency in original rational and the tendency toward fragmentation within and between program segments in osteopathic medical education even under the most desirable conditions.

This study will be significant in that it will (a) contribute to the body of research needed on the topic of faculty involvement in higher education planning and goal

setting, (b) provide information on the concerns of a single institution functioning within a state-wide educational network, (c) provide information on the nature of the concerns of medical school faculty as they relate to planning and institutional goal setting. This study will also determine whether or not differences exist between categories of a medical school faculty regarding their expressed concerns about planning and institutional goal setting.

Organization of the Study

Chapter II includes a review of the literature that pertains to (a) planning in institutions of higher education, (b) planning in medical education, (c) osteopathic medicine and osteopathic medical education, (d) the Delphi technique as a research tool, and (e) the Delphi technique in educational research. The third chapter contains descriptions of the population, the methods used in collecting and analyzing the data, and the instrument utilized in obtaining the data. Chapter IV presents the data analyses and findings from the research. The fifth chapter contains a summary of the investigation and its findings, conclusions drawn from the data findings, and recommendations for further research. Also included are relevant appendices, statistical tables, illustrations, and a bibliography.

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CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

This chapter will discuss two aspects that are related to this study. The first section discusses the concepts of medical education as they are related to institutional purpose and goals. The second section presents a discussion of the Delphi research technique that includes its history and relevant applications.

The Purpose and Goals of Medical Education

A clear sense of institutional identity is necessary in order for there to be a successful planning process. Increasingly important are the role of the faculty in the establishment of institutional goals and the perceived correlation between purpose (or mission) and the operating goals of the institution. Further, the unique characteristics of medical education and medical educators, and the characteristic of professional autonomy in particular, create an even greater need for planning in institutions of medical education . Niblett indicates that with society in such rapid movement, it is improbable that universities of any kind will themselves remain unchanged; he asks "to what extent

will they change by their own will or be changed by force of circumstance?" (53, p. 3). Niblett's question is one that must be addressed by all institutions of higher education.

According to Fincher, "the statement of mission for an institution or organization is a statement of its enduring purpose or aspiration. As such, it describes only the most general focus or direction" (19, p. 11). Romney goes beyond mission to define goals for an institution as "representing circumstances sought in pursuit of its mission" (58, p. 19).

The idea of educational futurism is a relatively new area of specialization and, to date, no one can claim any great degree of expertise. It does appear to provide an area of high promise and potential significance for education as well as other disciplines. Hack (25, p. 128) indicates that new knowledge in education must be developed through the use of new and improved techniques of research and planning; the future always has been and probably always will be the universal frontier. Hack believes that futurism provides the means for probing that frontier in terms of preparation for what lies ahead and determination of the shape of things to come. Futurism in fact may be the practical foundation for insuring the future health and perhaps even existence of certain institutions.

Consistent and guided planning can be described as the functional base of futurism in education. Hack (25, p. 127)

points out that organizational theorists almost universally agree that planning is a key element in the decision-making process; there are, however, wide differences in opinion concerning the meaning and implications of the term planning. As Howsam notes in his discussion of institutional planning, "there is much 'semantic looseness' among educators where planning and change is concerned" (31, p. 72). According to McManis and Harvey (51), the problem is not necessarily the absence of plans or competent planners, but rather the absence of a comprehensive planning process that integrates academic, physical, and financial planning. More specifically, what is lacking is a "planning process that assesses the needs of the community of which the institution is a part and the constituents it seeks to serve" (51, p. 6). The needs of the patient community, the potential student population, and society are of particular importance to institutions of medical education. McManis and Harvey go on to list other components of the planning process to include "routine examination of the institutions missions in light of established needs and either reaffirm the existing mission or modify it; and involvement of the persons responsible for the implementation of the plan in its development" (51, p. 7).

Miller refers to planning as "the cooperative conceptualization of the mission" (48, p. 2). Essentially, he

says, the first steps involve the assessment of given constraints, the analysis of information and trends, and the review of community expectations and student needs. Once this has been accomplished, goals and objectives can be formulated, priorities established, resources secured, and a problem-solving mechanism installed that provides a sequential step-by-step plan of action to achieve the goals. The process, then, involves determining educational-organizational needs, reducing these more comprehensive needs into goal statements, establishing performance objectives, and the further quantification of process through administrative process profiles, functional analyses, situational analyses, and resource analyses.

Planning, therefore, is intelligent preparation for action. According to Blair, "it involves the beginning determination of the new and an assessment of the old policies and programs" (5, p. 13). Furthermore, it involves the integration of many diverse perceptual viewpoints as to what should be done when, why, where, and how. An attempt should be made to control the future in the direction of desired goals through decisions based on careful estimates of the probable consequences of possible courses of action. Strategic planning is useful when major targets, objectives, and priorities are established, and when guidelines are developed that enable institutions and organizations to respond, as well as direct, change.

In his discussion of planning, Blair lists the following elements as significant components of the process:

1. Determination of constraints (federal and state statutes, accrediting agencies, local regents, etc.);
2. Analysis of the contextual setting (needs assessment, current trend predictions, competitive advantages, etc.);
3. Establishment of broad goals, objectives, and programs;
4. Estimation and validation of resources (money, manpower, material, etc.);
5. Building of an administrative problem-solving mechanism (5, p. 22).

The process of goal setting might first be described as goal sifting by those directly involved at all levels of the institution. The initial stages of planning must include wide participation by those involved.

Cherin and Armijo refer to planning as a "cyclical and continuous process which calls for every organizational unit in an educational institution to systematically consider setting goals and objectives" (12, p. 347). They believe that the perceptions of administrators and faculty must be assessed concerning (a) where the institution has been, (b) where it is presently, and (c) where it is likely to be at some future date if it continues along the trend line it has set. In independent studies, Fuller (22), Hengstler (29), Krentz (40), and Welch (66) examined the

perceptions of administrators, governing boards, and faculties concerning existing institutional goals and future goals. Khalaf (38) examined faculty perceptions of governance in higher education, including the performance of governing boards. Harris (26), in his study of M.D. and Ph.D. faculty at the University of Alabama, focused on perceptions of tenure in a medical school. It appears that the process of goal setting may be further enhanced by present and past self-study processes, and the perceptions of accreditation teams that visit the institution.

Miller (48, p. ii) states that in recent times planning systems have begun to move toward more systematic procedures because the accountability "syndrome" has pushed into the area of formal management, programming, and professional activities planning. Occasionally, industrial or business management systems are superimposed onto the collegium. Success is not often guaranteed, however, without consideration of the idiosyncrasies of the collegial atmosphere. Gambino (23, p. 1), in his discussion of planning and control in higher education, indicates that the environment and management problems of colleges and universities differ substantially from those of industrial firms. Higher education, according to Gambino, is "labor intensive," its labor force is highly trained, and skills are not readily transferable (23, p. 75).

Any planning system in higher education, Miller (48) says, should insure flexibility, individual initiative, self-initiative, self-regulation, and creativity.

According to Morphet (49, p. 157), the heart of any problem-solving approach is the needs assessment. To commit resources to a plan without objectively determining definable goals is to leave success to chance. Therefore, a needs assessment (or discrepancy analysis) must be undertaken or have been accomplished. The process and objectives for such a needs assessment might include the following:

1. To identify and validate institutional goals, i.e., learner-instructional, inquiry, service, and support goals;
2. To develop appropriate goal indicators;
3. Institutional goals should be the product of extensive effort, involvement, and commitment from all levels of the constituency of the institution;
4. Institutional goals (and indicators) should be broadly understood and accepted by those affected;
5. Institutional goals should serve as the foundation for all unit planning and management functions;
6. Institutional goals should serve as a frame of reference to determine needs and priorities as a basis for improvement (49, p. 162).

Osteopathic Medicine and Medical Education

In the history of the philosophy of medicine, two schools of thought have been in contention since the time of the Greeks if not before. The school of the Greek god

Hygeia is based on concepts of human health and function from which osteopathic medicine draws its major principles (15, p. 29; 16, p. 37; 33, p. 7).

The dominant school of thought in Western medicine, however, derives from the followers of the Greek god of cures, Aesculapius. This Greek cult concentrated its attention on disease and miracle cures; if one can find the cause of each and every disease, so this manner of thinking goes, one can find the requisite cures. The single cause-single cure theory of disease and health was solidly ensconced in Western medical thinking by the Roman physician Galen (33, p. 7).

This theory received a strong boost from the mind-body separation theory of Rene Descartes. Descartes' theory was a liberating force for the development of biological science (15, p. 31; 33, p. 9). It allowed scientists to get out from under the inhibiting influence of the Roman Catholic Church, which had claimed the whole body as the repository of the soul and therefore off-limits to any "prodding" (15).

The "there's something wrong, fix it" theory continues in contemporary medical thought, and according to the Dean of the Yale School of Medicine,

> The appropriate principal role for the physician is, in my opinion, the traditional one: namely, to try to effect the restoration to health of the individual patient. And the appropriate role of medical education is, accordingly, to provide the

> physician with the background that will maximize his effectiveness in this role (4, p. 41).

By the 1930s, medicine was firmly in the hands of an organized profession that controlled entry into the field through licensure and accreditation of medical schools and teaching hospitals (15, p. 62; 16, p. 188). According to Brown,

> medicine had come to mean the field of clinical practice by graduates of schools that followed the scientific, clinical, and research orientations laid down by the American Medical Association (AMA); all other healers were being excluded (8, p. 146).

So where does osteopathic philosophy and education fit into this concept of medical practice? Osteopathy originated in the United States in 1874, and for most of the twentieth century it has been engaged in a struggle to establish and secure its place as an independent, fully licensed medical profession (16, p. 176, 39, p. 9). This struggle has been won in many respects. In the past decade, with the establishment of a number of new osteopathic medical schools (several of which are state supported), the profession has embarked on what could be a new era of expansion, of numbers, of importance, and of influence in medicine (3, p. 25).

It might be illuminating, as background for this study, to examine some of the differences that are associated with osteopathic medicine. According to Korr (39, p. 8) and Northup (54, p. 18), the following basic principles of osteopathy seem evident:

1. Osteopathic medicine contends that there is more to health than the specific treatment of disease. "It is upon this foundation that osteopathic medicine stands and makes its contribution as a reform movement" (39, p. 8).

2. Health is a positive state, not merely the absence of disease (39, 54).

3. Osteopathic medicine views the body as a whole unit (39, 54).

4. The body demonstrates a natural tendency toward health. "Basically, all treatment should be designed to support, stimulate, and in some instances initiate the body's trend toward health" (54, p. 18).

5. There is a close interrelationship between the structure and function of the several parts of the body (39, 54).

6. According to Korr, "the musculo-skeletal system is not only the most massive and the most energy-consuming portion of the body, but it is the system, under the direction of the nervous system, with which we carry out human activity, act in and on our environments and on each other, act out our individualities, hopes, fears, beliefs, and our education. All else--the viscera, circulation, metabolism--is supportive" (39, p. 10).

At present, Jason (32) says, physicians control the bulk of the activity in what we call the health care delivery system. Physicians give the system its tone, ethics, directions, emphases, and priorities for programs and expenditures (3, p. 6, 8, p. 72, 32, p. 13). Allopathic physicians and many osteopathic ones as well, are by and large disease-oriented. This is shown by the pattern of their work, which in most specialties concentrates on acute care or the management of chronic disease after it has

become clinically well-manifested. Since physicians are so central to the operations of the health care delivery system, it should come as no surprise that it is in fact a disease-care delivery system, (32, p. 18).

The medical systems most obvious problems are the cost, inflation, and inaccessibility of medical care in the United States, according to Brown (8, p. 1). Brown and others make the point that contemporary medical care makes relatively little impact on the population's health status (3, 8, 16). Major philosophical, political, and economic changes will have to occur if the system is to become health-oriented. The stated principles of osteopathy seems to be in agreement with a health-oriented system. If these principles can be agreed upon and successfully integrated into an osteopathic curriculum, then a health-oriented system of health care delivery may be possible for the Western world. Jonas supports a

> health-oriented physician education in which the medical school itself would become a primary focus of healthy living. Curricular revision and changes in teaching approaches would need progressive revision and monitoring in order to increase the probability that graduating physicians would transfer the emphasis of their clinical efforts from therapy to prevention, from late-stage disease to early departure from health, from pathologic medicine to physiologic medicine, and most importantly from an emphasis on depersonalized technology to a heightened awareness of human values and individual uniqueness (33, p. 6).

Obviously, in the face of existing and accumulating disease and disablement, it will continue to be necessary to prepare students adequately for "acute, crisis and episodic" care as well as for prevention (39, p. 11).

According to Jonas (34, p. 11), the early struggle for survival of the osteopathic profession focussed on showing that it was "as good as" allopathic medicine; the struggle, today, focuses on being different--not only by invoking a health orientation but by the encouragement of primary care and rural medicine as well. Brown indicates that "primary care physicians, general practitioners, pediatricians, internists, and gynecologists are scarce" (8, p. 2). Doctors and hospitals are clustered in cities, and largely absent from the poorer sections and rural areas of the country (3, p. 29, 8, p. 2). Osteopathic medicine could both insure its survival and perhaps leap into leadership of all medicine by sharply differentiating its product from that of allopathic medicine (8).

The physician is, of course, the medical school product, and the student is shaped by the curriculum. Dressel (18, p. 4), in his discussion of curriculum analysis for colleges of osteopathic medicine, lists the following necessary steps for logical curriculum development:

> (1) definition of the purposes of a college of osteopathic medicine and of any unique purposes of a particular college, (2) a statement of educational

> objectives, such that their attainment at or above a specified level indicates attainments deserving recognition by conferring the D.O. degree, (3) development of a continuous sequential, integrative, and individually adaptable set of experiences including: (a) formal courses in basic and clinical sciences, (b) clinical experiences, (c) discussions of professional, ethical, social, and philosophical problems, issues and obligations, and (d) continuing, constructive, and developmental individual evaluation; (4) continuing or recurrent evaluation of individual faculty members to ascertain the extent of understanding of, commitment to, and performance in particular phases of the program in appropriate relation to the desired composite student experience; (5) continuing or recurrent evaluation of the program in reference to changing and accumulating knowledge about health and maintenance (18, p. 4, 5).

Integration of the medical curriculum is recognized as an important issue; according to Jason, "it is not surprising that traditional pre-clinical medical education has met with only meager success in generating student interest in and facility with the scientific basis of clinical practice" (32, p. 3). Educational theorists, among whom is Pfeiffer (56, p. 152), remind us that learning information out of context is tedious and retention is poor. Questions concerning the integration of basic science and clinical components of medical education are central to the planning process.

The Delphi Technique as a Research Tool and its Use in Educational Research

In an age of participation, groups are being called upon to plan, develop, and implement programs. This has provoked an increased need for skills and new techniques

that can be used to increase rationality, creativity, and participation in the group process. While the group process has not been shown to be the most efficient method of arriving at decisions, it has been shown to greatly increase possibilities for implementation and success. When people feel a part of a process, they are more willing to work toward a goal.

The Delphi survey technique was developed by Dalkey and Helmer, a physicist and a futurist, respectively (14, p. 1). According to Dalkey (14), Delphi was the site of the oracle of Apollo in ancient Greece. People came to the temple where priests divined from the entrails of animals what was to come. Centuries later, the future remains a mystery and foretelling events continues to be fraught with difficulties. Although the Delphi survey method of futures forecasting is still less than precise, it is believed to be removed somewhat from its primitive beginnings.

The Delphi technique was originated by the RAND corporation as a means for obtaining greater consensus among experts about urgent defense problems without face-to-face discussion (27, pp. 9-11; 28, p. 22). A number of studies that employ the Delphi technique have been performed by the RAND corporation. It has been used to conduct extensive

surveys in forecasting long-range developments, some as far as fifty years into the future, in such areas as scientific breakthroughs, population growth, automation, space progress, probability, prevention of war, and future weapons systems (27, pp. 17-31). The Delphi has been used in other divergent applications such as the prediction of land-use policies based on population growth and agriculture (37, pp. 1-9) and as the vehicle for establishing goals and priorities for state and regional health systems (67, pp. 2-6). In independent studies, Flickinger, Frederick, and Lindeman used the Delphi research technique to examine emergency medical services (20), community clinics (21), priorities within the health care system (42), and nursing research (43).

The Delphi process focuses on collating the aggregate judgments of a number of individuals who speculate on the present and the future and who have either similar or diverse backgrounds (44, p. 17; 65, p. 26). It has become not only a technical forecasting tool but also a procedure through which to assemble current thought and practice in defined areas (30, p. 447). The Delphi which has been used in many different settings and in many different ways, is an appropriate research tool wherever anonymous individual opinion is desired in an effort to reach agreement for future planning (55, p. 77). The subject pool need not be large; Pfeiffer (56, pp. 152-157) conducted an effective

study of short-term predictions with only twenty graduate business students at the University of California, Los Angeles. When their predictions were later checked against the actual happenings, although the consensus varied greatly from what actually occurred in certain indexes, the predictions achieved an accuracy of 90 per cent or better in most cases.

One of the earliest uses of the Delphi technique in an educational area was Helmer's (27) study which was incorporated as part of the 1965 Kettering project to elicit preference judgments from a panel of educational experts and experts in various education-related fields. Although the purpose of this study was to compile a list of preferred goals for possible federal funding, the value of this study was left in doubt by the experimenters. Helmer concludes, "although we believe that the compilation of a large number of ideas for possible educational innovations has served a useful purpose, not too much weight should be given to substantive findings resulting from these pilot studies" (27, p. 22).

Other studies have used the Delphi technique to make forecasts about education-related futures. Burke (9), Carver (11), Griffith (24), Nardoni (52), and Reilly (57) have studied various aspects of educational policy planning and goal development. Krueger (41) used the Delphi to make

future predictions of key educational issues, and McLeod (50) investigated the goals of a voluntary higher education consortium. Beacham's (2) study investigated changes in postsecondary education, and Taylor (62) examined alternatives for the financing of higher education. Brooks (7) used the Delphi to look at decision-making issues in continuing education in two- and four-year colleges.

As a pilot experiment at the San Diego meeting of the National Conference of Professors of Educational Administration, Judd (36) reports that a Delphi was conducted by staff from the Institute for the Future and the Educational Policy Research Center at Syracuse, New York. The major purpose was to collect conjectures about prospective developments which might impact on educational administration, probable dates of occurence, desirability should the developments occur, and potential interventions.

The Delphi has been used on university campuses in a number of ways, often as a means of involving faculty in the planning and decision-making processes for the future of the institution according to Judd (35, p. 173). Dowell (17), Wood and Davis (68), and others (13, 45, 46) report that the Delphi technique lends itself well to use by faculty members in establishing the goals and objectives of a new or revised curriculum. The particular advantages of the Delphi technique are that it minimizes the biasing effects

of dominant individuals and the amount of irrelevant communication. While each faculty member contributes freely and independently to the original statement of goals, at a later stage, the faculty member is able to benefit from the contribution of his or her colleagues in setting priorities among the objectives expressed by the entire group. It has been found that regardless of how divergent the original positions, opinions tend to converge and synthesize when the Delphi technique is used.

Delphi has been modified and linked with other tools, not necessarily for the purpose of forecasting but to modify the awareness, assumptions, and skill of the participants. For example, two simulation exercises at the Syracuse Educational Policy Research Center were constructed that linked the basic principles of Delphi, Cross-Impact Matrix, Scenario, and Analysis of Future Histories (1).

The nature of the Delphi technique, as described by Dalkey (14) and his associates, has a number of objectives. Among these are

(a) to determine and develop a range of possible program alternatives,

(b) to explore or expose underlying assumptions or information leading to different judgments,

(c) to seek out information which may generate a consensus on the part of the respondent group,

(d) to correlate informed judgments on a topic spanning a wide range of disciplines, and

(e) to educate the respondent group as to the diverse and interrelated aspects of the topic (14, p. 9).

In practice, the Delphi technique takes on diverse formats in different institutions and settings for different objectives and goals. The exact form of the Delphi is usually governed by the nature of the problem, resources, and the people implementing the program. The three critical conditions which are necessary for a successful Delphi are (a) sufficient time, (b) skills in written communication, and (c) motivation among the respondents (14, p. 2).

There are, of course, criticisms of the Delphi research technique that focus on several areas of its technical construction and overall philosophical design. One of the main areas of critical comment is the use through the Delphi of expert opinion as a basis for forecasting. According to Linstone and Turoff, "experts and non-experts consistently give indistinguishable responses in forecasting or evaluating social phenomena impacting on common values and no respondent need feel accountable for an opinion in the delphi no-risk situation" (44, p. 30). They also believe that some respondents may allow their true opinions to be influenced by what they must assume is expert opinion reported through the rounds; a halo effect may therefore contaminate the results, inhibiting creativity and innovation. Other criticisms, including those of Malone (46)

and Brodzinski (6), center on the basic goal of forced consensus, the encouragement of conforming answers, weaknesses in questionnaire construction, the possibility of snap judgments and responses, and the lack of experimental support for the validity and reliability of the method.

In contrast, supporters of the Delphi method cite several important advantages of its use as a forecasting methodology. These include (1) the expressed opinions represent well-reasoned conclusions of intercommunicating experts; (2) by organizing and controlling the feedback to respondents, the procedure increases the accuracy of the forecasts; (3) Delphi is a well-defined procedure and produces quantifiable results; (4) individual ratings of self-confidence on each item can be converted to an estimate of the accuracy of the group response; and (5) the procedure avoids psychological factors of persuasion, overcomes reluctance to abandon publicly expressed opinions, and discourages the bandwagon effect (28, pp. 27-28; 35, p. 180, 44, pp. 51-52).

Generally, forecasting in higher education is fairly common (30, p. 447). However, published evidence of systematic futures planning, particularly with the use of the Delphi technique, is minimal in medical education. A direct application to osteopathic medical education is virtually nonexistent. Although not specifically dealing

with future planning, and not a Delphi procedure, Sharma (59), in her study of osteopathic medical education program evaluation with Paul Dressel at the Michigan State University, notes the growth of osteopathic medical education in the last decade and the absence of osteopathic education related research. She says that her study is the first attempt by an educator outside the profession to study osteopathic medical education at a single college. Some efforts, however, have been made in the use of the Delphi in allied health areas of which nursing is one of the larger disciplines. Although Lindeman (42, 43) conducted two Delphi studies dealing with nursing, Stead (60, p. 6) comments in his nursing Delphi study on the paucity of futures research in this allied health area. Crowley (13) conducted a modified Delphi study of curriculum planning in medical technology, and Malone (46), made a similar study of curricular revision in dental education. Mansfield and Seaton (47, p. 175) examined interdisciplinary continuing education activities in health science and note the lack of a mechanism for developing collaborative efforts between and among disciplines. The results of their Delphi study were used to develop a statewide interdisciplinary network for continuing education in the health professions.

Some work, however, has been done in medical futures planning for clinical needs. For instance, Flickinger (20)

examined the role of higher education in emergency medical services incorporating both practitioners and consumers. He concludes that planning for clinical needs certainly impacts on all aspects of medical education; knowing how many and what kinds of health practitioners will be needed affects every aspect of the educational institution.

Perhaps the best example of clinical planning comes from the Graduate Medical Education National Advisory Committee (GMENAC) (63). This committee was an advisory group to the Secretary of the U. S. Department of Health and Human Services; although its charter ended September 30, 1980, during its life it submitted 107 recommendations that are aimed at achieving a better balance by specialty and geography between future physician requirements and future physician supply (64). The Carnegie Council on Policy Studies in Higher Education states that "This information has had a great impact on medical education present and futures planning" (10, p. 6).

Summary

Chapter II reviews the relevant literature that is associated with planning in institutions of higher education and in medical education institutions specifically. The historical development of medical practice is included with particular emphasis on the development of osteopathic medical

thinking and practice. A description of osteopathic medical education is provided. The Delphi research technique is described along with its applications in educational research.

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CHAPTER III

PROCEDURES OF THE STUDY

Introduction

The perceptions of faculty with respect to issues and concerns related to institutional needs and goals in an osteopathic medical education program is the focus for data collection and analysis in this study. The investigation involves full-time faculty at the New Jersey School of Osteopathic Medicine.

Population for the Study

The University of Medicine and Dentistry of New Jersey (UMDNJ) is the state-wide health sciences university for the State of New Jersey. UMDNJ operates three medical schools. The UMDNJ-New Jersey Medical School (NJMS) and the UMDNJ-Rutgers Medical School (RMS) are allopathic schools, and the UMDNJ-New Jersey School of Osteopathic Medicine (NJSOM, established in 1976) is an osteopathic school.

UMDNJ-NJSOM operates in a split-campus mode whereby the first two years are offered in shared facilities at UMDNJ-RMS in northern New Jersey (Piscataway) through an affiliation agreement with Kennedy Memorial Hospital's University Medical Center (see Figure 1). The third and

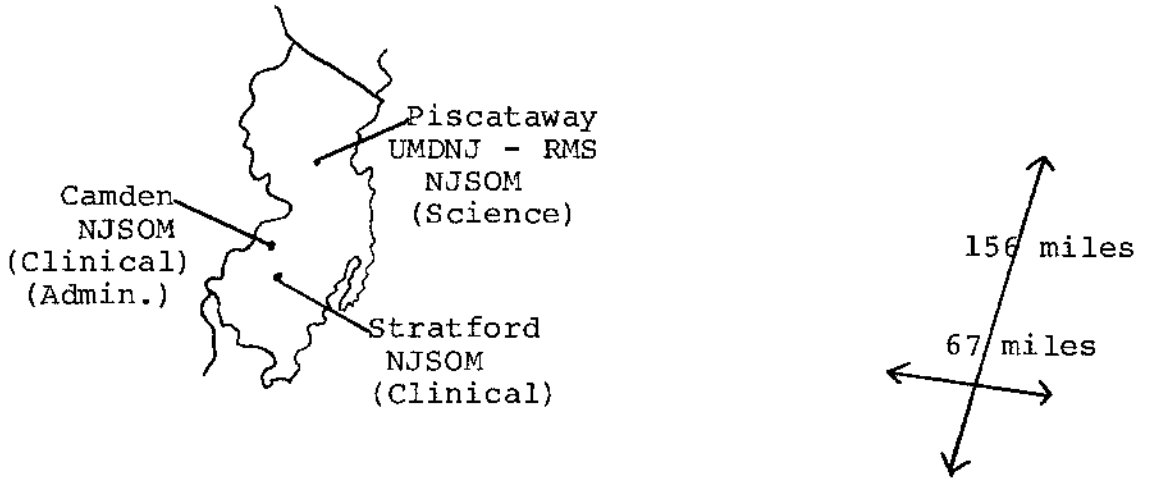

Fig. 1--Geographical locations of NJSOM campuses.

fourth years of study are conducted in clinical medicine in Camden and Stratford. Figure 2 depicts how the curriculum is divided among facilities.

Year 1	Year 2	Year 3	Year 4
BASIC SCIENCE		CLINICAL SCIENCE	
Medicine Surgery Family Practice Osteopathic Science	Psychiatry Hemotology Phys. Diagnosis		
PISCATAWAY		CAMDEN/STRATFORD	

Fig. 2--Plan of NJSOM curriculum.

The clinical faculty research and office building is located in Camden, adjacent to the Cooper Memorial Hospital. This facility is shared with UMDNJ, RMS, and the Cooper Medical Education Program. NJSOM's core teaching hospital,

the John F. Kennedy Memorial Hospital, is located in Stratford. Additional clinical facilities are located in Cherry Hill (Cherry Hill Medical Center) and Turnersville (Washington Memorial Hospital). All three hospitals are within an approximate ten-mile radius.

The office of student affairs has three office locations. The base office is in Piscataway, the admissions office is in Camden, and the third- and fourth-year student coordinator's office is in Stratford. The Registrar of the Rutgers Medical School at Piscataway retains all permanent student records.

The Rutgers University Library of Science and Medicine (Piscataway) serves the school's science departments, the College of Engineering, the College of Pharmacy, Rutgers Medical School, and the New Jersey School of Osteopathic Medicine. The Camden campus has a small medical library, as does the John F. Kennedy Hospital.

Faculty concerns, such as promotion and tenure decisions for all NJSOM faculty, are handled by the UMDNJ Board of Trustees upon recommendation from the Dean of NJSOM, but the process for basic science faculty is somewhat different. All recommendations for promotion and tenure of basic science faculty must pass through a parallel evaluation process involving the RMS faculty committees and Dean (2, p. 5). Although an unfavorable decision by the RMS committee can be appealed directly to the NJSOM Dean, or a NJSOM faculty

member can even nominate himself for promotion or tenure, these are unrealistic alternatives. Furthermore, the fact that clinical faculty promotions and tenure are determined only by the NJSOM process seemingly creates two classes of faculty.

In 1983-1984 a group of medical education experts appointed by the President of UMDNJ (2) will re-evaluate the entire medical education program in New Jersey. Therefore, it is critical that NJSOM reach a series of unified decisions within itself. Fragmentation of needs and goals on any level of policy making could disrupt the potential for and realization of the establishment of a strong, unified institution and further endanger the accomplishment of full accreditation by the American Osteopathic Association. The opportunity for substantial change may not present itself again.

It has been the assumption of the administrators at NJSOM that a common campus in which the didactic program in the first two years is more closely aligned to the clinical years of the curriculum is an agreed upon, positive choice for NJSOM. In their specification of priorities of the present self-study, the multiple campus is listed as a major concern (2, p. 2). The American Osteopathic Association has also expressed concern that NJSOM is not in full control of its program (3, p. 1).

The Delphi technique requires a panel of experts to generate concerns suitable for response. In accordance with the precepts of the Delphi, the initial panel for this study is comprised of experts in the field of osteopathic medical education; however, the present and future concerns of osteopathic medical education were generated via verbal agreement of administrators (presidents and deans) in the selection of topics for study and discussion at the first and second meetings of the American Association of Colleges of Osteopathic Medicine, rather than through the more customary mailed questionnaires. These presidents and academic deans represent all of the schools and colleges of osteopathic medicine in the United States (see Appendix A).

Topics for discussion and study at the first and second meetings of the American Association of Colleges of Osteopathic Medicine were (1) the establishment of institutional missions and goals, (2) the identification of osteopathic perspective and its' relationship to the curriculum, (3) the identification of administrative and faculty perception of issues with regard to (a) tenure, (b) promotion, (c) salary, (d) merit, (e) teaching, (f) evaluation of teaching, and (g) students. These general topics of concern were presented to the administrators and the Self-Study Committee at the New Jersey School of Osteopathic Medicine where they

were reviewed and refined to reflect the actual issues of specific importance to NJSOM; however, none of these more comprehensive areas of concern was deleted.

The NJSOM administration and Self-Study Committee lists the following areas of concern (2) as specific to their institution:

1. Problems associated with a multiple campus, and the need for a single unified campus adjacent to a teaching hospital.

2. Problems in the establishment of mission and goals with regard to the conflict between clinical specialty and subspecialty areas versus primary care curricular emphasis.

3. The need for additional faculty and programs of faculty development for the present faculty.

4. The need to strengthen osteopathic principles and techniques and to integrate these principles and techniques into the educational program.

5. The need for an organized program of faculty research, particularly into the areas of osteopathic principles and techniques.

6. The need to establish an ongoing program of curricular review and revision.

7. The need to resolve we and they attitudes and communication difficulties between administration and the clinical and basic science faculty (2).

Description of the Delphi Instrument

As was mentioned in the previous chapter, the Delphi technique is a method of soliciting and combining the opinions of a group of experts. The group members are called experts by reason of familiarity with and interest in exploration of a topic (1, p. 4).

The Delphi involves the use of a series of questionnaires that are designed to produce group consensus and eliminates face-to-face confrontation, as is often experienced on panels or committees. It also attempts, in a rapid and relatively efficient way, to combine the knowledge and abilities of a diverse group of experts in quantifying variables that are either intangible or vague.

Key characteristics of the Delphi approach are (a) anonymity of survey panel members, (b) anonymity of response, (c) multiple iterations, (d) statistical analysis of panel response, and (e) controlled feedback of responses to panel members. The Delphi technique prevents any one member of the panel from unduly influencing the responses of other panel members. Through the statistical summaries and minority reports, panel members communicate with each other but only in a limited, goal-centered manner. The systematic control provides an element of objectivity to the outcome, which further provides a share of responsibility that is reassuring and releases the participants from group inhibition.

Procedures for Data Collection

The researcher compiled the Round I instrument consisting of open-ended questions in keeping with the aforementioned areas of concern. This instrument was distributed to the NJSOM Self-Study Committee as a pilot project. The committee is composed of seven full-time faculty who represent both basic science and clinical components. Some minor revisions were made in the language of questions; however, no questions were deleted during the pilot process. The Self-Study Committee strongly recommended, however, that no identifying information be attached to the Round I questionnaire; this is, of course, keeping with standard Delphi procedure. It was agreed that identification could be solicited on the Round II instrument. Although this is not necessarily a part of the Delphi procedure, it was felt information of a comparative nature by departments, degree, rank, and tenure would be useful in this particular study, not only since faculty communication appears to be a problem at NJSOM but also because this issue bears implications for other medical education institutions.

The revised Round I instrument (Appendix C) was then distributed to all full-time faculty employed during the Spring-Summer-Fall of 1983. Seventy-two questionnaires were distributed. An accompanying cover letter from the chairman of the Self-Study Committee and the researcher

(Appendix B) was attached to all questionnaires. Full-time faculty were assumed to have more of an investment and commitment to the goals of the institution than would part-time or volunteer faculty.

Fifty-two Round I responses were returned indicating agreement to participate in the three rounds (approximately 72% of the full-time faculty). The results of Round I were used to develop the three-hundred forty-one item questionnaire used for Round II (Appendix D).

The Self-Study Committee chairman and the researcher categorized individual responses, tabulated the frequency of items, and grouped similar items. Efforts were made to reflect all Round I responses categorically in the Round II instrument. This process of response review is believed to have contributed to the internal validity of the Round II questionnaire.

The format of the Round II instrument was designed to elicit responses on a scale of from one-to-seven. The respondents were asked to indicate degrees of agreement (1) or disagreement (7) for each statement. Space was provided so that respondents could comment on each item or add items if they wished.

Fifty Round II questionnaires were returned (approximately 97% of the Round I respondents; and 69.4% of the total faculty). The median and interquartile range were computed

for each of the 341 items of Round II. The median and interquartile range were printed above each item for Round III (Appendix E).

Additional items for response were added to Round III from the Round II responses. Forty-seven additions were made.

Round III was returned to respondents with instructions to re-evaluate their responses in consideration of the group consensus. If the participants' Round III response remained outside the interquartile range of agreement, the participants were asked to provide an explanation (Appendix F). Respondents were also asked to respond to the additional items added to Round III (Appendix G). Forty-seven Round III questionnaires were returned to the researcher (approximately 90% of the Round I respondents; and 65% of the total faculty).

Procedures for Analyses of Data

As was mentioned previously, the median and interquartile range were computed for each item from Round II. A final analysis was made of the Round II data utilizing the inferential statistical procedures of one-way analysis of variance (ANOVA) and the Duncans new multiple range test for post hoc comparisons. Differences in frequency of response were recorded on categorical item differences by

faculty rank, tenure status, academic degree, and department. The level of statistical significance used is .05.

Summary

Chapter III outlines the procedures of the study. A detailed description is presented on the population of the study, and the Delphi instrument is described. Also presented are procedures for data collection including a description of the characteristics of the three rounds of the Delphi instrument, and a description of the procedures for data analysis.

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CHAPTER IV

ANALYSIS OF DATA

Introduction

Presented in this chapter are the data results of this investigation to determine and compare faculty perceptions of areas of concern that are identified by osteopathic medical education administrators and faculty as having relationships to institutional needs and goal setting. The findings are the result of a three-round Delphi questionnaire process; this process was selected to provide data that answer the three research questions presented in Chapter I.

The Round I questionnaire was distributed to seventy-two full-time faculty who were employed at the New Jersey School of Osteopathic Medicine (NJSOM) between May and October, 1983. This categorical breakdown is presented in Table I by the selected demographic variables.

Table I represents the demographic distribution of population and respondents grouped according to the variables faculty rank, tenure status, highest academic degree, and department affiliation. Of the 72 full-time faculty at NJSOM, 52 (72%) returned the Round I Delphi instrument.

TABLE I

DEMOGRAPHIC DISTRIBUTION OF POPULATION AND RESPONDENTS ACCORDING TO VARIABLES

Variable	Category Title	N	Total Population N=72	Respondents N	Respondents % of Variable N
I. Faculty Rank	Professor				
	Academic	14			
	Clinical	2	16	8	16.0
	Associate				
	Academic	14			
	Clinical	2	16	11	22.0
	Assistant				
	Academic	27			
	Clinical	9	36	23	46.0
	Instructors; others		4	0	
	Rank not indicated			8	16.0
			72	50	100.0
II. Tenure Status	Tenured		15	8	16.0
	Non-tenured		57	35	70.0
	Status not indicated			7	14.0
			72	50	100.0
III. Highest Academic Degree	D.O.		43	21	42.0
	Ph.D.		20	10	20.0
	M.D.		4	2	4.0
	Ed.D.		3	3	6.0
	D.O./M.D.;D.D.S		2	6*	12.0
	Degree not indicated			8	16.0
			72	50	100.0
IV. Department Affiliation	Osteopathic Sci.		5	9*	18.0
	Administration		2	2	4.0
	Pediatrics		6	5	10.0
	Family Practice		12	8	16.0
	Internal Med.		20	10	20.0
	Pathology		2	1	2.0
	Basic Sciences		10	5	10.0
	Psychiatry		2	2	4.0
	Surgery		5	3	6.0
	Obstetrics-Gyn.		8	5	10.0
			72	50	100.0

*Shared appointments between departments.

Fifty Round II instruments were returned, which represents 69.4 per cent of the total full-time faculty and 96 per cent of the Round I respondents.

NJSOM separates ranks according to academic or clinical teaching environments; for the purpose of this study, however, these were combined. Tenure status is represented simply as tenured or not tenured. No effort was made to identify various kinds of annual or semi-annual contract status for non-tenured faculty.

The doctors of osteopathic medicine (D.O.) and the doctors of philosophy (Ph.D.) represent the largest groups of full-time faculty at NJSOM. Provision was made in the study to include M.D.s, Ed.D.s, and those with combinations of degrees or degrees not indicated in the other categories. Table I appears to reflect a discrepancy between the number of combination degrees at NJSOM and the number of respondents in this category. This occurred because respondents indicated all degrees but NJSOM lists faculty only by primary degree.

All departments are represented in the study. Again, in this category there appears to be a discrepancy between the number of faculty and those who responded in this category. This occurred because four additional faculty responded who hold joint appointments with other departments but who consider themselves primarily in osteopathic science. The category of administrators includes only those whose

responsibility to NJSOM is strictly administrative. Secondary administrators (i.e., department chairmen) are listed with departments.

Round I of the NJSOM Delphi Survey (Appendix C)

The Round I Delphi instrument consists of ten groups of open-ended questions that are designed to gather a broad range of opinions on areas of concern which are critical to needs assessment and planning at NJSOM. Fifty-two individuals returned the Round I Delphi instrument.

The responses from the Round I instruments were reviewed by the NJSOM Self-Study Committee and the researcher. Although responses were condensed and categorized into eight major areas of concern, a special effort was made to reflect every individually expressed idea. The eight established categories include (a) physical campus and curriculum (items 1 - 102); (b) future growth and missions and goals (items 103 - 144); (c) osteopathic perspective and identity (items 145 - 181); (d) curriculum content and laboratory space (items 182 - 196); (e) administration (items 197 - 216); (f) teaching and evaluation (items 217 - 242); (g) tenure, promotion, salary, and merit (items 243 - 324); and (h) students and admissions (items 325 - 341). The categorized Round I responses produced 341 statements that comprise the Round II questionnaire.

Round II of the NJSOM Delphi Survey

Participants were instructed to respond to each Round II survey item on the basis of a scale of one to seven on an agree-disagree continuum. This round requested the demographic data that is included in Table I; no identifying demographics were requested on Rounds I and III, thereby providing anonymity for the respondents.

Computerized statistical analyses of the Round II data produced mean, median, mode, standard deviation, variance, value counts, and range for each of the individual items (341) on the Round II Delphi survey instrument. These data are included in Table X, Appendix H. The Round II inter-quartile range and group median for each statement are included on the Round III instrument.

A further analysis of the Round II responses include the mean and standard deviations for variable groups, a one-way analysis of variance (ANOVA), and a post hoc comparison (Duncan's new multiple range test) where appropriate. These data are included in Tables II through IX. The data results presented in each table are discussed for each demographic variable.

Responses by Academic Rank

The respondents were grouped by academic rank into four categories that include (a) instructor, (b) assistant

professor, (c) associate professor, and (d) professor. The mean scores and standard deviations for this group of respondents is presented in Table II according to the eight categories of survey item responses.

The largest group of respondents by rank is the 23 assistant professors; this is the largest group of full-time faculty, by rank, available to the study. The smallest group is at instructor level; the only faculty member designated as full-time in this rank category did not respond. (The instructor category is generally occupied by part-time clinical faculty at NJSOM and therefore were excluded from the study.)

All means by academic rank for the eight variables are between 2.70 and 3.99. The mean ranges for the eight variables indicate close agreement among all three represented ranks except for the variable tenure, promotion, salary, and merit where the professor group's score fell below the group mean, which indicates stronger agreement with these statements than that reported by the other ranks.

Table III presents a further analysis of these data by academic rank using a one-way analysis of variance (ANOVA) to determine significant differences among the responses for the eight institutional categories. The results of a post hoc comparison (using Duncan's new

TABLE II

MEANS AND STANDARD DEVIATIONS FOR RESPONSES BY ACADEMIC RANK FOR EIGHT INSTITUTIONAL VARIABLES

Institutional Variable	Faculty Demographic Variables	N	Mean	S.D.
Physical Campus - Curriculum (Items 1-102)	Rank:			
	Instructor	0		
	Assistant	23	3.67	0.29
	Associate	11	3.63	0.33
	Professor	8	3.74	0.46
TOTAL		42	3.67	0.33
Future Growth Missions and Goals (Items 103-144)	Rank:			
	Instructor	0		
	Assistant	23	2.79	0.35
	Associate	11	2.73	0.75
	Professor	8	2.70	0.53
TOTAL		42	2.76	0.50
Osteopathic Perspective & Identity (Items 145-181)	Rank:			
	Instructor	0		
	Assistant	23	3.76	0.41
	Associate	11	3.72	0.35
	Professor	8	3.74	0.51
TOTAL		42	3.74	0.40
Curriculum - Laboratory Space (Items 182-196)	Rank:			
	Instructor	0		
	Assistant	23	3.54	0.48
	Associate	11	3.59	0.63
	Professor	8	3.41	1.51
TOTAL		42	3.53	0.78
Administration (Items 197-216)	Rank:			
	Instructor	0		
	Assistant	23	3.54	0.50
	Associate	11	3.40	0.91
	Professor	8	3.25	1.52
TOTAL		42	3.45	0.86
Teaching and Evaluation (Items 217-242)	Rank:			
	Instructor	0		
	Assistant	23	3.69	0.23
	Associate	11	3.74	0.44
	Professor	8	3.22	1.39
TOTAL		42	3.61	0.67
Tenure - Promotion - Salary - Merit (Items 243-324)	Rank:			
	Instructor	0		
	Assistant	23	3.44	0.35
	Associate	11	3.40	0.31
	Professor	8	2.83	1.25
TOTAL		42	3.31	0.64
Students - Admissions (Items 325-341)	Rank:			
	Instructor	0		
	Assistant	23	3.88	0.39
	Associate	11	3.99	0.48
	Professor	8	3.51	1.51
TOTAL		42	3.84	0.75

TABLE III

ANALYSIS OF VARIANCE FOR RESPONSES BY ACADEMIC RANK FOR COMPARISON TO EIGHT INSTITUTIONAL VARIABLES

Institutional Variable	Source of Variance	d.f.	S.S.	M.S.	F Ratio	p
Physical Campus-Curriculum (Items 1-102)	Rank	2	0.06	0.03	0.26	0.77
	Error	39	4.38	0.11		
	Total	41	4.44			
Future Growth - Missions and Goals (Items 103-144)	Rank	2	0.06	0.03	0.12	0.89
	Error	39	10.31	0.26		
	Total	41	10.37			
Osteopathic Perspective and Identity (Items 145-181)	Rank	2	0.01	0.00	0.02	0.98
	Error	39	6.69	0.17		
	Total	41	6.69			
Curriculum - Laboratory Space (Items 182-196)	Rank	2	0.17	0.08	0.13	0.88
	Error	39	25.03	0.64		
	Total	41	25.20			
Administration (Items 197-216)	Rank	2	0.54	0.27	0.35	0.71
	Error	39	30.02	0.77		
	Total	41	30.56			
Teaching and Evaluation (Items 217-242)	Rank	2	1.56	0.78	1.84	0.17
	Error	39	16.57	0.42		
	Total	41	18.13			
Tenure - Promotion Salary - Merit (Items 243-324)	Rank	2	2.32	1.16	3.10	0.06
	Error	39	14.57	0.37		
	Total	41	16.89			
Students - Admissions (Items 325-341)	Rank	2	1.15	0.58	1.04	0.36
	Error	39	21.66	0.56		
	Total	41	22.81			

multiple range test) is reported in the narrative discussion for any significant differences shown by Table III data.

The responses from the academic rank group produced no significant F ratios at the .050 level for any of the eight institutional variable categories. The variable tenure, promotion, salary, and merit, however approached the desired .05 level. The Duncan's post hoc comparison identified the rank of professor.

Responses by Tenure Status

The respondents were grouped by tenure status into two groups, tenured and non-tenured. The mean scores and standard deviations for this group of respondents is presented in Table IV.

All means by tenure status for the eight institutional variables are between 2.61 and 3.90. The mean ranges for the eight variables indicate close agreement for the two groups with the exception of the variable for administration, which has a mean range of between 2.96 and 3.58, and the variable for tenure, promotion, salary, and merit, which has a mean range of between 2.90 and 3.42. The mean score for the tenured respondent group, for the variable administration, was 2.96, below the group mean score of 3.46. The tenured respondents were also below the group mean score for the variable for tenure, promotion, salary, and merit with

TABLE IV

MEANS AND STANDARD DEVIATIONS FOR RESPONSES BY TENURE STATUS FOR EIGHT INSTITUTIONAL VARIABLES

Institutional Variable	Faculty Demographic Variables	N	Mean	S.D.
Physical Campus - Curriculum (Items 1-102)	Tenure Status:			
	Tenured	8	3.71	0.44
	Non-Tenured	35	3.65	0.31
TOTAL		43	3.66	0.33
Future Growth Missions and Goals (Items 103-144)	Tenure Status:			
	Tenured	8	2.61	0.54
	Non-Tenured	35	2.81	0.50
TOTAL		43	2.77	0.50
Osteopathic Perspective and Identity (Items 145-181)	Tenure Status:			
	Tenured	8	3.75	0.51
	Non-Tenured	35	3.74	0.38
TOTAL		43	3.74	0.40
Curriculum - Laboratory Space (Items 182-196)	Tenure Status:			
	Tenured	8	3.27	1.62
	Non-Tenured	35	3.59	0.43
TOTAL		43	3.53	0.78
Administration (Items 197-216)	Tenure Status:			
	Tenured	8	2.96	1.52
	Non-Tenured	35	3.58	0.60
TOTAL		43	3.46	0.86
Teaching and Evaluation (Items 217-242)	Tenure Status:			
	Tenured	8	3.36	1.39
	Non-Tenured	35	3.68	0.34
TOTAL		43	3.62	0.66
Tenure - Promotion - Salary - Merit (Items 243-324)	Tenure Status:			
	Tenured	8	2.90	1.22
	Non-Tenured	35	3.42	0.38
TOTAL		43	3.32	0.64
Students-Admissions (Items 325-341)	Tenure Status:			
	Tenured	8	3.63	1.54
	Non-Tenured	35	3.90	0.41
TOTAL		43	3.85	0.74

a mean score of 2.90 compared to the group mean of 3.32. This indicates a higher degree of agreement for tenured faculty on these variables.

A further analysis of these data by tenure status was made using a one-way analysis of variance (ANOVA) to determine significant differences among the responses for the eight institutional variables. These data are presented in Table V.

One significant difference at 0.04 was found for the variable tenure, promotion, salary, and merit. The variable administration approached the desired .05 level. No range tests were performed with fewer than three non-empty groups.

Responses by Academic Degree

The respondents were grouped by academic degree into five categories that include (a) Ph.D., (b) Ed.D., (c) D.O., (d) M.D., and (e) other, (combinations of degrees or degrees not specified in the previous categories). The mean scores and standard deviations for this group of respondents are presented in Table VI according to the eight categories of survey item responses.

All means by academic degree for the eight institutional variables range between 2.67 and 4.32. The variable for osteopathic perspective and identity shows a range of mean scores from 3.61 for the D.O. category for 4.05 for that

TABLE V

ANALYSIS OF VARIANCE FOR RESPONSES BY TENURE STATUS FOR COMPARISON TO EIGHT INSTITUTIONAL VARIABLES

Institutional Variable	Source of Variance	d.f.	S.S.	M.S.	F Ratio	p
Physical Campus-Curriculum (Items 1-102)	Tenure	1	0.02	0.02	0.17	0.68
	Error	41	4.56	0.11		
	Total	42	4.58			
Future Growth - Missions and Goals (Items 103-144)	Tenure	1	0.25	0.25	0.98	0.33
	Error	41	10.41	0.25		
	Total	42	10.66			
Osteopathic Perspective and Identity (Items 145-181)	Tenure	1	0.00	0.00	0.00	0.97
	Error	41	6.72	0.16		
	Total	42	6.72			
Curriculum - Laboratory Space (Items 182-196)	Tenure	1	0.68	0.68	1.14	0.29
	Error	41	24.55	0.60		
	Total	42	25.23			
Administration (Items 197-216)	Tenure	1	2.49	2.49	3.61	0.06
	Error	41	28.37	0.69		
	Total	42	30.86			
Teaching and Evaluation (Items 217-242)	Tenure	1	0.66	0.66	1.56	0.22
	Error	41	17.50	0.43		
	Total	42	18.16			
Tenure - Promotion Salary - Merit (Items 243-324)	Tenure	1	1.78	1.78	4.75*	0.04
	Error	41	15.41	0.38		
	Total	42	17.20			
Students - Admissions (Items 325-341)	Tenure	1	0.48	0.48	0.88	0.35
	Error	41	22.43	0.55		
	Total	42	22.91			

*Statistically significant.

TABLE VI

MEANS AND STANDARD DEVIATIONS FOR RESPONSES BY ACADEMIC DEGREE FOR EIGHT INSTITUTIONAL VARIABLES

Institutional Variable	Faculty Demographic Variables	N	Mean	S.D.
Physical Campus - Curriculum (Items 1-102)	Academic Degree:			
	Ph.D.	10	3.58	0.37
	Ed.D.	3	3.50	0.47
	D.O.	21	3.67	0.24
	M.D.	2	3.47	0.31
	Other	6	3.91	0.46
TOTAL		42	3.66	0.33
Future Growth Missions and Goals (Items 103-144)	Academic Degree:			
	Ph.D.	10	2.70	0.51
	Ed.D.	3	3.07	0.98
	D.O.	21	2.68	0.39
	M.D.	2	2.67	0.94
	Other	6	3.17	0.38
TOTAL		42	2.78	0.50
Osteopathic Perspective and Identity (Items 145-181)	Academic Degree:			
	Ph.D.	10	3.83	0.41
	Ed.D.	3	3.80	0.26
	D.O.	21	3.61	0.38
	M.D.	2	3.88	0.09
	Other	6	4.05	0.43
TOTAL		42	3.75	0.40
Curriculum - Laboratory Space (Items 182-196)	Academic Degree:			
	Ph.D.	10	3.10	1.32
	Ed.D.	3	3.93	0.00
	D.O.	21	3.59	0.44
	M.D.	2	3.37	0.05
	Other	6	3.80	0.66
TOTAL		42	3.52	0.78
Administration (Items 197-216)	Academic Degree:			
	Ph.D.	10	2.78	1.28
	Ed.D.	3	4.32	0.32
	D.O.	21	3.47	0.45
	M.D.	2	3.05	0.71
	Other	6	4.25	0.36
TOTAL		42	3.46	0.87
Teaching and Evaluation (Items 217-242)	Academic Degree:			
	Ph.D.	10	3.16	1.18
	Ed.D.	3	3.82	0.24
	D.O.	21	3.67	0.29
	M.D.	2	3.85	0.13
	Other	6	3.97	0.32
TOTAL		42	3.97	0.66
Tenure - Promotion - Salary - Merit (Items 243-324)	Academic Degree:			
	Ph.D.	10	3.15	1.18
	Ed.D.	3	3.71	0.10
	D.O.	21	3.29	0.38
	M.D.	2	3.18	0.24
	Other	6	3.58	0.31
TOTAL		42	3.32	0.65
Students - Admissions (Items 325-341)	Academic Degree:			
	Ph.D.	10	3.38	1.26
	Ed.D.	3	3.90	0.62
	D.O.	21	3.98	0.42
	M.D.	2	3.94	0.08
	Other	6	4.02	0.51
TOTAL		42	3.84	0.74

respondent group classified as other. The variable for administration shows a range of mean scores from 2.78 for the Ph.D. category to 4.32 for the Ed.D. category. The variable for teaching and evaluation shows a range of mean scores from 3.16 for the Ph.D. respondent category to 3.97 for that group classified as other. There is a close range of agreement by mean scores for all of the remaining institutional variables.

The PH.D. respondent category reported below (greater agreement) the group mean score on two variables, administration group mean = 3.46 and teaching and evaluation group mean = 3.97. The Ed.D. respondent category reported above (lesser agreement) the group mean score of 3.46 on the variable administration. The respondent category classified as other reported mean scores above (lesser agreement) the group means for the variables future growth and missions and goals (group mean = 2.78), osteopathic perspective and identity (group mean = 3.75), and administration (group mean = 3.46).

Table VII presents a further analysis of these data by degree using a one-way analysis of variance (ANOVA) to determine significant differences among the responses for the eight institutional variables. The results of post hoc comparisons are reported where significant differences are noted.

TABLE VII

ANALYSIS OF VARIANCE FOR RESPONSES BY ACADEMIC DEGREE COMPARISON TO EIGHT INSTITUTIONAL VARIABLES

Institutional Variable	Source of Variance	d.f.	S.S.	M.S.	F Ratio	p
Physical Campus-Curriculum (Items 1-102)	Degree	4	0.60	0.15	1.39	0.26
	Error	37	3.97	0.11		
	Total	41	4.57			
Future Growth - Missions and Goals (Items 103-144)	Degree	4	1.48	0.37	1.54	0.21
	Error	37	8.85	0.24		
	Total	41	10.33			
Osteopathic Perspective and Identity (Items 145-181)	Degree	4	1.07	0.27	1.81	0.15
	Error	37	5.45	0.15		
	Total	41	6.52			
Curriculum - Laboratory Space (Items 182-196)	Degree	4	2.85	0.71	1.21	0.32
	Error	37	21.86	0.59		
	Total	41	24.71			
Administration (Items 197-216)	Degree	4	10.87	2.72	5.03*	0.00
	Error	37	19.99	0.54		
	Total	41	30.86			
Teaching and Evaluation (Items 217-242)	Degree	4	3.13	0.78	1.93	0.13
	Error	37	14.96	0.40		
	Total	41	18.09			
Tenure - Promotion Salary - Merit (Items 243-324)	Degree	4	1.20	0.30	0.69	0.60
	Error	37	15.99	0.43		
	Total	41	17.19			
Students - Admissions (Items 325-341)	Degree	4	2.77	0.69	1.29	0.29
	Error	37	19.89	0.54		
	Total	41	22.65			

*Statistically significant.

One significant difference at 0.00 was found for the variable administration; the Duncan's post-hoc comparison identified the Ph.D. respondent group. The variables of osteopathic perspective and identity approached significance (0.15) for the D.O. respondent category and for the variable of teaching and evaluation (0.13) for the Ph.D. respondent category.

Responses by Department

The respondents were grouped by departments that include (0) osteopathic science, (1) administration (no designated department), (2) pediatrics, (3) family practice, (4) internal medicine, (5) pathology, (6) basic science, (7) psychiatry, (8) surgery, and (9) obstetrics-gynecology. The mean scores and standard deviations for this group of respondents are presented in Table VIII according to the eight categories of survey item responses.

The means by department for the eight institutional variables range between 1.88 and 4.57. The variable of physical campus and curriculum produced a range of means from 3.35 for the category of administrative respondents to 4.22 for the one respondent in the departmental category of pathology. The variable of administration produced a range of means from 1.88 for the department of psychiatry respondents to 4.40 for the one respondent from the department of pathology.

TABLE VIII

MEANS AND STANDARD DEVIATIONS FOR RESPONSES BY DEPARTMENT FOR EIGHT INSTITUTIONAL VARIABLES

Institutional Variable	Faculty Demographic Variables	N	Mean	S.D.
Physical Campus - Curriculum Items 1-102)	Department			
	Osteopathic Science	9	3.87	0.19
	Administration	2	3.35	0.54
	Pediatrics	5	3.52	0.17
	Family Practice	8	3.46	0.30
	Internal Medicine	10	3.81	0.26
	Pathology	1	4.22	----
	Basic Science	5	3.66	0.24
	Psychiatry	2	3.41	0.30
	Surgery	3	3.65	0.37
	Obstetrics/Gynecology	5	3.89	0.40
TOTAL		50	3.69	0.32
Future Growth Missions and Goals (Items 103-144)	Department			
	Osteopathic Science	9	2.90	0.45
	Administration	2	2.58	0.66
	Pediatrics	5	2.52	0.31
	Family Practice	8	2.69	0.75
	Internal Medicine	10	2.89	0.33
	Pathology	1	3.23	----
	Basic Science	5	2.58	0.58
	Psychiatry	2	2.70	0.43
	Surgery	3	3.20	0.45
	Obstetrics/Gynecology	5	2.82	0.37
TOTAL		50	2.79	0.48
Osteopathic Perspective and Identity Items 145-181)	Department			
	Osteopathic Science	9	3.83	0.69
	Administration	2	3.66	0.14
	Pediatrics	5	3.50	0.29
	Family Practice	8	3.70	0.41
	Internal Medicine	10	3.77	0.43
	Pathology	1	4.13	----
	Basic Science	5	3.99	0.15
	Psychiatry	2	3.76	0.45
	Surgery	3	3.73	0.32
	Obstetrics/Gynecology	5	3.91	0.58
TOTAL		50	3.78	0.45
Curriculum - Laboratory Space (Items 182-196)	Department			
	Osteopathic Science	9	3.61	0.90
	Administration	2	3.93	0.00
	Pediatrics	5	3.54	0.55
	Family Practice	8	3.26	0.45
	Internal Medicine	10	3.68	0.42
	Pathology	1	3.73	----
	Basic Science	5	3.48	0.95
	Psychiatry	2	2.03	2.87
	Surgery	3	3.80	0.07
	Obstetrics/Gynecology	5	3.77	0.76
TOTAL		50	3.53	0.80
Administration (Items 197-216)	Department			
	Osteopathic Science	9	3.38	0.99
	Administration	2	4.20	0.35
	Pediatrics	5	3.51	0.30
	Family Practice	8	3.44	0.72
	Internal Medicine	10	3.56	0.52
	Pathology	1	4.40	----
	Basic Science	5	2.71	0.84
	Psychiatry	2	1.88	2.65
	Surgery	3	3.63	0.59
	Obstetrics/Gynecology	5	4.03	0.72
TOTAL		50	3.44	0.89

Table VIII--continued

Institutional Variable	Faculty Demographic Variables	N	Mean	S.D.
Teaching and Evaluation (Items 217-242)	Department			
	Osteopathic Science	9	3.83	0.72
	Administration	2	3.72	0.23
	Pediatrics	5	3.65	0.14
	Family Practice	8	3.69	0.31
	Internal Medicine	10	3.61	0.37
	Pathology	1	4.57	----
	Basic Science	5	3.54	0.58
	Psychiatry	2	1.93	2.73
	Surgery	3	3.81	0.10
	Obstetrics/Gynecology	5	3.73	0.15
TOTAL		50	3.64	0.68
Tenure - Promotion - Salary - Merit (Items 243-324)	Department			
	Osteopathic Science	9	3.67	0.48
	Administration	2	3.77	0.06
	Pediatrics	5	3.06	0.28
	Family Practice	8	3.29	0.35
	Internal Medicine	10	3.43	0.52
	Pathology	1	3.50	----
	Basic Science	5	3.49	0.38
	Psychiatry	2	1.76	2.48
	Surgery	3	3.61	0.25
	Obstetrics/Gynecology	5	3.50	0.32
TOTAL		50	3.38	0.64
Students - Admissions (Items 325-341)	Department			
	Osteopathic Science	9	3.80	0.62
	Administration	2	3.59	0.42
	Pediatrics	5	3.70	0.35
	Family Practice	8	4.03	0.44
	Internal Medicine	10	3.90	0.45
	Pathology	1	4.17	----
	Basic Science	5	3.87	0.58
	Psychiatry	2	1.74	2.45
	Surgery	3	4.26	0.10
	Obstetrics/Gynecology	5	4.08	0.51
TOTAL		50	3.83	0.72

The variable of teaching and evaluation produced a range of means from 1.93 for the department of psychiatry respondents to 4.57 for the department of pathology. The variable of tenure, promotion, salary, and merit produced a range of means from 1.76 for the department of psychiatry respondents to 3.77 for the administrative respondents. The variable of students and admissions produced a range of means from 1.74 for the department of psychiatry respondents to 4.26 for those respondents from the department of surgery.

The administrative respondent category reported above (lesser agreement) the group mean score of 3.44 for the variable administration. The respondent category of pathology reported above (lesser agreement) the group mean scores for the variables physical campus and curriculum (group mean = 3.69), future growth and missions and goals (group mean = 2.79), osteopathic perspective and identity (group mean = 3.78), administration (group mean = 3.44) and teaching and evaluation (group mean = 3.64). The family practice respondent category reported above (lesser agreement) the group mean score of 3.83 for the variable students and admissions. Respondents from the department of surgery reported above (lesser agreement) the mean group score on two variables, future growth and missions and goals (group mean = 2.79) and students and admissions (group mean = 3.83). Respondents from the department of obstetrics and gynecology

reported above (lesser agreement) the group mean scores for the variables administration (group mean = 3.44) and students and admissions (group mean = 3.83).

The departments of basic science and psychiatry were the only respondents reporting mean scores below (greater agreement) the group means. Basic Science reported below (greater agreement) the group mean of 3.44 for the variable administration, as did psychiatry department respondents. In addition, psychiatry respondents reported below (greater agreement) the group mean scores for the variables curriculum and laboratory space (group mean = 3.53), teaching and evaluation (group mean = 3.64), tenure, promotion, salary, and merit (group mean = 3.38), and students and admissions (group mean = 3.83). The respondents from the departments of osteopathic science, pediatrics, and internal medicine reported mean scores in close agreement with the group means for all variables; these are also three of the largest respondent categories. Table IX presents a further analysis of these data by department using a one-way analysis of variance (ANOVA) to determine significant differences among the responses for the eight institutional categories. The results of the post hoc comparisons (Duncan's new multiple range test) is reported where there are significant differences.

TABLE IX

ANALYSIS OF VARIANCE FOR RESPONSES BY DEPARTMENT FOR COMPARISON TO EIGHT INSTITUTIONAL VARIABLES

Institutional Variables	Source of Variance	d.f.	S.S.	M.S.	F Ratio	P
Physical Campus-Curriculum (Items 1-102)	Dept.	9	1.90	0.21	2.63*	0.02
	Error	40	3.20	0.08		
	Total	49	5.10			
Future Growth - Missions and Goals (Items 103-144)	Dept.	9	1.69	0.19	0.77	0.65
	Error	40	9.79	0.24		
	Total	49	11.48			
Osteopathic Perspective and Identity (Items 145-181)	Dept.	9	0.93	0.10	0.46	0.89
	Error	40	8.90	0.22		
	Total	49	9.83			
Curriculum - Laboratory Space (Items 182-196)	Dept.	9	6.25	0.69	1.12	0.37
	Error	40	24.85	0.62		
	Total	49	31.10			
Administration (Items 197-216)	Dept.	9	11.72	1.30	1.93	0.08
	Error	40	27.06	0.68		
	Total	49	38.78			
Teaching and Evaluation (Items 217-242)	Dept.	9	7.26	0.81	2.14*	0.05
	Error	40	15.07	0.38		
	Total	49	22.33			
Tenure - Promotion Salary - Merit (Items 243-324)	Dept.	9	7.24	0.80	2.54*	0.02
	Error	40	12.69	0.32		
	Total	49	19.93			
Students - Admissions (Items 325-341)	Dept.	9	10.34	1.15	2.98*	0.01
	Error	40	15.40	0.39		
	Total	49	25.74			

*Statistically significant.

A significant difference at 0.02 was found for the variable of physical campus and curriculum for the administration respondent category. A significant difference at 0.05 was found for the variable of teaching and evaluation for the psychiatry respondent category. Psychiatry was also significantly different at 0.02 for the variable of tenure, promotion, salary, and merit, and at 0.01 for the variable of students and admissions. The variable of administration approached significance (0.08) for the department of psychiatry respondents.

Round III of the NJSOM Delphi Survey

The Round III survey instrument was presented to the respondents in the same manner as for the Round II survey. Round III, however, consists of the 341 Round II survey items plus 47 additional statements that were added by respondents.

The participants were instructed on the Round III survey to reconsider their Round II responses in view of the groups' statistical opinions, which were indicated on the Round III instrument (see Appendix E). If a Round III response still lay outside the interquartile range for Round II, the respondent was asked to give a narrative, explanatory response. Each statement, where there is disagreement, is included as it appears on the Round III questionnaire; following the statement is the divergent narrative response (see Appendix F).

The Round III responses to the respondent-added items in Round II are also included.

Respondents were able to reach consensus by reporting within the group range of agreement on 372 of the 388 items of Round III.

Specific Answers to Research Questions

As presented in Chapter I, three research questions were formulated to carry out the purposes of this study. The data as previously presented are applied to these research questions in this section.

Research Question One

Research question one asks, "What are the major issues and concerns in regard to institutional needs and goals as perceived by osteopathic medical education administrators?" The major issues and concerns in the areas of institutional needs and goals were first identified through program emphases at the first and second meeting of the American Association of Colleges of Osteopathic Medicine in 1981 and 1982.

Program emphases at both of these meetings were established by the presidents and the academic and clinical deans of the fourteen schools and colleges of osteopathic medicine in the United States. These major issues and concerns in regard to

institutional needs and goals are (a) physical campus facilities; (b) direction of future growth; (c) establishment of individual institutional missions and goals; (d) curriculum content and structure; (e) osteopathic identity; (f) administrative structure and communication; (g) faculty teaching and evaluation of teaching; (h) faculty and administrative policy issues of tenure, promotion, salary, and merit; and (i) student admissions.

Research Question Two

Research question two asks, "What are the faculty perceptions of issues and concerns related to needs and goals at one institution of osteopathic medical education?" The established issues and concerns (as reflected in Research Question One) were presented first to the New Jersey School of Osteopathic Medicine institutional self-study committee for refinement and review, and, second to the full-time faculty for their responses.

The faculty perceptions of issues and concerns related to the needs and goals at NJSOM are the structure for the format of the responses to the Rounds I, II, and III Delphi instruments. These faculty perceptions of issues and concerns related to needs and goals are categorized into (a) physical campus and its relationships to the curriculum; (b) future growth of NJSOM and missions and goals; (c) osteopathic perspective and identity; (d) laboratory space and its

relationship to the curriculum; (e) administrative roles and functions; (f) teaching and evaluation of teaching; (g) tenure, promotion, salary, and merit policies; and (h) students, and student admissions.

Research Question Three

Research question three asks, "What are the similarities and differences in faculty perception of issues and concerns related to institutional needs and goals compared by the characteristics of (a) faculty rank, (b) tenure status, (c) academic-professional degree, and (d) institutional department of employment?" Faculty were asked to provide demographic variable information on the Round II Delphi instrument. Statistical analyses of the grouped variables produced the following similarities and differences in faculty perceptions of issues and concerns related to institutional needs and goals at NJSOM.

Demographic variables.--The means of academic rank for the eight institutional variables indicate that there is a greater degree of agreement than disagreement among the respondents. While there are no statistically significant differences at the .05 level, there is a trend toward significance by the professor rank for the institutional variable category of tenure, promotion, salary, and merit; the professors agree with these statements to a stronger degree than do the other academic ranks surveyed.

The means by tenure status for the eight institutional variables indicate that there is close agreement between the two groups in the direction of agreement with the survey items. Although there is a statistically significant difference of opinion between the tenure status groups for the institutional variable category of tenure, promotion, salary, and merit, plus a trend toward significance for the institutional variable category of administration, the statistical procedure used does not show the direction of the difference or trend when there are only two groups.

The means by academic-professional degree for the eight institutional variables indicate that there is a greater degree of agreement than disagreement among the respondents. There is one statistically significant difference for the Ph.D. degree group for the variable administration; this group of respondents agrees with the administration-category statements to a significantly greater degree than do the other degree groups surveyed. The Ph.D. group's responses also show a trend toward significance in greater agreement for the teaching and evaluation institutional category variable. The D.O. group's responses also show a trend toward significance in greater agreement for the osteopathic perspective and identity institutional category variable.

The means by department affiliation for the eight institutional variables show a wider range of opinion than do those by the other demographic variables. Significant

differences were found for the administration group (greater agreement) for the institutional category variable of physical campus and curriculum, and for the psychiatry group (greater agreement) for the institutional category variables of teaching and evaluation, tenure, promotion, salary, and merit, and students and admissions. The psychiatry group also showed a trend toward significance (greater agreement) for the institutional category variable of administration.

Based on the number of significant differences and trends found in the data and the relationships of group means, it appears that the demographic category for department affiliation produced the largest differences of opinion in regard to perceptions of issues and concerns related to institutional needs and goals. By the same measurement, the demographic variables for academic-professional degree, tenure status, and rank produced lesser differences.

Institutional category variables.--The institutional category of physical campus and curriculum produced responses that indicate strong agreement on statements that are favorable toward campus unification. The greatest degree of agreement on campus location was from a mean of 2.36 for Stratford.

The institutional category of future growth and missions and goals produced a predominance of mean responses at or

near 4.0. This would suggest a rather ambivalent attitude by the respondents to this category.

The institutional category of curriculum and laboratory space addressed issues and proposed changes of shared curriculum and laboratory space by NJSOM and RMS students for the first phase of the program. With the majority of the items producing means near 4.0, an ambivalent attitude is again suggested by the responses.

The institutional category of osteopathic perspective and identity was developed around questions about what constitutes osteopathic medicine and if and how such a philosophy should be incorporated into the curriculum. There was strong agreement for statements supporting the teaching of manipulative therapy, humanistic practice and primary care to all students. The strongest item mean for disagreement in this category was in response to the statement, "Manipulative therapy should be available only to students who seek it out."

The institutional category of administration produced responses that suggest agreement with the statements included in the category. One revealing statement, which produced an agreement mean below 2.0, indicated that there should be a prescribed and consistent system for communication between administration and faculty.

The institutional category of teaching and evaluation produced a majority of agreement means. The greatest agreement was reached for the statement, "I offer assistance to students who are having academic difficulty."

The institutional category of tenure, promotion, salary, and merit produced a majority of responses in agreement with the statements. Sixty-one of the eighty-two statements produced means below 4.0.

The institutional category of students-admissions included items that are descriptive of admissions processes and the requirements, needs and wants of enrolled students. This category produced a widespread of response means for almost all statements. The respondents strongly disagree (mean = 6.18) that "students older than 25 should not be considered for admission to NJSOM," and they also disagree (mean = 5.43) that "admitting students with degrees in other than pre-med virtually guarantees academic difficulty in the first two years."

Summary of Data Findings

Following is a brief summary of data findings from this study.

1. Respondents were well represented by percentages in terms of the demographic groupings of full-time faculty who were employed at NJSOM at the time of the study.

2. Respondents were in agreement with the selected areas of concern presented for their response. All Round I responses were readily grouped into the selected variable categories; no categories were without response.

3. Respondents were able to reach consensus by reporting within the group range of agreement on 372 of the 388 items of Round III.

4. There were no significant differences found for the dependent varible categories of future growth and missions and goals and curriculum and laboratory space.

5. There were significant differences found for the dependent variable categories of physical campus and curriculum, osteopathic perspective and identity, administration, teaching and evaluation, tenure, promotion, salary, and merit, and students and admissions.

6. The dependent variable categories of osteopathic perspective and identity, administration, and teaching and evaluation approached significance.

7. There were significant differences on response to variable categories by tenure status, academic-professional degree, and department.

8. There was no significant difference on responses to variable categories by faculty rank.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS FOR FUTURE RESEARCH

Summary

The primary factor in the development of organizational goals is planning. A successful planning process depends upon a clear sense of institutional identity. Institutional mission, and the perceived correlation between this mission and the operating goals of the institution, are of increasing importance in contemporary higher education.

As an organization develops and grows, many persons may influence its goals. It is necessary to offer each person in the organization an opportunity to participate in goal setting so that the attainment of personal goals is possible through organizational group goals. The more widely faculty are involved, the more they are likely to be committed to successful innovation and change.

Many national agencies have recommended that those institutions engaged in the education of physicians devote time and expertise to the planning process. The future of medicine and the resulting direction of medical education is a concern to everyone. It is, therefore, vitally

important that there is faculty involvement in the examination and formulation of institutional goals appropriate to the continued future of medical practice in the United States.

The purpose of this study was to determine and compare faculty perceptions of areas of concern as identified by osteopathic medical education administrators, that have a relationship to institutional needs and goal setting. The areas of concern were determined through program emphasis at the first (1981) and the second (1982) meetings of the American Association of Colleges of Osteopathic Medicine. Further refinement of these areas of concern was accomplished through review by the NJSOM self-study committee. Faculty perceptions of these concerns were obtained through the use of the three-round Delphi research technique.

The data were treated as is customary for the Delphi process. In addition, data from the Round II instrument was used to compare responses by the demographic categories of faculty rank, tenure status, academic and professional degrees, and department affiliation.

Summary of Data Findings

Following is a brief summary of data findings from this study.

1. Respondents were well represented by percentages in terms of the demographic groupings of full-time faculty who

were employed at NJSOM at the time of the study.

2. Respondents were in agreement with the selected areas of concern presented for their response. All Round I responses were readily grouped into the selected variable categories; no categories were without response.

3. Respondents were able to reach consensus by reporting within the group range of agreement on 372 of the 388 items of Round III.

4. There were no significant differences found for the dependent variable categories of future growth and missions and goals and curriculum and laboratory space.

5. There were significant differences found for the dependent variable categories of physical campus and curriculum, osteopathic perspective and identity, administration, teaching and evaluation, tenure, promotion, salary, and merit and students and admissions.

6. The dependent variable categories of osteopathic perspective and identity, administration, and teaching and evaluation approached significance.

7. There were significant differences on response to variable categories by tenure status, academic-professional degree, and department.

8. There was no significant difference on responses to variable categories by faculty rank.

Discussion of Data Findings

The following discussion items are based upon a comparison of data findings from this study with those cited in the literature.

1. It appears that the motivation for assessment of institutional needs and goals at NJSOM is prompted, at least in part, by their need for compliance with both state authorities and their accrediting body, the American Osteopathic Association. Blair (3, p. 22), in his discussion of planning, lists the determination of accrediting agency constraints and federal and state statutes as significant components of the process.

NJSOM was subject, at its conception in 1976, to location in the southern portion of the state. In addition, the New Jersey Department of Higher Education established a split campus that would be maintained through 1983 at which time an extensive study would be initiated (1, pp. 3-5). The absorption of NJSOM students into the RMS basic science program in northern New Jersey, however, is not in compliance with the American Osteopathic Association's standards for accreditation, and NJSOM must be brought into compliance for full accreditation.

2. NJSOM has undertaken an effort to perform an active assessment of needs in an effort to defend their position with

AOA to the state of New Jersey. To commit resources to a plan without attempting to identify and validate institutional goals, according to Morphet, would be useless (17, p. 157).

McManis and Harvey (18) strongly support the determination of community needs as part of the planning process. This was, of course, a large concern of the NJSOM self-study, and it generated a number of statements in the present Delphi instrument. Hack (8), Malone (16), Johns and Reller (17), and McManis and Harvey (18) encourage the involvement of all members of the institution in planning, as was the intent of this study. Furthermore, they believe that efforts be made to acquaint the faculty with the existing goal structure through efforts to solicit their individual concerns.

3. Present findings support the contention by Jonas (12, p. 6) and Korr (14, p. 8) that osteopathic practice and osteopathic medical education should support a "health-oriented physician education" with attention to primary care. The emphasis on the need for primary care by Brown (5), and also Berlant (2), is supported by the respondents to the present study, but not at the exclusion of specialty medical care.

4. The structure of this study incorporates Dressel's (7, p. 4) concerns that curriculum analysis and development come from a systematic study to evaluate individual faculty members to ascertain the extent of their understanding and

commitment to the goals and functions of the institution. It further supports the interest in an integrated medical curriculum as proposed by Jason (11), and Pfeiffer (19).

5. Since this study attempted to discern not only present perceptions of missions and goals, but also indications for future planning, it follows Dalkey (6), Helmer (10), and Judd (13) in their interpretations of the function of the Delphi research technique.

6. It would appear, from the interest generated at NJSOM, that the Delphi is an effective process to involve faculty in the planning and decision-making processes for the future of the institution. This agrees with the views of Judd (13) and Wood and Davis (21) in their analysis of the use of the Delphi technique in higher education. This study also reinforces the thinking of Dalkey (6) regarding the use of the Delphi to inform and educate the respondent group in regard to the administrative interpretations of the missions of the institution.

7. The findings from this study seem to support Harris's (9) contention in his study of Ph.D. and M.D. faculty that differences exist in response to issues of tenure between these groups; there were differences noted in the present study by Ph.D. degree and other clinical respondent categories for the broad areas of tenure, promotion, salary, and merit. Harris emphasizes differences in faculty perceptions of whether peers or administrators should do tenure evaluation.

8. The strongest criticisms of the Delphi process, according to Linstone and Turoff (15) and Malone (16) center on the basic goal of forced consensus and weaknesses in questionnaire construction. Brodzinski (4) adds that there is as well a lack of experimental support for the validity and reliability of the method. Malone (16) experienced difficulties with communication and semantics in his Delphi study.

The present study, because of the strong responses to Round I, generated an unwieldy number of statements, and even though there were two readers and compilers, there were many poorly constructed statements. The length of the questionnaire was a concern to the researcher; however, no statement is an exact duplicate of another, and specific information not generalities was of interest to the institution and the researcher. Only one respondent complained about the length of the instrument. According to Dalkey, "the three critical conditions for a successful Delphi are (a) sufficient time, (b) skills in written communication, and (c) motivation among the respondents" (6, p. 10). The time span of the study was flexible enough to encourage participation, yet not so much elapsed time that people tended to neglect their responses. The majority of the participants were able to express their thoughts and opinions in a clear and concise manner; most importantly, because change in

the institution appears to be imminent, there was motivation among the respondents to influence the direction of change.

Conclusions

Based upon the data findings from this study, the following conclusions appear to be warranted.

1. Since there was a good response to all three rounds of the Delphi process, it appears that those topics of concern expressed by osteopathic education administrators are appropriate to the concerns of full-time faculty at NJSOM. Furthermore, since all additions made by faculty were within the pre-selected response categories, it would appear that these categories are sufficiently comprehensive in that they exclude neither personal or institutional concerns.

2. The faculty rank of professor and the tenured faculty expressed stronger agreement for statements within the institutional category variable of tenure, promotion, salary, and merit. Since all professors at NJSOM are tenured this is not an unusual dual response. Tenured professors are more likely to have more invested in the institution and be more interested in maintaining agreement with existing policy concerning characteristics of this variable.

3. Those faculty who hold doctor of osteopathic medicine degrees have the greatest concern for the osteopathic perspective and identity of NJSOM; this intensity confirms their belief in the philosophy of osteopathic medicine.

4. Professorial rank and tenured status appear to affect opinion; such respondents are more protective of the status quo.

5. The departments of basic science differed in responses very little from other respondents. The difference expressed in response to the category of administration reflects the differences in administrative structure for basic science and clinical faculty and the resulting responsibility to two administrations experienced by basic science--that of NJSOM and RMS.

6. The faculty is in support of a proposed unified campus in Stratford; they are aware of, and support the current missions and goals of NJSOM.

7. The clinical departments of family practice, surgery, and obstetrics and gynecology reported strong disagreement for the items expressed in the variable category of students and admissions. It would appear that their perceptions of students is different than other departments. If a relationship exists between the expectations for student behavior by these departments, it is not clear.

8. The faculty is committed to a model of osteopathic perspective to include the teaching of manipulative therapy humanistic practice, and primary care. The doctors of osteopathic medicine were somewhat more supportive of this variable than other categories of degree respondents, as might be expected.

9. Clinical faculty is in strong support of a functional practice plan and are in agreement that no such consistent plan is in existence at the present time.

10. The faculty is receptive to the non-traditional medical student; but the most and least desirable characteristics in an incoming student produced varied opinion.

Implications

The following implications appear justified, based upon the findings of this study.

1. Since there were no significant differences noted for the questionnaire category future growth/missions and goals and the means represented a spread with a predominance at 4.0 or below would indicate that this category is one where faculty are in agreement with the statements presented. This may indicate that faculty (1) do not have strong opinions concerning the institution's growth and its missions and goals, (2) that they may not have expressed strong responses because they feel ineffectual in the planning of the institution and further in their power over what they consider administrative decisions, (3) faculty are generally disinterested in planning, or (4) that faculty are simply uninformed concerning this area of response.

2. There were no significant differences noted for the variable curriculum and laboratory space and the majority of the means ranged near 4.0. It would

appear that faculty see the issue of how to present the curriculum and how to structure laboratory space at RMS as perhaps of little consequence if the political trend continues toward campus consolidation.

3. The presence of strong faculty responses for campus unification was indicated in this category of the study. That unification should occur in Stratford seems to be agreeable with some support for Cherry Hill, few were in support of Camden. There was more of a spread of response and means near 4.0 for statements concerning the benefits or disadvantages concerning a southerly move for the students and the basic scientists from Rutgers during the first two years and how the unification process would affect individual roles within the curriculum.

4. It would appear that there is strong faculty support at NJSOM for the teaching of osteopathic perspective. The interpretation of osteopathic perspective ranges from the teaching of required manipulative therapy techniques, reiteration of the history of the profession as separate from allopathic medicine, and the teaching of humanistic practice and primary care.

5. Faculty appear to feel a need for better communication between upper level administration and themselves, including a prescribed and consistent system for dissemination of information. This is in agreement with expressed

concerns by administration in the selection of statements dealing with communication issues for the first round of the study. There was indicated support of the statements regarding the effectiveness of department chairmen. It would appear that faculty are optimistic that communication will be better when upper-level administrators are no longer politically involved in the plans for a unified campus.

6. Most faculty are in support of the need for a better system of teaching evaluation by students. Most would welcome peer review of teaching, but would not welcome administrative review believing it to be biased. Faculty appear to be open to innovative teaching procedures and would enjoy the opportunity to learn more about small group facilitation, and computer-assisted instruction. There seems to be some shared confusion about the nature of student-directed learning and its role in medical education. There appears to be strong agreement that faculty should have more input into their individual course selection and content.

7. It would appear that faculty mildly agree that the following percentages are currently utilized in tenure/promotion decisions: research 50%, teaching 25%, service 25%. There is mild agreement that the following percentages should be utilized in tenure/promotion decisions: research 20%, teaching 40%, service 40%. There is spread of response to these statements although there was no significant difference

noted between the basic science and clinical departments even though their pressures to research and publish are currently very different. There was agreement that teaching and clinical expertise would constitute larger contributing factors than research for the promotion of clinical faculty and that basic science faculty should expect more emphasis on research and publication.

There was more agreement that present salaries are adequate to attract and retain quality basic science faculty than agreement on the same statement for clinical faculties.

Faculty appear not to favor equal pay raises for all members of a department, preferring raises based on merit. Merit pay raises should be based on principles developed by discussion and agreement between faculty and administrators. Most faculty appear not to support review processes to determine clinical competency for merit.

It would appear that most faculty are dissatisfied with the present clinical practice plan.

8. Most faculty appear to be interested in attracting, and educating the non-traditional student; although not at the exclusion of the traditional student. Good MCAT scores, and a high GPA are still favored to enhance success in medical school. There appears to be strong support for a counseling staff and active program for students and their families.

Most faculty agree that the concern to be addressed regarding admissions is not how to evaluate prospective students, but how to improve the over-all applicant pool.

9. If the one respondent from pathology is representative of pathologists in institutions of osteopathic medical education, then they are independent thinkers, disagreeing with most other departmental faculties.

Recommendations for Future Research

The following recommendations for future research are suggested based upon the findings and conclusions of this study.

1. This study should be conducted at other institutions of osteopathic medical education to determine the relevance of the initial concerns expressed by the administrators of the institutions of osteopathic medical education.

2. Further, a similar study of other institutions of osteopathic medical education would be of interest for comparison of faculty perceptions to those of NJSOM. If, in fact, this study is biased by the predominance of second generation Italian and Jewish faculty (as one participant observed), then further comparisons at institutions of more varied ethnic identity would be appropriate.

3. Compared to many of the osteopathic medical education institutions, NJSOM has a large faculty; therefore, it would appear to be fairly representative of all osteopathic institutions of similar size. A comparison study with an allopathic

institution would indicate how many of the perceptions in this study are particular to osteopathic medical educators.

4. Further research of a different instrumentation on those issues represented in the study would be of interest to focus on more specific concerns without the expectation of consensus.

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APPENDIX A

SCHOOLS AND COLLEGES OF OSTEOPATHIC MEDICINE

APPENDIX A

Chicago College of Osteopathic Medicine
Chicago, Illinois

College of Osteopathic Medicine and Surgery
Des Moines, Iowa

College of Osteopathic Medicine of the Pacific
Pomona, California

Kirksville College of Osteopathic Medicine
Kirksville, Missouri

Michigan State University College of Osteopathic Medicine
East Lansing, Michigan

College of Medicine and Dentistry of New Jersey
New Jersey School of Osteopathic Medicine
Camden, New Jersey

New England College of Osteopathic Medicine
Biddeford, Maine

New York College of Osteopathic Medicine
New York Institute of Technology
Old Westbury, L.I., New York

Ohio University
College of Osteopathic Medicine
Athens, Ohio

Oklahoma College of Osteopathic Medicine and Surgery
Tulsa, Oklahoma

Philadelphia College of Osteopathic Medicine
Philadelphia, Pennsylvania

North Texas State University
Texas College of Osteopathic Medicine
Ft. Worth, Texas

Southwestern College of Osteopathic Medicine
North Miami Beach, Florida

The University of Health Sciences
Kansas City, Missouri

APPENDIX B

ACCOMPANYING LETTER OF INTRODUCTION

UNIVERSITY
COLLEGE OF MEDICINE AND DENTISTRY OF NEW JERSEY

NEW JERSEY SCHOOL OF OSTEOPATHIC MEDICINE
Medical Arts Building
300 Broadway, Camden, N.J. 08103
609—757-2893

Department of Pediatrics

UMDNJ-NJSOM

BASIC SCIENCE AND CLINICAL FACULTY

Dear Colleagues:

As part of the UMDNJ-New Jersey School of Osteopathic Medicine "Self Study Process", we are using the Delphi Technique to gather input from all full-time faculty for the purposes of gaining consensus on issues important to you presently, and to the future growth and direction of the school.

There will be a series of three questionnaires. In order to encourage your continued participation, every effort will be made to keep these brief and straight-forward. All responses will be anonymous and your candid opinions are strongly invited. We ask that you seal your response in the enclosed envelope and return them to the Camden Office of the Department of Pediatrics c/o Juliann Pomykacz. The sealed responses will then be forwarded to Ms. Linda S. Fazio for analysis.

The second round will include your anonymous input for agree-disagree responses from all participants. The third round will be similar to the second round but will include statistical data (median and interval) so that you may compare your thinking to that of your colleagues and revise or defend your opinions if they vary widely from consensus.

The results of this process will be included in the Self Study document required by the accreditation process of the Committee on Colleges of the American Osteopathic Association. Your individual opinion on the attached issues is of critical importance to the success of this study...please lend your input.

Thank you.

Sincerely,

Thomas F. Santucci, Jr., D.O., F.A.C.O.P.
Professor and Chairman

Linda S. Fazio, M.S., O.T.R.
Consultant
Institute of Health Sciences
Texas Woman's University

TFS/jp

APPENDIX C

DELPHI ROUND I INSTRUMENT

NEW JERSEY SCHOOL OF OSTEOPATHIC MEDICINE

DELPHI SELF-STUDY 1983

Because of the short answer nature of this first instrument, it will take more of your time than the following two; however, please give it your careful attention so that your personal views may be shared.

Please be assured that this first questionnaire will be anonymous. Only the second questionnaire will request information about your academic rank, degree(s), tenure status, and department. The data will be tabulated extramurally and will not be available to anyone within UMDNJ-NJSOM. The Self-Study Steering Committee and the researcher hopes this anonymity will encourage you to be candid about your personal views on UMDNJ-NJSOM.

Please return this form by May 31, 1983, even if you do not intend to participate in the study.

Thank you.

DELPHI I

1. SPLIT CAMPUS:

   a. Is the split campus a negative or a positive situation for the faculty?

   Positive ☐ Negative ☐

   Explain:

   b. Is the split campus a negative or a positive situation for the students?

   Positive ☐ Negative ☐

   Explain:

   c. Should the campus be unified?

   Yes ☐ No ☐

   Where?

   Stratford ☐ Camden ☐

   Explain.

d. What changes might you suggest in curriculum assuming NJSOM was located on a single campus?

e. If the split campus were maintained, what, if any, changes would you suggest in curriculum?

f. If the campuses cannot realistically be combined, what are your suggestions for offering first and second year students clinical experience/education?

g. Has the split campus caused you personal and/or professional inconvenience?

Yes ☐ No ☐

In what way?

1) travel

2) communication with other faculty/administration

3) other

h. Has the split campus been to your advantage?
Yes ☐ No ☐

In what way?

i. Are you satisfied with current teaching hospital facilities?
Yes ☐ No ☐

What changes might you recommend?

2. SEPARATE STUDENT LABS IN PISCATAWAY:

a. What is your opinion regarding separate student labs for NJSOM and RMS? Please explain.

1) needed because:

2) detrimental because:

3. FUTURE GROWTH:

a. What do you see as the most serious issue facing the continued growth of NJSOM?

b. What do you see as the most positive issue?

4. MISSIONS AND GOALS:

a. Are the missions and goals of NJSOM appropriate and realistic?

b. Is the existing institution making progress toward these goals?

c. What should be the goals and missions of NJSOM?

d. Should measures be taken to improve the students' identity with NJSOM?

1) short-range?

2) long-range?

5. OSTEOPATHIC PERSPECTIVE AND THE CURRICULUM:

a. What is the value of the following osteopathic principles and practices in the education of physicians?

1) osteopathic manipulative therapy

2) humanistic practice

3) attention to primary care

b. Which of the above do you subscribe to? In principle? In practice? Both?

c. Would you be interested in taking time and effort to further develop your own knowledge and skills about osteopathic principles and practice?

Which ones in particular?

d. Do you have interest in research concerning osteopathic principles?

Explain:

e. Do you think the view that osteopathy is being gradually absorbed into allopathic medicine is valid?

Do you find the idea disturbing, comforting, or of no consequence?

f. Would you like to see more manipulative therapy taught to all students throughout their academic years?

g. Or, do you see "manipulative therapy" as perhaps a specialty, or subspecialty available to those students who seek it?

Other views:

h. Should the curriculum be doing more to encourage the primary care physician? What?

i. Should the curriculum be doing more to encourage the "specialist"? What?

j. In your opinion, what is a "family physician"? What should he or she be?

k. Do you include the teaching of osteopathic perspective when you instruct students?

6. TENURE AND PROMOTION:

a. How much weight (%) do you think each of the following currently carries in tenure/promotion decisions?

1) research/publication _____%
2) teaching _____%
3) service _____%
4) other _____% What are these?

b. How much weight do you think each of the following should carry?

1) research/publication _____%
2) teaching _____%
3) service _____%
4) other _____% What are these?

c. Do you think the same tenure/promotion requirements should hold for basic science and clinical faculty? Explain.

d. Do you know what the procedures are for terminating faculty appointments?

Are they appropriate?

Are they adequate?

e. Do you know what the procedures are for a formal grievance appeal?

f. Do you know what the options are if you are denied tenure?

g. About how many hours a week do you devote to the following:

Active teaching?

Preparation for teaching?

Patient treatment?

Individual and/or institutional research?

Institutional committees?

Administration?

Travel between campus sites?

Other?

h. What professional meetings have you attended in the past year?

Were you on the program?

Did you receive external funding for these meetings?

i. Have you published in the last three years? Books? Journals? Other? Please explain:

j. Does NJSOM offer you sufficient support for research?

Time?

Money?

Availability in support staff?

7. SALARY AND MERIT:

a. Do you think the same pay scale should hold for basic science and clinical faculty? Explain:

Should they enjoy the same benefits? Explain:

b. Do you think present salaries are adequate to attract and retain quality faculty?

Basic scientists?

Clinicians?

c. Do you support equal raises for each member of a department?

d. Do you support the idea of merit raises? Based on what?

e. What do you think are the most important features which NJSOM should have in order to attract and retain adequate faculty

f. What are your opinions about the clinical faculty practice plan?

8. TEACHING AND EVALUATION:

a. How do you measure your teaching effectiveness?

b. How does the institution measure your teaching effectiveness?

c. Do you have sufficient, and efficient secretarial support for preparing handouts, teaching aids, grading, other?

d. Do you have ready access to audio-visual materials, simulation models, computer-assisted instruction?

If not, what are your needs?

e. Do you give the students lecture outlines? A syllabus?

f. Do you have adequate information and expertise in the following teaching skills:

1) writing behavioral objectives
2) test construction
3) developing self-instructional materials
4) lecture
5) laboratory instruction
6) individualized learning
7) seminar
8) other

g. Who decides what you teach?

Are you in agreement with this procedure?

h. How do you feel about the current system for course evaluation by students?

What changes would you recommend?

i. Are you aware of the results of student course evaluations? Do you make use of them?

j. Would you welcome peer review of your teaching?

k. Would you welcome review by the administration of your teaching?

l. Are you encouraged to design new and innovative teaching/clinical approaches?

m. Do you feel secure in your freedom to bring up controversial topics to your students?

n. Do you find the current process by which the curriculum is reviewed and modified to be adequate? What might you suggest?

o. Do you think the school's policy for recruitment and selection of faculty is effective? Fair?

9. ADMINISTRATION:

a. What's your feeling about current channels of communication between faculty and administration?

b. Do you have adequate opportunity to participate in the budget process of your department?

How is this accomplished?

c. Do you have a voice in the selection of chairmen and other upper-level administrators? Do you want a voice?

d. Do you think that Deans and chairpersons should be limited to a specific time period? What length of time?

e. Do you see a need for more faculty in your department? How would your response benefit you personally? How would it benefit the institution?

f. Should there be changes in departmental structure?

g. How effective is the NJSOM administration?

What are the strengths, weaknesses?

Where, and in what way, would you like to see improvement?

h. How effective is the UMDNJ central administration?

i. How effective is the faculty practice plan administration?

j. Should faculty review the performance of administration?

10. STUDENTS:

a. How would you recommend improving the blend between didactic and clinical experiences throughout the students' program of study?

b. Would you like to see students have more contact with ambulatory care? How might this be accomplished? When?

c. Do you know what the student admissions policies are? What do you think of them?

If you'd like to see changes, in what way?

GPA_____

MCAT_____

Male/Female Ratio_____

Minorities_____

More expressed interest in osteopathic philosophy_____

Sons and daughters of D.O.'s_____ of M.D.'s_____

Other_____

d. Do you think extra assistance should be provided for students who may make "good D.O.'s" but have low GPA's? Should low grade point averages be considered at all in the admission process? How low?

e. Do you offer extra assistance to students who are having academic difficulty?

f. Would you like to see more/less non-traditional medical students?

1) older_____

2) degrees in areas other than pre-med_____

3) other_____

g. If students could have some clinical exposure during their first two years, how much would you recommend? What kind?

h. Would the students benefit from more electives during their education?

i. Concerning the procedures for "failing" a student.....Do you know what they are? Are they adequate? Fair?

Please look back over the questions and categories; are there issues and concerns you would like to have represented on the following questionnaires? Please list here:

Thanks for your participation.

APPENDIX D

DELPHI ROUND II INSTRUMENT

NEW JERSEY SCHOOL OF OSTEOPATHIC MEDICINE

DELPHI SELF-STUDY

ROUND II

Your comprehensive, and thoughtful responses to our Round I questionnaire is greatly appreciated. Because of your excellent response, and the Delphi characteristic of reflecting all expressed ideas from the first open-ended instrument...this second questionnaire is longer than promised!

Please help us maintain the validity of this study by your continued participation. Please remember that all responses are viewed by an independent researcher. No information will be available to NJSOM that will not be available to you.

For those of you who may not be familiar with the Delphi research process, it has been found to be the most effective way to inform administration of faculty consensus on issues affecting the growth and the direction of the institution's future. Educational planners have proven that 'sweeping change' cannot occur successfully without faculty consensus.

Response on Round I was very close to 80% therefore I assume you, as faculty, have concern about your own futures within the institution. Initiation of this research by your own 'self-study' committee indicates that they are soliciting your views on future growth. I am optimistic that your consensual results on the third round of this study will be considered carefully in establishing future goals for NJSOM.

The Round III instrument will look exactly like this one (with the addition of further statements if you wish); however, it will include the median, and interquartile range of agreement for each statement so that you may see how your own opinion compares with other faculty members.

Because of the length of this instrument, you may wish to do one section at a time. Please complete the whole questionnaire, however.

Please turn the page for instructions.

PLEASE RETURN THIS QUESTIONNAIRE BY JULY 15, 1983. THANK YOU.

NOTE:

You are being asked to supply the researcher with the following categorical information on this round.

Providing this information will not be a threat to you, and it will further enhance the statistical validity of the study.

RANK _____ TENURE STATUS _____ DEGREE HELD _____

DEPARTMENT _____

INSTRUCTIONS FOR ROUND II

You are asked to react to the following statements. Please indicate your agreement or disagreement with the statements in the following manner.

Circle as follows if you strong agree with the statement:

(1) 2 3 4 5 6 7

If you strongly disagree with the statement, you should indicate by circling as follows:

1 2 3 4 5 6 (7)

Circling number (4) would indicate that your feelings of agreement and disagreement are about equal; while circling any other number (2, 3, 5, 6) would indicate respective levels of agreement.

Should you have a comment or question concerning a statement, please feel free to utilize the space directly following the statement for this purpose.

Space is provided at the end of each section for any additional statements you would like added to Round III.

NJSOM DELPHI SELF-STUDY 1983
ROUND II QUESTIONNAIRE

I. CAMPUS/CURRICULUM	AGREE						DISAGREE
1. The present 'split campus' is a positive situation for my purposes.	1	2	3	4	5	6	7
2. The present 'split campus' has been to my disadvantage most of the time.	1	2	3	4	5	6	7
3. A unified campus would be more convenient in every way.	1	2	3	4	5	6	7
4. The present 'split campus' offers advantages to the students.	1	2	3	4	5	6	7
5. A 'split campus' is not cost effective.	1	2	3	4	5	6	7
6. A 'split campus' discourages collaborative research.	1	2	3	4	5	6	7
7. A unified campus would encourage better faculty relations.	1	2	3	4	5	6	7
8. A 'split campus' prevents collegiality.	1	2	3	4	5	6	7
9. A unified campus would encourage better rapport between faculty and students.	1	2	3	4	5	6	7
10. A 'split campus' prevents students from contact with clinical role models.	1	2	3	4	5	6	7
11. Stratford is the ideal place for a unified campus.	1	2	3	4	5	6	7
12. With the new research facility, and some planning; Camden is the ideal site.	1	2	3	4	5	6	7

	AGREE						DISAGREE
13. A unified campus at Cherry Hill would benefit the hospital, the community, and the school.	1	2	3	4	5	6	7
14. Camden is not a desirable environment for faculty or students.	1	2	3	4	5	6	7
15. A unified campus at a site other than Stratford is best.	1	2	3	4	5	6	7
16. Location in Stratford would encourage development of an integrated curriculum that is problem-oriented and student-directed.	1	2	3	4	5	6	7
17. A unified campus in Stratford would encourage the continued feelings of poor "stepsisters" at our major hospital.	1	2	3	4	5	6	7
18. A unified campus would encourage integration of pre-clinical and clinical courses.	1	2	3	4	5	6	7
19. The community needs us more in Camden.	1	2	3	4	5	6	7
20. The integration of basic science and clinical science in one place is critical to growth.	1	2	3	4	5	6	7
21. If the campuses cannot be combined, the present system for offering first and second year students clinical experience/education should be continued.	1	2	3	4	5	6	7
22. The 'split campus' causes me loss of professional and personal time.	1	2	3	4	5	6	7
23. Isolation from the pre-clinical faculty, or the clinical faculty has not been a problem for me.	1	2	3	4	5	6	7

	AGREE						DISAGREE
24. The current teaching hospitals' commitment to NJSOM is questionable.	1	2	3	4	5	6	7
25. The current teaching hospital facilities are good.	1	2	3	4	5	6	7
26. The teaching hospital is not committed to quality care.	1	2	3	4	5	6	7
27. More NJSOM students should be required to rotate at Cherry Hill and other sites.	1	2	3	4	5	6	7
28. A problem-oriented and student-directed curriculum is best for us whether the campus is split or unified.	1	2	3	4	5	6	7
29. The systems approach is artificial and needs revision.	1	2	3	4	5	6	7
30. An integrated curriculum simply means combining the existing basic science and clinical courses.	1	2	3	4	5	6	7
31. An integrated curriculum means more work, and less certainty about my role as an educator.	1	2	3	4	5	6	7
32. An integrated curriculum can only be possible if the campuses are unified.	1	2	3	4	5	6	7
33. If the campuses are not combined a 'mini' (1 to 2 month) preceptorship in the summer between first and second years should be added.	1	2	3	4	5	6	7
34. I would like more contact with first and second year students.	1	2	3	4	5	6	7

	AGREE						DISAGREE
35. Improved clinic status would make the current teaching hospital facilities more desirable.	1	2	3	4	5	6	7
36. Removing basic science faculty from Piscataway will limit their professional growth.	1	2	3	4	5	6	7
37. Removing basic science faculty from Piscataway will require a substantial increase in their teaching load.	1	2	3	4	5	6	7
38. If basic science faculty are moved to Camden or Stratford they will be forced to travel to Piscataway for continued education and research.	1	2	3	4	5	6	7
39. Students are subject to 'fragmentation' by the current split campus conditions.	1	2	3	4	5	6	7
40. It would not be cost-effective or educationally sound to try and duplicate the basic science education in Stratford or Camden.	1	2	3	4	5	6	7
41. If the campuses remain split, the curriculum cannot be changed.	1	2	3	4	5	6	7
42. The strength of the basic science curriculum is currently the strength of NJSOM.	1	2	3	4	5	6	7
43. Quality basic science faculty would not be attracted to an integrated four-year osteopathic curriculum.	1	2	3	4	5	6	7
44. The quality of basic science instruction will be difficult to maintain if there is integration of clinical and basic science curriculum.	1	2	3	4	5	6	7

	AGREE						DISAGREE
45. Students have only two years to concentrate on understanding the scientific foundation of medicine; they have a life-time of clinical practice...keep the curriculum as it is.	1	2	3	4	5	6	7
46. Physical distance between the campuses is not as difficult as the lack of a common vision and sense of purpose between and within the faculty.	1	2	3	4	5	6	7
47. Integrating the curriculum cannot be accomplished without first 'integrating' the basic science and the clinical faculty.	1	2	3	4	5	6	7
48. The route to quality medical education is not a point of agreement between basic science and clinical faculty.	1	2	3	4	5	6	7
49. The greatest advantage to clinical contact for students during the first two years is that they will learn to distinguish between osteopathic and allopathic medicine.	1	2	3	4	5	6	7
50. Both the basic science and clinical faculties should be with the students all four years.	1	2	3	4	5	6	7
51. The curriculum should encourage students to select role models from the 'best' of basic science and clinical faculties.	1	2	3	4	5	6	7
52. The research facilities, faculty offices, and the teaching hospital should be located adjacent to each other.	1	2	3	4	5	6	7
53. The distance between campuses would not be as inconvenient if there were fewer meetings or more use made of conference telephone calls.	1	2	3	4	5	6	7

	AGREE						DISAGREE
54. The teaching hospital does not provide enough out-patients, nor clinic space.	1	2	3	4	5	6	7
55. We need more conference, lecture and meeting rooms in the teaching hospital.	1	2	3	4	5	6	7
56. Compared to other osteopathic schools, the quality of the first two years as they now stand is not to be discounted.	1	2	3	4	5	6	7
57. The predicted 'urbanization' of Stratford and the resultant diversification of the patient population makes it the only tenable site for a unified campus.	1	2	3	4	5	6	7
58. The curriculum needs no changes.	1	2	3	4	5	6	7
59. First year students should not be provided with any clinical exposure.	1	2	3	4	5	6	7
60. A program of 'guided' research is the best way to integrate basic science and clinical faculty.	1	2	3	4	5	6	7
61. It's professionally embarrassing for NJSOM not to have a unified teaching complex.	1	2	3	4	5	6	7
62. If campuses are not combined the students should be bussed down for clinical teaching one day each week during their first two years.	1	2	3	4	5	6	7
63. There aren't enough available beds in the teaching hospital.	1	2	3	4	5	6	7

	AGREE						DISAGREE
64. Students should be offered simulations during second year, but not patient contact.	1	2	3	4	5	6	7
65. My biggest complaint about JFK is that I'm not welcome there.	1	2	3	4	5	6	7
66. Clinical faculty are 'clinicians'; basic science faculty are 'scientists'; they share the role of 'educator' and that's enough.	1	2	3	4	5	6	7
67. Students need to learn normal functioning first; early clinical exposure would be too confusing.	1	2	3	4	5	6	7
68. Students currently feel that they're a product of Rutger's Medical School and JFK Hospital....not NJSOM.	1	2	3	4	5	6	7
69. NJSOM administration should be in Camden; phases of student education split between Stratford and Camden.	1	2	3	4	5	6	7
70. Meetings are currently too long to be effective because everyone wants the long drive to be "worthwhile".	1	2	3	4	5	6	7
71. The teaching hospital needs more primary care teaching examples.	1	2	3	4	5	6	7
72. One of the biggest problems associated with the split campus is communication; frequent misunderstanding and resultant delay in resolving administrative issues.	1	2	3	4	5	6	7
73. NJSOM is not currently in control of their curriculum.	1	2	3	4	5	6	7

	AGREE						DISAGREE
74. Inaccessibility of administrative support (secretarial staff, etc.) is a major problem prompted by the split campus.	1	2	3	4	5	6	7
75. Fragmenting the campus in the south is no more desirable than the current arrangement.	1	2	3	4	5	6	7
76. The teaching hospital is not maintaining up-to-date equipment.	1	2	3	4	5	6	7
77. The traditional approach to medical education should be revised in favor of non-traditional educational options.	1	2	3	4	5	6	7
78. Research and teaching resources at Rutgers are too valuable and stimulating to lose.	1	2	3	4	5	6	7
79. The reputation of any medical school is based on academic/research achievements.	1	2	3	4	5	6	7
80. A unified set of "walls" for NJSOM may be important; but the "ivy" of Rutgers should'nt be lost.	1	2	3	4	5	6	7
81. "Problem-solving" techniques are important in the first two years; actual patient exposure isn't necessary.	1	2	3	4	5	6	7
82. Introducing more clinically relevant material into the basic science curriculum is desirable.	1	2	3	4	5	6	7
83. Basic science faculty should generally have more input into course selection and curriculum planning than they do under the present system.	1	2	3	4	5	6	7

	AGREE						DISAGREE
84. A preceptorship once or twice a week in community D.O. offices during the first two years is a good idea.	1	2	3	4	5	6	7
85. Loss of the association with a graduate school is professional "death" for an academic basic scientist.	1	2	3	4	5	6	7
86. If the connection to Piscataway is maintained, efforts should be made to establish an outpatient facility there with a faculty medical director.	1	2	3	4	5	6	7
87. The library at the teaching hospital is not appropriate for osteopathic students.	1	2	3	4	5	6	7
88. Money should be spent on strengthening the existing program not trying to duplicate RMS in south Jersey.	1	2	3	4	5	6	7
89. If the split campus is maintained, those courses more closely associated with clinical medicine (pharmacology, pathology, etc.) should be moved south.	1	2	3	4	5	6	7
90. The current curriculum produces a student who regards the patient as an example of a problem, not as a 'patient' with this or that inter-connecting disease.	1	2	3	4	5	6	7
91. Two of the biggest weaknesses of the current teaching hospital situation are the lack of community-based medicine, and little attention to the 'health-oriented' approach.	1	2	3	4	5	6	7
92. Whether we remain 'split' or we unify, it is a necessity that the basic science curriculum be separated from RMS so that NJSOM can alter the curriculum to meet our aims and objectives.	1	2	3	4	5	6	7

	AGREE						DISAGREE
93. We should strongly implement the 'health maintenance concept throughout the four-year curriculum.	1	2	3	4	5	6	7
94. We should not lose the "systems" approach in efforts to revise the curriculum.	1	2	3	4	5	6	7
95. Future curricular changes must insure that we control against a biased curriculum, and that we train family practitioners as we say we do.	1	2	3	4	5	6	7
96. Lectures should be removed entirely from the third year curriculum or at least reduced substantially.	1	2	3	4	5	6	7
97. The expense of establishing a library for students and faculty away from Rutgers is one of many reasons not to unify the campuses.	1	2	3	4	5	6	7
98. NJSOM should put its' time, effort, and money into one teaching hospital that it can control.	1	2	3	4	5	6	7
99. Moving the campus to south Jersey will make it less desirable to students, and therefore contribute to recruitment problems.	1	2	3	4	5	6	7
100. The separation from RMS will weaken the quality and the reputation of NJSOM.	1	2	3	4	5	6	7
101. The 'tentativeness' of state funding for education makes a unified campus appear risky.	1	2	3	4	5	6	7
102. The continued condition of a 'split campus' is the most serious issue facing the continued growth of NJSOM.	1	2	3	4	5	6	7

Do you have further statements you would like added to this section for your colleagues' response?

II. FUTURE GROWTH/MISSIONS AND GOALS	AGREE						DISAGREE
103. The proposed plans for NJSOM are more politically attractive than pedagogically realistic.	1	2	3	4	5	6	7
104. The growing isolation of administration from faculty and students is a serious issue facing the growth of NJSOM.	1	2	3	4	5	6	7
105. The ability to attract and recruit qualified and motivated students is one of the most critical issues facing the continued growth of NJSOM.	1	2	3	4	5	6	7
106. NJSOM's greatest guarantee of future growth is its' commitment to produce quality primary care physicians.	1	2	3	4	5	6	7
107. The present missions and goals of NJSOM are appropriate and realistic.	1	2	3	4	5	6	7
108. The existing institution is making progress toward these goals.	1	2	3	4	5	6	7
109. The existing institution does not reflect any real identification with osteopathy: or its' missions and goals.	1	2	3	4	5	6	7
110. Our demonstrated interest in providing a quality educational experience for our students is the best short-range goal to improve the student's identity with NJSOM.	1	2	3	4	5	6	7
111. A clear commitment to excellence in the quality of the faculty and their teaching and research performance is the best long-range goal to improve the student's identity with NJSOM.	1	2	3	4	5	6	7

		AGREE						DISAGREE
112.	Development of a common vision for NJSOM that all faculty and administration can respect and contribute to without loss of personal goals and integrity is a serious issue affecting future institutional growth.	1	2	3	4	5	6	7
113.	The current missions and goals are little more than 'political posturing' to encourage a unified campus.	1	2	3	4	5	6	7
114.	When the 'split/unified' campus decision is resolved, meaningful missions and goals must be written.	1	2	3	4	5	6	7
115.	The only "meaningful" goals for NJSOM should be those that contribute to the education of competent care-givers who will be able to remain competent in times of inevitable technological, social and cultural change.	1	2	3	4	5	6	7
116.	A unified campus close to the teaching hospital will improve the student's identity with NJSOM.	1	2	3	4	5	6	7
117.	The Division of Research is one of the most positive moves toward the growth of NJSOM.	1	2	3	4	5	6	7
118.	An existing D.O. training program with a strong academic/clinical foundation equal to training anywhere in this country is the strength of NJSOM.	1	2	3	4	5	6	7
119.	A serious threat to future NJSOM growth will be availability of adequate space and support to recruit threshold numbers of research-oriented basic science faculty.	1	2	3	4	5	6	7
120.	Future missions and goals must be written with broader representation of full-time faculty.	1	2	3	4	5	6	7

	AGREE						DISAGREE
121. Implementing the proposed curriculum is perhaps the most serious issue facing the growth of a viable medical education program at NJSOM.	1	2	3	4	5	6	7
122. Recruiting and attracting quality clinical faculty is, and will be a severe inhibitor of continued institutional growth.	1	2	3	4	5	6	7
123. The dichotomy between stated philosophical purpose and the actual educational process at NJSOM is a problem.	1	2	3	4	5	6	7
124. Missions and goals should reflect an interest in the holistic education of physicians, support of research, and implementation of continued education and life-long professional growth.	1	2	3	4	5	6	7
125. It is apparent that the University Board is committed to the positive future of NJSOM.	1	2	3	4	5	6	7
126. The professional strength of the existing 'house staff' is a positive feature of NJSOM.	1	2	3	4	5	6	7
127. Administrative leadership toward health care issues of the 1990's is one of the most positive indications of institutional growth potential.	1	2	3	4	5	6	7
128. There are too many 'specialist faculty' oriented toward pathology for NJSOM to make progress toward its' present goal statement.	1	2	3	4	5	6	7
129. More clinical 'specialists' are needed on the full-time faculty.	1	2	3	4	5	6	7

		AGREE						DISAGREE
130.	The 'youth' of the faculty and the administration is beneficial to the growth of NJSOM.	1	2	3	4	5	6	7
131.	The institutional missions and goals are generally unknown and/or of no functional use to faculty.	1	2	3	4	5	6	7
132.	Lack of a viable relationship with the community, and other institutions is a serious threat to institutional growth.	1	2	3	4	5	6	7
133.	The institution should be responsible for providing clinical departments more services in areas of mental health counseling, social work, etc.	1	2	3	4	5	6	7
134.	It's pointless to discuss missions and goals of an institution that doesn't have administrative control of a teaching hospital.	1	2	3	4	5	6	7
135.	The resolution of "money issues" regarding clinical billing, faculty practice income, etc. must be a priority regardless of the direction of academic growth.	1	2	3	4	5	6	7
136.	The establishment of a 'tenure' system for full-time clinical faculty is of importance to the institution; and should be a future goal.	1	2	3	4	5	6	7
137.	Efforts should be made to correct the "anti-school" attitude and divisional isolationism associated hospital staffs demonstrate..before any real growth can occur.	1	2	3	4	5	6	7
138.	Post-graduate facilities to provide specialists and "super" specialists should be a goal of NJSOM.	1	2	3	4	5	6	7

	AGREE						DISAGREE
139. Continued 'infiltration' of M.D.'s into the institution should be actively discouraged.	1	2	3	4	5	6	7
140. A graduate program leading to the M.S., Ph.D., or D.O./Ph.D. should be in the future plans of NJSOM.	1	2	3	4	5	6	7
141. A graduate program with Rutgers, or another quality institution would be a political and educational advantage to NJSOM.	1	2	3	4	5	6	7
142. The decreasing need for physicians nationally causes concern for any "new" medical institution, including NJSOM.	1	2	3	4	5	6	7
143. Efforts should be made to integrate part-time and volunteer faculty with the goals of the institution.	1	2	3	4	5	6	7
144. A public relations office should be established to insure visibility of NJSOM and the profession.	1	2	3	4	5	6	7

Do you have further statements you would like added to this section for your colleagues' response?

III. OSTEOPATHIC PERSPECTIVE AND IDENTITY	AGREE						DISAGREE
145. The 'history' of osteopathic medicine should not be offered in a formal course; unnecessary use of valuable time.	1	2	3	4	5	6	7
146. Osteopathic identity and PRIDE is assured when the student clearly sees that all faculty (clinical and basic science) and administration cares about him.	1	2	3	4	5	6	7
147. Early student 'orientations', social as well as academic, with faculty D.O.'s who are "role" models representative of the school's desired profile would encourage D.O. identity during early phases of education.	1	2	3	4	5	6	7
148. A students' identity with a profession occurs during clinical exposure and training, not during academic years.	1	2	3	4	5	6	7
149. A students' identity with his/her school is of no significance in educational and professional growth.	1	2	3	4	5	6	7
150. NJSOM students do not presently get enough basic anatomy, physiology, etc. to later practice sound osteopathic fundamentals.	1	2	3	4	5	6	7
151. NJSOM should be doing more to attract, and keep D.O.s in New Jersey.	1	2	3	4	5	6	7
152. A NJSOM 'alumni association' should be a future goal to encourage identity with the school and the profession.	1	2	3	4	5	6	7
153. NJSOM has alienated members of the osteopathic profession.	1	2	3	4	5	6	7

	AGREE						DISAGREE
154. An extended orientation, a problem-approach, a preceptorship, and small-group instruction will all contribute toward improving the students' identity with NJSOM.	1	2	3	4	5	6	7
155. There is no distinction between "osteopathic" principles and the general practice of "good" medicine.	1	2	3	4	5	6	7
156. Osteopathy is being gradually absorbed into allopathic medicine.	1	2	3	4	5	6	7
157. I do not feel a need for a clear distinction between osteopathy and allopathy either in philosophy or practice.	1	2	3	4	5	6	7
158. The teaching of manipulative therapy should be included in the curriculum for all students.	1	2	3	4	5	6	7
159. Manipulative therapy should be available only to those students who seek it out.	1	2	3	4	5	6	7
160. Encouragement of primary care practice or specialties is not the role of the four-year curriculum.	1	2	3	4	5	6	7
161. I include the active teaching of osteopathic perspective in my student instruction.	1	2	3	4	5	6	7
162. The teaching of 'humanistic' practice and primary care is critical to the education of osteopathic physicians.	1	2	3	4	5	6	7
163. I subscribe to osteopathic principles and practice in 'principle' only.	1	2	3	4	5	6	7

	AGREE						DISAGREE
164. I subscribe to osteopathic principles in 'practice' as well as 'principle'.	1	2	3	4	5	6	7
165. I would be interested in taking time and effort to further develop my own knowledge and skills related to osteopathic principles and practice.	1	2	3	4	5	6	7
166. I am conducting research concerning osteopathic principles and practice.	1	2	3	4	5	6	7
167. I would be interested in conducting research concerning osteopathic principles and practice.	1	2	3	4	5	6	7
168. I have personally benefited from OMT.	1	2	3	4	5	6	7
169. OMT is more appropriate as post-graduate study.	1	2	3	4	5	6	7
170. A preceptorship in the first one or two years would be the best way to encourage an interest in primary care.	1	2	3	4	5	6	7
171. The growth of science over the past 100 years has eliminated the so-called differences between osteopathy and allopathy.	1	2	3	4	5	6	7
172. Offering a D.O./Ph.D. option to students would help validate the scientific basis of osteopathy.	1	2	3	4	5	6	7
173. Attention to primary care will encourage interns to enter practice before they're fully prepared.	1	2	3	4	5	6	7

		AGREE						DISAGREE
174.	More exposure to psycho-social assessment and counseling, resource utilization, nutrition, wellness, and family dynamics would encourage interest in primary care.	1	2	3	4	5	6	7
175.	Regular grand teaching rounds would encourage an emphasis on primary care.	1	2	3	4	5	6	7
176.	The use of OMT is basic to our philosophy of patient care.	1	2	3	4	5	6	7
177.	Primary care is the thing that D.O.'s can, and should do better than the contemporary M.D..	1	2	3	4	5	6	7
178.	All department chairs should be selected, in part, because of their interest and commitment to primary care.	1	2	3	4	5	6	7
179.	'Humanistic' practice is a given; we don't need to constantly emphasize it.	1	2	3	4	5	6	7
180.	In offering students clinical experience we need to better define the areas of family practice, primary care, and ambulatory care....they're confused!	1	2	3	4	5	6	7
181.	Loyalty to NJSOM and osteopathy should be a criterion for selection of all faculty, including basic science.	1	2	3	4	5	6	7

Do you have further statements you would like added to this section for your colleagues' response?

IV. CURRICULUM/LABORATORY SPACE	AGREE						DISAGREE
182. If the campuses remain split, separate labs for NJSOM and RMS must be arranged to encourage osteopathic awareness in NJSOM students.	1	2	3	4	5	6	7
183. 'Basic science' is 'basic science' regardless of the students' potential professional identity; separate labs are not necessary.	1	2	3	4	5	6	7
184. Separate labs for NJSOM and RMS are not as important as lab instructors who are available, responsive and good teachers.	1	2	3	4	5	6	7
185. Separate labs for NJSOM students will be an indication that they're inferior to RMS students, and perhaps to allopathic physicians.	1	2	3	4	5	6	7
186. NJSOM's early student contact with RMS in basic science courses and labs help them later establish credibility as D.O.'s and is therefore a strength of the institution.	1	2	3	4	5	6	7
187. Massive restructuring of the curriculum should be in the hands of a curriculum committee.	1	2	3	4	5	6	7
188. Administration should not be involved in curriculum change.	1	2	3	4	5	6	7
189. Whether or not there are separate, or combined labs for NJSOM and RMS students, the osteopathic students are identified and discriminated against.	1	2	3	4	5	6	7
190. Changes in curriculum should generally be made at the department level.	1	2	3	4	5	6	7

	AGREE						DISAGREE
191. If electives are available to students they should be in keeping with the missions and goals of the school (wellness, nutrition, family dynamics, etc.).	1	2	3	4	5	6	7
192. The 'revised educational plan' will effectively integrate didactic and clinical education.	1	2	3	4	5	6	7
193. I would like to see some restructuring of departments.	1	2	3	4	5	6	7
194. The process of selection, and time served for the curriculum committee membership should be reviewed.	1	2	3	4	5	6	7
195. The curriculum committee should provide faculty with more detailed and frequent reports of their activities.	1	2	3	4	5	6	7
196. The independent basic science departments should be maintained if the campuses are unified.	1	2	3	4	5	6	7

Do you have further statements you would like added to this section for your colleagues' response?

V. ADMINISTRATION	AGREE						DISAGREE
197. Lack of effective communication between upper administration and faculty is a serious issue at NJSOM.	1	2	3	4	5	6	7
198. Lack of effective communication between department chairpersons and faculty is a serious issue at NJSOM.	1	2	3	4	5	6	7
199. The administration appeare to have little regard or respect for faculty needs, or strengths.	1	2	3	4	5	6	7
200. The administration appears to function in response to a "drummer" not heard by most faculty!	1	2	3	4	5	6	7
201. The budget process in my department guarantees a fair and adequate distribution of funds.	1	2	3	4	5	6	7
202. Administrators, at least at the lower levels, should be voted on by faculty they'll be working with.	1	2	3	4	5	6	7
203. Set time periods for administrators would discourage dictatorial tendencies.	1	2	3	4	5	6	7
204. My department needs more faculty to deal with our present demands.	1	2	3	4	5	6	7
205. Upper level administrators should possess a broad sense of political expertise.	1	2	3	4	5	6	7
206. Central level administrators are doing a good job of implementing the goals of the top administrators.	1	2	3	4	5	6	7
207. Top level administrators are working in agreement with the missions and goals of the school.	1	2	3	4	5	6	7

	AGREE						DISAGREE
208. Most faculty aren't very aware of administrators above department chairperson level.	1	2	3	4	5	6	7
209. Administrators should be evaluated by appropriate faculty yearly for renewal options.	1	2	3	4	5	6	7
210. NJSOM administration cannot be effective as long as they're associated with UMDNJ administrative structure.	1	2	3	4	5	6	7
211. A department budget committee is the best way to ensure equitable funding.	1	2	3	4	5	6	7
212. There should be a prescribed and consistent system for communication between administration and faculty.	1	2	3	4	5	6	7
213. When the upper level of administration is no longer involved in the 'campus unification' process, I am optimistic that communication and management will be better.	1	2	3	4	5	6	7
214. Communication between administration and department chairpersons is adequate.	1	2	3	4	5	6	7
215. NJSOM students should be involved in all institutional committees.	1	2	3	4	5	6	7
216. The chairmanship of a department should be on a five-year or less rotation.	1	2	3	4	5	6	7
Do you have further statements you would like added to this section for your colleagues' response?							

VI. TEACHING AND EVALUATION	AGREE						DISAGREE
217. I would welcome the opportunity for basic science/ clinical "team teaching".	1	2	3	4	5	6	7
218. I would prefer to lecture to large groups of students without much personal contact.	1	2	3	4	5	6	7
219. I would enjoy learning the role of 'small group facilitator'.	1	2	3	4	5	6	7
220. Self-directed student learning is desirable because it releases me from my heavy teaching responsibility.	1	2	3	4	5	6	7
221. I don't understand how 'student-directed' learning fits into a medical education program.	1	2	3	4	5	6	7
222. I don't think self-directed learning is appropriate for most phases of medical education.	1	2	3	4	5	6	7
223. All faculty should have more input into their individual course selection and content.	1	2	3	4	5	6	7
224. The institution makes a fair and accurate evaluation of my teaching skills.	1	2	3	4	5	6	7
225. Competent, and adequate secretarial support is available to assist me in teaching.	1	2	3	4	5	6	7
226. I make use of simulation models, and/or computer-assisted instruction in my teaching.	1	2	3	4	5	6	7
227. I would like information on the use of computer-assisted instruction.	1	2	3	4	5	6	7

	AGREE						DISAGREE
228. My teaching would benefit from a workshop on aspects of instructional preparation such as writing objectives, developing self-instructional materials, etc.	1	2	3	4	5	6	7
229. I am in agreement with my departments approach to the selection of my teaching assignments.	1	2	3	4	5	6	7
230. My department head 'dictates' what I teach.	1	2	3	4	5	6	7
231. The present system of student course evaluation is adequate.	1	2	3	4	5	6	7
232. Peer review of teaching is a good idea.	1	2	3	4	5	6	7
233. Administrative review of teaching is generally biased and of no real use.	1	2	3	4	5	6	7
234. I am encouraged by my department head to try innovative course design and implementation.	1	2	3	4	5	6	7
235. Student's test performance is the best measure of teaching effectiveness.	1	2	3	4	5	6	7
236. I offer assistance to students who are having academic difficulty.	1	2	3	4	5	6	7
237. The curriculum committee should be dealing with the design and implementation of course evaluations.	1	2	3	4	5	6	7
238. There is no consistent system for student evaluation of teaching.	1	2	3	4	5	6	7

	AGREE						DISAGREE
239. On-site evaluation of teaching by peers and administration is a violation of academic freedom.	1	2	3	4	5	6	7
240. Intuitive measures of teaching effectiveness are more reliable than objective criteria.	1	2	3	4	5	6	7
241. Student performance on the 'Boards' is the best measure of institutional teaching effectiveness.	1	2	3	4	5	6	7
242. In the area of teaching, the association with RMS is not of benefit to NJSOM faculty.	1	2	3	4	5	6	7

Do you have further statements you would like added to this section for your colleagues' response?

VII. TENURE/PROMOTION; SALARY AND MERIT	AGREE						DISAGREE
243. Clinical faculty do not practice their three-fold responsibility to the institution: teaching, research and service.	1	2	3	4	5	6	7
244. I feel that the following percentages are utilized in tenure/promotion decisions: research 50% teaching 25% service 25% other 0%	1	2	3	4	5	6	7
245. I feel that the following percentages are utilized in tenure/promotion decisions: research 25% teaching 25% service 0% 'good old boy' network 50%	1	2	3	4	5	6	7
246. I feel that the following percentages are utilized in tenure/promotion decisions: research 33 1/3 % teaching 33 1/3 % service 33 1/3 %	1	2	3	4	5	6	7
247. I feel that the following percentages <u>should</u> be utilized in tenure/promotion decisions: research 50% teaching 25% service 25%	1	2	3	4	5	6	7
248. I feel that the following percentages <u>should</u> be utilized in tenure/promotion decisions: research 30% teaching 30% service 20% other 20%	1	2	3	4	5	6	7

	AGREE						DISAGREE
249. I feel that the following percentages <u>should</u> be utilized in tenure/promotion decisions: research 20% teaching 40% service 40%	1	2	3	4	5	6	7
250. I feel that the following percentages <u>should</u> be utilized in tenure/promotion decisions: research 33 1/3% teaching 33 1/3% service 33 1/3%	1	2	3	4	5	6	7
251. All faculty on tenure track should be evaluated with the same criterion.	1	2	3	4	5	6	7
252. An annually renewable (non-tenure track) appointment should not be subject to the same evaluation criterion as a tenure-track position.	1	2	3	4	5	6	7
253. The 'research/publication' pressure is generating a lot of useless paper that I don't want to be part of!	1	2	3	4	5	6	7
254. The procedures for terminating faculty appointments at NJSOM are appropriate and adequate.	1	2	3	4	5	6	7
255. The procedures for a formal grievance appeal are stated clearly.	1	2	3	4	5	6	7
256. I devote between one and four hours each week to active academic teaching in the classroom.	1	2	3	4	5	6	7
257. I devote more than four hours each week to active teaching in the classroom.	1	2	3	4	5	6	7

	AGREE						DISAGREE
258. I devote between ten and twenty hours each week to clinical teaching.	1	2	3	4	5	6	7
259. I devote more than twenty hours each week to clinical teaching.	1	2	3	4	5	6	7
260. I devote between twenty and thirty hours each week to patient treatment.	1	2	3	4	5	6	7
261. I devote more than thirty hours each week to patient treatment.	1	2	3	4	5	6	7
262. I devote between five and fifteen hours each week to individual and/or institutional research.	1	2	3	4	5	6	7
263. I devote more than fifteen hours each week to individual and/or institutional research.	1	2	3	4	5	6	7
264. I devote between one and three hours each week to institutional committees.	1	2	3	4	5	6	7
265. I devote more than three hours each week to institutional committees.	1	2	3	4	5	6	7
266. I devote between twenty and thirty hours each week to administrative responsibilities.	1	2	3	4	5	6	7
267. I devote more than thirty hours each week to administrative responsibilities.	1	2	3	4	5	6	7
268. I devote three hours or more a week to travel between campuses.	1	2	3	4	5	6	7

		AGREE
269.	I attend at least one professional meeting each year where I am on the program	1 2 3 4 5 6 7
270.	I experience no difficulty receiving institutional funds to attend meetings when I am on the program.	1 2 3 4 5 6 7
271.	I have published in the last academic year.	1 2 3 4 5 6 7
272.	I expect to publish in the up-coming academic year.	1 2 3 4 5 6 7
273.	I have sufficient time for research.	1 2 3 4 5 6 7
274.	I receive adequate institutional funding for research.	1 2 3 4 5 6 7
275.	I feel it is my obligation to obtain my own research grants.	1 2 3 4 5 6 7
276.	I receive adequate informational support to do my own research.	1 2 3 4 5 6 7
277.	I have adequate space and staff to do research.	1 2 3 4 5 6 7
278.	Pay scales for basic science and clinical faculty should be different.	1 2 3 4 5 6 7
279.	Basic science and clinical faculty should receive the same benefits.	1 2 3 4 5 6 7
280.	Present salaries are adequate to attract and retain quality basic sceince faculty.	1 2 3 4 5 6 7

		AGREE						DISAGREE
281.	Present salaries are adequate to attract and retain quality clinical faculty.	1	2	3	4	5	6	7
282.	Merit pay raises should be based on principles developed by discussion and agreement between faculty and administrators.	1	2	3	4	5	6	7
283.	Merit pay should be based on an assessment of each person as an individual, not on percentage weights.	1	2	3	4	5	6	7
284.	Equal pay raises for all members of a department are more desirable than pay raises based on merit.	1	2	3	4	5	6	7
285.	Clear, visible academic standards for student performance is one of the most important features to attract and retain quality faculty.	1	2	3	4	5	6	7
286.	Opportunities for clinical faculty to learn research techniques and concurrent support for clinical research is important to attract and retain quality faculty.	1	2	3	4	5	6	7
287.	A total program for research support is the most critical factor to attract and retain faculty.	1	2	3	4	5	6	7
288.	Academic freedom and an atmosphere of collegiality are the most important features for attracting and retaining good faculty.	1	2	3	4	5	6	7
289.	A strong, working relationship with a graduate university is the most important feature for the attraction of basic science faculty to NJSOM.	1	2	3	4	5	6	7
290.	Teaching and clinical expertise should be larger contributing factors than research for the promotion of clinical faculty.	1	2	3	4	5	6	7

		AGREE						DISAGREE
291.	Basic science faculty should expect more emphasis on research and publication, and less on teaching and service in matters of merit pay, promotion, and tenure.	1	2	3	4	5	6	7
292.	Basic science faculty contribute to the total institution by publication, reading papers, etc. and therefore should receive a small percentage of the faculty practice profit.	1	2	3	4	5	6	7
293.	A percentage of the faculty practice profit for basic science faculty would be an important feature to attract quality basic science people to a small institution such as NJSOM.	1	2	3	4	5	6	7
294.	Competitive salaries and pay raises are the most important way to attract and keep good faculty.	1	2	3	4	5	6	7
295.	Clinical faculty have less time for research therefore they should not be judged on the basis of publications.	1	2	3	4	5	6	7
296.	Clinical faculty should be reviewed yearly, including objective examinations, to determine levels of clinical competency.	1	2	3	4	5	6	7
297.	Incentive reimbursements for dollars brought in to NJSOM would be a way to attract and retain faculty.	1	2	3	4	5	6	7
298.	The clinical faculty practice plan should be more flexible.	1	2	3	4	5	6	7
299.	Family practitioners are critical to the efficiency of the "specialists" practice..they should be rewarded by an institution like NJSOM.	1	2	3	4	5	6	7
300.	Years of employment should be considered in pay/promotion decisions.	1	2	3	4	5	6	7

	AGREE						DISAGREE
301. Merit pay raises should be judged by a committee of peers including the department chairpersons.	1	2	3	4	5	6	7
302. The clinical faculty practice plan is not yet a reality.	1	2	3	4	5	6	7
303. A good clinical practice plan is vital to attracting and maintaining clinical faculty; and should be a priority.	1	2	3	4	5	6	7
304. The concept of tenure is outmoded.	1	2	3	4	5	6	7
305. People who spend more than 50% of their time in administrative responsibility should be exempt from teaching and research.	1	2	3	4	5	6	7
306. I would like more specific information on reasons for, and procedures for terminating faculty appointments.	1	2	3	4	5	6	7
307. I have devoted twenty hours or more to postgraduate formal education this academic year.	1	2	3	4	5	6	7
308. NJSOM needs the addition of support staff in the areas of health education, research nursing, psychology, and medical education.	1	2	3	4	5	6	7
309. An adequate travel budget for all full-time faculty is needed to encourage faculty morale.	1	2	3	4	5	6	7
310. In general terms the clinical faculty practice plan is disorganized, mismanaged and grossly unfair.	1	2	3	4	5	6	7
311. It is inappropriate to expect clinical faculty to research just as it is inappropriate to expect basic scientists to treat patients.	1	2	3	4	5	6	7

		AGREE						DISAGREE
312.	The faculty affairs committee should keep the faculty better informed on the tenure process.	1	2	3	4	5	6	7
313.	Salaries are adequate to attract basic science, and clinical faculty...but not to retain them.	1	2	3	4	5	6	7
314.	Chairpersons should independently make evaluations concerning merit pay raises.	1	2	3	4	5	6	7
315.	Faculty should make merit "contracts" with their chairman at the beginning of each academic year; merit pay should be based on whether they meet the terms in their contracts.	1	2	3	4	5	6	7
316.	The present clinical faculty practice plan does not encourage incentive.	1	2	3	4	5	6	7
317.	National and international recognition for contributions to the profession should be a requirement for merit in addition to, or in lieu of research.	1	2	3	4	5	6	7
318.	A clinical faculty practice plan should be based on contingencies and profit incentives.	1	2	3	4	5	6	7
319.	Evidence of leadership, loyalty, and initiative are important in tenure and promotion decisions.	1	2	3	4	5	6	7
320.	Departmental autonomy is critical to a successful clinical faculty practice plan.	1	2	3	4	5	6	7
321.	Academic freedom is not practiced to any great extent at NJSOM.	1	2	3	4	5	6	7

	AGREE						DISAGREE
322. Recruitment and selection of faculty is based on the individual's qualities and anticipated contribution to the missions and goals of NJSOM.	1	2	3	4	5	6	7
323. The 'search' process for new faculty in clinical and basic science is a farce.	1	2	3	4	5	6	7
324. 'Loyalty' to the institution is best measured by a faculty members' commitment of time and energy to his job.	1	2	3	4	5	6	7

Do you have further statements you would like to add to this section for your colleagues' response?

VIII. STUDENTS/ADMISSIONS	AGREE						DISAGREE
325. The poor quality of applicants for admission is a serious concern to most faculty.	1	2	3	4	5	6	7
326. The concept of meeting "quotas" (sex, minorities, etc.) is not appropriate in student admissions.	1	2	3	4	5	6	7
327. Only G.P.A.'s well above 3.0 should be considered for admission to NJSOM.	1	2	3	4	5	6	7
328. Students older than 25 should not be considered for admission to NJSOM.	1	2	3	4	5	6	7
329. Appealing to the older, minority, non-traditionally prepared student is the only way NJSOM can survive.	1	2	3	4	5	6	7
330. Preference should be given to prospective students with traditional pre-med preparation.	1	2	3	4	5	6	7
331. MCAT scores are emphasized too much in the admissions process.	1	2	3	4	5	6	7
332. I'm not familiar with the admissions requirements or the process of selection.	1	2	3	4	5	6	7
333. Extensive counseling services should be available to students who may be having academic difficulties because of stress and personal problems.	1	2	3	4	5	6	7
334. A counseling support staff for students and their families would be a good student recruitment incentive.	1	2	3	4	5	6	7

	AGREE						DISAGREE
335. A young, un-married student with good MCAT scores, & a high GPA is still the best candidate for med school (osteopathic or allopathic).	1	2	3	4	5	6	7
336. Admitting students with degrees in other than pre-med virtually guarantees academic difficulty in the first two years.	1	2	3	4	5	6	7
337. Student Affairs should organize more combined faculty-administration-student social occasions to encourage a sense of comraderie.	1	2	3	4	5	6	7
338. Enrolled student representatives should participate in new student admissions.	1	2	3	4	5	6	7
339. The University granting the bachelor's degree, and the class rank are more significant than G.P.A. or MCATs.	1	2	3	4	5	6	7
340. My exposure to current students reflects the capability of our present admissions procedures.	1	2	3	4	5	6	7
341. The concern to be addressed regarding admissions is not how to evaluate what we have, but how to improve the over-all quality of the applicant pool.	1	2	3	4	5	6	7
Do you have further statements you would like added to this section for your colleagues' responses?							

APPENDIX E

Delphi Round III Instrument

NEW JERSEY SCHOOL OF OSTEOPATHIC MEDICINE

DELPHI SELF-STUDY

ROUND III

As was stated in the beginning, the purpose of this study is to establish a consensus of opinion on faculty generated items included within the general categories of (1) campus/ curriculum, (2) future growth/missions and goals, (3) osteopathic perspective and identity, (4) curriculum/laboratory space, (5) administration, (6) teaching and evaluation; (7) tenure/promotion, salary and merit; and (8) students/admissions.

Formated onto this Round III form is statistical data compiled from all the Round II responses in terms of median (M) and quartile interval (Q1 - Q3). The quartile interval contains the middle 50 percent of the total responses; its size gives you some indication of how widely the responses differed from one another. The median (M) reflects the midpoint of all responses to each statement.

In keeping with the Delphi Research method, Round III presents the opportunity for reevalatuion of your thinking. As you compare your Round II response to that of the faculty as a whole, it is requested that you revise your response on Round III in keeping with the group opinion. If your Round III response remains outside the quartile interval (i.e. lower than the Q1 designation or higher than the Q3 designation), we ask that you offer a written explanation in the space directly below the question. If additional space is needed, please use the back of the questionnaire pages. Feel free to comment even though your response is within the quartile interval, should you so desire.

Additional statements have been added to this Round III form. Please respond to these and provide any comment you wish.

A final report of this study with additional statistics will be provided. Thank you again for your interest, and thoughtful comments.

NJSOM DELPHI SELF-STUDY 1983
ROUND III QUESTIONNAIRE

I. CAMPUS/CURRICULUM	AGREE ... DISAGREE
1. The present 'split campus' is a positive situation for my purposes.	Q1 = 6.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 7.0
2. The present 'split campus' has been to my disadvantage most of the time.	Q1 = 1.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 1.5
3. A unified campus would be more convenient in every way.	Q1 = 1.0/Q3 = 2.0 1 2 3 4 5 6 7 M = 1.0
4. The present 'split campus' offers advantages to the students.	Q1 = 4.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.5
5. A 'split campus' is not cost effective.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 1.5
6. A 'split campus' discourages collaborative research.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 1.0
7. A unified campus would encourage better faculty relations.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 1.0
8. A 'split campus' prevents collegiality.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 2.0
9. A unified campus would encourage better rapport between faculty and students.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 1.0
10. A 'split campus' prevents students from contact with clinical role models.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 1.0
11. Stratford is the ideal place for a unified campus.	1 Q1 = 1.0/Q3 = 5.0 6 7 M = 1.5
12. With the new research facility, and some planning: Camden is the ideal site.	Q1 = 4.0/Q3 = 7.0 M = 6.0 1 2 3 4 5 6 7

	AGREE 1 2 3 4 5 6 7 DISAGREE
13. A unified campus at Cherry Hill would benefit the hospital, the community, and the school.	Q1 = 4.0/Q3 = 6.0 M = 4.0
14. Camden is not a desirable environment for faculty or students.	Q1 = 1.0/Q3 = 3.0 M = 1.0
15. A unified campus at a site other than Stratford is best.	Q1 = 4.0/Q3 = 7.0 M = 5.5
16. Location in Stratford would encourage development of an integrated curriculum that is problem-oriented and student-directed.	Q1 = 1.0/Q3 = 4.0 M = 2.0
17. A unified campus in Stratford would encourage the continued feelings of poor "stepsisters" at our major hospital.	Q1 = 3.0/Q3 = 6.5 M = 4.0
18. A unified campus would encourage integration of pre-clinical and clinical courses.	Q1 = 1.0/Q3 = 2.0 M = 1.0
19. The community needs us more in Camden.	Q1 = 3.0/Q3 = 7.0 M = 4.0
20. The integration of basic science and clinical science in one place is critical to growth.	Q1 = 1.0/Q3 = 3.0 M = 1.0
21. If the campuses cannot be combined, the present system for offering first and second year students clinical experience/education should be continued.	Q1 = 1.0/Q3 = 4.0 M = 2.0
22. The 'split campus' causes me loss of professional and personal time.	Q1 = 1.0/Q3 = 3.0 M = 1.0
23. Isolation from the pre-clinical faculty, or the clinical faculty has not been a problem for me.	Q1 = 3.0/Q3 = 7.0 M = 6.0

	AGREE ... DISAGREE
24. The current teaching hospitals' commitment to NJSOM is questionable.	1 2 3 4 5 6 7 Q1 = 2.0/Q3 = 6.0 M = 4.0
25. The current teaching hospital facilities are good.	Q1 = 2.5/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
26. The teaching hospital is not committed to quality care.	Q1 = 4.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
27. More NJSOM students should be required to rotate at Cherry Hill and other sites.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 4.0
28. A problem-oriented and student-directed curriculum is best for us whether the campus is split or unified.	Q1 = 1.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 4.0
29. The systems approach is artificial and needs revision.	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 4.0
30. An integrated curriculum simply means combining the existing basic science and clinical courses.	Q1 = 3.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 5.0
31. An integrated curriculum means more work, and less certainty about my role as an educator.	Q1 = 2.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 4.0
32. An integrated curriculum can only be possible if the campuses are unified.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 2.0
33. If the campuses are not combined a 'mini' (1 to 2 month) preceptorship in the summer between first and second years should be added.	Q1 = 3.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 4.0
34. I would like more contact with first and second year students.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 1.0

	AGREE 1 2 3 4 5 6 7 DISAGREE
35. Improved clinic status would make the current teaching hospital facilities more desirable.	Q1 = 1.0/Q3 = 3.0 M = 2.0
36. Removing basic science faculty from Piscataway will limit their professional growth.	Q1 = 2.0/Q3 = 6.0 M = 6.0
37. Removing basic science faculty from Piscataway will require a substantial increase in their teaching load.	Q1 = 2.0/Q3 = 6.0 M = 4.0
38. If basic science faculty are moved to Camden or Stratford they will be forced to travel to Piscataway for continued education and research.	Q1 = 3.0/Q3 = 7.0 M = 4.5
39. Students are subject to 'fragmentation' by the current split campus conditions.	Q1 = 1.0/Q3 = 2.0 M = 1.0
40. It would not be cost-effective or educationally sound to try and duplicate the basic science education in Stratford or Camden.	Q1 = 4.0/Q3 = 7.0 M = 6.0
41. If the campuses remain split, the curriculum cannot be changed.	Q1 = 3.0/Q3 = 6.0 M = 5.0
42. The strength of the basic science curriculum is currently the strength of NJSOM.	Q1 = 4.0/Q3 = 7.0 M = 5.0
43. Quality basic science faculty would not be attracted to an integrated four-year osteopathic curriculum.	Q1 = 4.0/Q3 = 7.0 M = 6.0
44. The quality of basic science instruction will be difficult to maintain if there is integration of clinical and basic science curriculum.	Q1 = 4.0/Q3 = 7.0 M = 6.0

	AGREE ... DISAGREE
45. Students have only two years to concentrate on understanding the scientific foundation of medicine; they have a life-time of clinical practice...keep the curriculum as it is.	Q1 = 4.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
46. Physical distance between the campuses is not as difficult as the lack of a common vision and sense of purpose between and within the faculty.	Q1 = 2.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 3.0
47. Integrating the curriculum cannot be accomplished without first 'integrating' the basic science and the clinical faculty.	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 3.0
48. The route to quality medical education is not a point of agreement between basic science and clinical faculty.	Q1 = 2.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 4.0
49. The greatest advantage to clinical contact for students during the first two years is that they will learn to distinguish between osteopathic and allopathic medicine.	Q1 = 3.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
50. Both the basic science and clinical faculties should be with the students all four years.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 2.0
51. The curriculum should encourage students to select role models from the 'best' of basic science and clinical faculties.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 1.0
52. The research facilities, faculty offices, and the teaching hospital should be located adjacent to each other.	Q1 = 1.0/Q3 = 2.0 1 2 3 4 5 6 7 M = 1.0
53. The distance between campuses would not be as inconvenient if there were fewer meetings or more use made of conference telephone calls.	Q1 = 2.0/Q3 = 7.0 M = 4.0 1 2 3 4 5 6 7

	AGREE 1 2 3 4 5 6 7 DISAGREE
54. The teaching hospital does not provide enough out-patients, nor clinic space.	Q1 = 1.0/Q3 = 4.0 M = 2.0
55. We need more conference, lecture and meeting rooms in the teaching hospital.	Q1 = 1.0/Q3 = 2.0 1 2 3 4 5 6 7 M = 1.0
56. Compared to other osteopathic schools, the quality of the first two years as they now stand is not to be discounted.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 1.0
57. The predicted 'urbanization' of Stratford and the resultant diversification of the patient population makes it the only tenable site for a unified campus.	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 4.0
58. The curriculum needs no changes.	Q1 = 5.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 7.0
59. First year students should not be provided with any clinical exposure.	Q1 = 5.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 7.0
60. A program of 'guided' research is the best way to integrate basic science and clinical faculty.	Q1 = 2.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 4.0
61. It's professionally embarrassing for NJSOM not to have a unified teaching complex.	Q1 = 1.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 2.0
62. If campuses are not combined the students should be bussed down for clinical teaching one day each week during their first two years.	Q1 = 2.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 4.0
63. There aren't enough available beds in the teaching hospital.	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 4.0

	AGREE DISAGREE
64. Students should be offered simulations during second year, but not patient contact.	1 2 3 4 5 6 7 Q1 = 4.0/Q3 = 7.0 M = 6.0
65. My biggest complaint about JFK is that I'm not welcome there.	Q1 = 4.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 7.0
66. Clinical faculty are 'clinicians'; basic science faculty are 'scientists'; they share the role of 'educator' and that's enough.	Q1 = 4.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
67. Students need to learn normal functioning first; early clinical exposure would be too confusing.	Q1 = 3.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
68. Students currently feel that they're a product of Rutger's Medical School and JFK Hospital....not NJSOM.	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 3.5
69. NJSOM administration should be in Camden; phases of student education split between Stratford and Camden.	Q1 = 3.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
70. Meetings are currently too long to be effective because everyone wants the long drive to be "worthwhile".	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 4.0
71. The teaching hospital needs more primary care teaching examples.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
72. One of the biggest problems associated with the split campus is communication; frequent misunderstanding and resultant delay in resolving administrative issues.	Q1 = 1.0/Q3 = 4.0 M = 2.0 1 2 3 4 5 6 7
73. NJSOM is not currently in control of their curriculum.	Q1 = 1.0/Q3 = 4.0 M = 2.0 1 2 3 4 5 6 7

	AGREE 1 2 3 4 5 6 7 DISAGREE
74. Inaccessibility of administrative support (secretarial staff, etc.) is a major problem prompted by the split campus.	Q1 = 1.0/Q3 = 5.0 M = 3.0
75. Fragmenting the campus in the south is no more desirable than the current arrangement.	Q1 = 1.0/Q3 = 6.0 M = 3.0
76. The teaching hospital is not maintaining up-to-date equipment.	Q1 = 3.0/Q3 = 4.0 M = 4.0
77. The traditional approach to medical education should be revised in favor of non-traditional educational options.	Q1 = 2.0/Q3 = 6.0 M = 3.5
78. Research and teaching resources at Rutgers are too valuable and stimulating to lose.	Q1 = 3.0/Q3 = 7.0 M = 5.0
79. The reputation of any medical school is based on academic/research achievements.	Q1 = 1.0/Q3 = 4.0 M = 2.0
80. A unified set of "walls" for NJSOM may be important; but the "ivy" of Rutgers should'nt be lost.	Q1 = 3.0/Q3 = 7.0 M = 6.0
81. "Problem-solving" techniques are important in the first two years; actual patient exposure isn't necessary.	Q1 = 3.0/Q3 = 6.0 M = 5.0
82. Introducing more clinically relevant material into the basic science curriculum is desirable.	Q1 = 1.0/Q3 = 3.0 M = 2.0
83. Basic science faculty should generally have more input into course selection and curriculum planning than they do under the present system.	Q1 = 2.0/Q3 = 4.0 M = 4.0

	AGREE 1 2 3 4 5 6 7 DISAGREE
84. A preceptorship once or twice a week in community D.O. offices during the first two years is a good idea.	Q1 = 2.0/Q3 = 5.0 M = 3.0
85. Loss of the association with a graduate school is professional "death" for an academic basic scientist.	Q1 = 2.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 4.0
86. If the connection to Piscataway is maintained, efforts should be made to establish an outpatient facility there with a faculty medical director.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
87. The library at the teaching hospital is not appropriate for osteopathic students.	Q1 = 2.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 4.0
88. Money should be spent on strengthening the existing program not trying to duplicate RMS in south Jersey.	Q1 = 3.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
89. If the split campus is maintained, those courses more closely associated with clinical medicine (pharmacology, pathology, etc.) should be moved south.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
90. The current curriculum produces a student who regards the patient as an example of a problem, not as a 'patient' with this or that inter-connecting disease.	Q1 = 3.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 4.0
91. Two of the biggest weaknesses of the current teaching hospital situation are the lack of community-based medicine, and little attention to the 'health-oriented' approach.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.5
92. Whether we remain 'split' or we unify, it is a necessity that the basic science curriculum be separated from RMS so that NJSOM can alter the curriculum to meet our aims and objectives.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 2.0

		AGREE 1 2 3 4 5 6 7 DISAGREE
93.	We should strongly implement the 'health maintenance concept throughout the four-year curriculum.	Q1 = 1.0/Q3 = 3.0 M = 2.0
94.	We should not lose the "systems" approach in efforts to revise the curriculum.	Q1 = 2.0/Q3 = 4.0 M = 4.0
95.	Future curricular changes must insure that we control against a biased curriculum, and that we train family practitioners as we say we do.	Q1 = 1.0/Q3 = 3.5 M = 2.0
96.	Lectures should be removed entirely from the third year curriculum or at least reduced substantially.	Q1 = 2.0/Q3 = 6.0 M = 4.0
97.	The expense of establishing a library for students and faculty away from Rutgers is one of many reasons not to unify the campuses.	Q1 = 4.0/Q3 = 7.0 M = 6.5
98.	NJSOM should put its' time, effort, and money into one teaching hospital that it can control.	Q1 = 1.0/Q3 = 5.0 M = 3.0
99.	Moving the campus to south Jersey will make it less desirable to students, and therefore contribute to recruitment problems.	Q1 = 5.0/Q3 = 7.0 M = 7.0
100.	The separation from RMS will weaken the quality and the reputation of NJSOM.	Q1 = 4.0/Q3 = 7.0 M = 6.0
101.	The 'tentativeness' of state funding for education makes a unified campus appear risky.	Q1 = 3.0/Q3 = 6.5 M = 4.0
102.	The continued condition of a 'split campus' is the most serious issue facing the continued growth of NJSOM.	Q1 = 1.0/Q3 = 3.0 M = 2.0

II. FUTURE GROWTH/MISSIONS AND GOALS	AGREE 1 2 3 4 5 6 7 DISAGREE
103. The proposed plans for NJSOM are more politically attractive than pedagogically realistic.	Q1 = 3.0/Q3 = 6.0 M = 4.5
104. The growing isolation of administration from faculty and students is a serious issue facing the growth of NJSOM.	Q1 = 1.0/Q3 = 4.0 M = 2.0
105. The ability to attract and recruit qualified and motivated students is one of the most critical issues facing the continued growth of NJSOM.	Q1 = 1.0/Q3 = 4.0 M = 2.5
106. NJSOM's greatest guarantee of future growth is its' commitment to produce quality primary care physicians.	Q1 = 1.0/Q3 = 3.0 M = 2.0
107. The present missions and goals of NJSOM are appropriate and realistic.	Q1 = 1.0/Q3 = 4.0 M = 2.0
108. The existing institution is making progress toward these goals.	Q1 = 2.0/Q3 = 4.0 M = 3.0
109. The existing institution does not reflect any real identification with osteopathy: or its' missions and goals.	Q1 = 2.0/Q3 = 5.0 M = 4.0
110. Our demonstrated interest in providing a quality educational experience for our students is the best short-range goal to improve the student's identity with NJSOM.	Q1 = 1.0/Q3 = 2.0 M = 2.0
111. A clear commitment to excellence in the quality of the faculty and their teaching and research performance is the best long-range goal to improve the student's identity with NJSOM.	Q1 = 1.0/Q3 = 2.0 M = 1.0

	AGREE 1 2 3 4 5 6 7 DISAGREE
112. Development of a common vision for NJSOM that <u>all</u> faculty and administration can respect and contribute to without loss of personal goals and integrity is a serious issue affecting future institutional growth.	Q1 = 1.0/Q3 = 3.0 M = 2.0
113. The current missions and goals are little more than 'political posturing' to encourage a unified campus.	Q1 = 3.0/Q3 = 6.0 M = 4.0
114. When the 'split/unified' campus decision is resolved, meaningful missions and goals must be written.	Q1 = 1.0/Q3 = 3.0 M = 1.0
115. The only "meaningful" goals for NJSOM should be those that contribute to the education of competent care-givers who will be able to remain competent in times of inevitable technological, social and cultural change.	Q1 = 1.0/Q3 = 4.0 M = 3.0
116. A unified campus close to the teaching hospital will improve the student's identity with NJSOM.	Q1 = 1.0/Q3 = 2.0 M = 1.0
117. The Division of Research is one of the most positive moves toward the growth of NJSOM.	Q1 = 1.0/Q3 = 4.0 M = 3.0
118. An existing D.O. training program with a strong academic/clinical foundation equal to training anywhere in this country is the strength of NJSOM.	Q1 = 1.0/Q3 = 3.0 M = 2.0
119. A serious threat to future NJSOM growth will be availability of adequate space and support to recruit threshold numbers of research-oriented basic science faculty.	Q1 = 1.0/Q3 = 4.0 M = 2.0
120. Future missions and goals must be written with broader representation of full-time faculty.	Q1 = 1.0/Q3 = 4.0 M = 2.5

	AGREE ... DISAGREE
121. Implementing the proposed curriculum is perhaps the most serious issue facing the growth of a viable medical education program at NJSOM.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
122. Recruiting and attracting quality clinical faculty is, and will be a severe inhibitor of continued institutional growth.	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 3.0
123. The dichotomy between stated philosophical purpose and the actual educational process at NJSOM is a problem.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
124. Missions and goals should reflect an interest in the holistic education of physicians, support of research, and implementation of continued education and life-long professional growth.	Q1 = 1.0/Q3 = 2.0 1 2 3 4 5 6 7 M = 1.0
125. It is apparent that the University Board is committed to the positive future of NJSOM.	Q1 = 3.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 4.0
126. The professional strength of the existing 'house staff' is a positive feature of NJSOM.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 2.0
127. Administrative leadership toward health care issues of the 1990's is one of the most positive indications of institutional growth potential.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
128. There are too many 'specialist faculty' oriented toward pathology for NJSOM to make progress toward its' present goal statement.	Q1 = 3.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 5.0
129. More clinical 'specialists' are needed on the full-time faculty.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 4.0

	AGREE ... DISAGREE
130. The 'youth' of the faculty and the administration is beneficial to the growth of NJSOM.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 2.0
131. The institutional missions and goals are generally unknown and/or of no functional use to faculty.	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 3.0
132. Lack of a viable relationship with the community, and other institutions is a serious threat to institutional growth.	Q1 = 1.5/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
133. The institution should be responsible for providing clinical departments more services in areas of mental health counseling, social work, etc.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 2.0
134. It's pointless to discuss missions and goals of an institution that doesn't have administrative control of a teaching hospital.	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 4.0
135. The resolution of "money issues" regarding clinical billing, faculty practice income, etc. must be a priority regardless of the direction of academic growth.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 2.0
136. The establishment of a 'tenure' system for full-time clinical faculty is of importance to the institution; and should be a future goal.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 2.0
137. Efforts should be made to correct the "anti-school" attitude and divisional isolationism associated hospital staffs demonstrate..before any real growth can occur.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 2.0
138. Post-graduate facilities to provide specialists and "super" specialists should be a goal of NJSOM.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0

	AGREE DISAGREE
139. Continued 'infiltration' of M.D.'s into the institution should be actively discouraged.	1 2 3 4 5 6 7 Q1 = 3.0/Q3 = 7.0 M = 5.0
140. A graduate program leading to the M.S., Ph.D., or D.O./Ph.D. should be in the future plans of NJSOM.	Q1 = 1.0/Q3 = 2.0 1 2 3 4 5 6 7 M = 1.0
141. A graduate program with Rutgers, or another quality institution would be a political and educational advantage to NJSOM.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 2.0
142. The decreasing need for physicians nationally causes concern for any "new" medical institution, including NJSOM.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 2.0
143. Efforts should be made to integrate part-time and volunteer faculty with the goals of the institution.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 2.0
144. A public relations office should be established to insure visibility of NJSOM and the profession.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 1.0

III. OSTEOPATHIC PERSPECTIVE AND IDENTITY	AGREE ... DISAGREE
145. The 'history' of osteopathic medicine should not be offered in a formal course; unnecessary use of valuable time.	Q1 = 2.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 5.0
146. Osteopathic identity and PRIDE is assured when the student clearly sees that all faculty (clinical and basic science) and administration cares about him.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 2.0
147. Early student 'orientations', social as well as academic, with faculty D.O.'s who are "role" models representative of the school's desired profile would encourage D.O. identity during early phases of education.	Q1 = 1.0/Q3 = 2.0 1 2 3 4 5 6 7 M = 1.0
148. A students' identity with a profession occurs during clinical exposure and training, not during academic years.	Q1 = 2.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
149. A students' identity with his/her school is of no significance in educational and professional growth.	Q1 = 5.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
150. NJSOM students do not presently get enough basic anatomy, physiology, etc. to later practice sound osteopathic fundamentals.	Q1 = 4.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 6.0
151. NJSOM should be doing more to attract, and keep D.O.s in New Jersey.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
152. A NJSOM 'alumni association' should be a future goal to encourage identity with the school and the profession.	Q1 = 1.0/Q3 = 2.0 1 2 3 4 5 6 7 M = 1.0
153. NJSOM has alienated members of the osteopathic profession.	Q1 = 3.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 4.0

	AGREE ... DISAGREE
154. An extended orientation, a problem-approach, a preceptorship, and small-group instruction will all contribute toward improving the students' identity with NJSOM.	Q1 = 1.0/Q3 = 4.5 1 2 3 4 5 6 7 M = 2.0
155. There is no distinction between "osteopathic" principles and the general practice of "good" medicine.	Q1 = 2.5/Q3 = 5.0 1 2 3 4 5 6 7 M = 4.0
156. Osteopathy is being gradually absorbed into allopathic medicine.	Q1 = 2.0/Q3 = 4.5 1 2 3 4 5 6 7 M = 3.0
157. I do not feel a need for a clear distinction between osteopathy and allopathy either in philosophy or practice.	Q1 = 4.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 5.0
158. The teaching of manipulative therapy should be included in the curriculum for all students.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 1.0
159. Manipulative therapy should be available only to those students who seek it out.	Q1 = 5.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 7.0
160. Encouragement of primary care practice or specialties is not the role of the four-year curriculum.	Q1 = 3.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 5.0
161. I include the active teaching of osteopathic perspective in my student instruction.	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 4.0
162. The teaching of 'humanistic' practice and primary care is critical to the education of osteopathic physicians.	Q1 = 1.0/Q3 = 2.5 1 2 3 4 5 6 7 M = 1.0
163. I subscribe to osteopathic principles and practice in 'principle' only.	Q1 = 3.0/Q3 = 6.0 1 2 3 M = 4.0 5 6 7

	AGREE 1 2 3 4 5 6 7 DISAGREE
164. I subscribe to osteopathic principles in 'practice' as well as 'principle'.	Q1 = 1.0/Q3 = 4.0 M = 3.0
165. I would be interested in taking time and effort to further develop my own knowledge and skills related to osteopathic principles and practice.	Q1 = 1.0/Q3 = 4.0 M = 3.0
166. I am conducting research concerning osteopathic principles and practice.	Q1 = 4.0/Q3 = 7.0 M = 7.0
167. I would be interested in conducting research concerning osteopathic principles and practice.	Q1 = 2.0/Q3 = 7.0 M = 4.0
168. I have personally benefited from OMT.	Q1 = 1.0/Q3 = 4.0 M = 2.0
169. OMT is more appropriate as post-graduate study.	Q1 = 4.0/Q3 = 7.0 M = 6.0
170. A preceptorship in the first one or two years would be the best way to encourage an interest in primary care.	Q1 = 2.0/Q3 = 4.0 M = 3.0
171. The growth of science over the past 100 years has eliminated the so-called differences between osteopathy and allopathy.	Q1 = 3.0/Q3 = 6.0 M = 5.0
172. Offering a D.O./Ph.D. option to students would help validate the scientific basis of osteopathy.	Q1 = 1.0/Q3 = 4.0 M = 2.0
173. Attention to primary care will encourage interns to enter practice before they're fully prepared.	Q1 = 4.0/Q3 = 7.0 M = 6.0

174. More exposure to psycho-social assessment and counseling, resource utilization, nutrition, wellness, and family dynamics would encourage interest in primary care.	1 2 3 4 5 6 7 Q1 = 1.0/Q3 = 3.5 M = 2.0
175. Regular grand teaching rounds would encourage an emphasis on primary care.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
176. The use of OMT is basic to our philosophy of patient care.	Q1 = 1.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 3.0
177. Primary care is the thing that D.O.'s can, and should do better than the contemporary M.D..	Q1 = 1.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 3.0
178. All department chairs should be selected, in part, because of their interest and commitment to primary care.	Q1 = 2.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 4.0
179. 'Humanistic' practice is a given; we don't need to constantly emphasize it.	Q1 = 4.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 5.5
180. In offering students clinical experience we need to better define the areas of family practice, primary care, and ambulatory care....they're confused!	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
181. Loyalty to NJSOM and osteopathy should be a criterion for selection of all faculty, including basic science.	Q1 = 3.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 5.0

IV. CURRICULUM/LABORATORY SPACE	AGREE 1 2 3 4 5 6 7 DISAGREE
182. If the campuses remain split, separate labs for NJSOM and RMS must be arranged to encourage osteopathic awareness in NJSOM students.	Q1 = 1.0/Q3 = 6.0 M = 4.0
183. 'Basic science' is 'basic science' regardless of the students' potential professional identity; separate labs are not necessary.	Q1 = 1.0/Q3 = 6.0 M = 4.0
184. Separate labs for NJSOM and RMS are not as important as lab instructors who are available, responsive and good teachers.	Q1 = 1.0/Q3 = 4.0 M = 2.0
185. Separate labs for NJSOM students will be an indication that they're inferior to RMS students, and perhaps to allopathic physicians.	Q1 = 4.0/Q3 = 7.0 M = 7.0
186. NJSOM's early student contact with RMS in basic science courses and labs help them later establish credibility as D.O.'s and is therefore a strength of the institution.	Q1 = 1.0/Q3 = 5.0 M = 4.0
187. Massive restructuring of the curriculum should be in the hands of a curriculum committee.	Q1 = 1.0/Q3 = 4.0 M = 2.0
188. Administration should not be involved in curriculum change.	Q1 = 2.0/Q3 = 6.0 M = 4.0
189. Whether or not there are separate, or combined labs for NJSOM and RMS students, the osteopathic students are identified and discriminated against.	Q1 = 3.0/Q3 = 6.0 M = 4.0
190. Changes in curriculum should generally be made at the department level.	Q1 = 2.0/Q3 = 5.0 M = 3.0

	AGREE 1 2 3 4 5 6 7 DISAGREE
191. If electives are available to students they should be in keeping with the missions and goals of the school (wellness, nutrition, family dynamics, etc.).	Q1 = 2.0/Q3 = 6.0 M = 4.0
192. The 'revised educational plan' will effectively integrate didactic and clinical education.	Q1 = 2.0/Q3 = 4.0 M = 3.0
193. I would like to see some restructuring of departments.	Q1 = 2.0/Q3 = 4.0 M = 4.0
194. The process of selection, and time served for the curriculum committee membership should be reviewed.	Q1 = 2.0/Q3 = 4.0 M = 4.0
195. The curriculum committee should provide faculty with more detailed and frequent reports of their activities.	Q1 = 1.5/Q3 = 4.0 M = 3.0
196. The independent basic science departments should be maintained if the campuses are unified.	Q1 = 1.0/Q3 = 4.0 M = 2.0

V. ADMINISTRATION	AGREE 1 2 3 4 5 6 7 DISAGREE
197. Lack of effective communication between upper administration and faculty is a serious issue at NJSOM.	Q1 = 1.0/Q3 = 4.0 M = 3.0
198. Lack of effective communication between department chairpersons and faculty is a serious issue at NJSOM.	Q1 = 3.0/Q3 = 6.0 M = 5.0
199. The administration appears to have little regard or respect for faculty needs, or strengths.	Q1 = 2.5/Q3 = 6.0 M = 4.0
200. The administration appears to function in response to a "drummer" not heard by most faculty!	Q1 = 2.0/Q3 = 5.0 M = 3.0
201. The budget process in my department guarantees a fair and adequate distribution of funds.	Q1 = 2.0/Q3 = 5.0 M = 4.0
202. Administrators, at least at the lower levels, should be voted on by faculty they'll be working with.	Q1 = 2.0/Q3 = 5.0 M = 4.0
203. Set time periods for administrators would discourage dictatorial tendencies.	Q1 = 2.0/Q3 = 5.0 M = 3.0
204. My department needs more faculty to deal with our present demands.	Q1 = 1.0/Q3 = 4.0 M = 2.0
205. Upper level administrators should possess a broad sense of political expertise.	Q1 = 1.0/Q3 = 3.0 M = 2.0
206. Central level administrators are doing a good job of implementing the goals of the top administrators.	Q1 = 2.0/Q3 = 4.0 M = 3.0
207. Top level administrators are working in agreement with the missions and goals of the school.	Q1 = 2.0/Q3 = 4.0 M = 3.0

		AGREE ... DISAGREE
208.	Most faculty aren't very aware of administrators above department chairperson level.	Q1 = 2.0/Q3 = 5.5 1 2 3 4 5 6 7 M = 3.0
209.	Administrators should be evaluated by appropriate faculty yearly for renewal options.	Q1 = 1.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 3.0
210.	NJSOM administration cannot be effective as long as they're associated with UMDNJ administrative structure.	Q1 = 3.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 5.0
211.	A department budget committee is the best way to ensure equitable funding.	Q1 = 2.0/Q3 = 4.5 1 2 3 4 5 6 7 M = 3.0
212.	There should be a prescribed and consistent system for communication between administration and faculty.	Q1 = 1.0/Q3 = 2.0 1 2 3 4 5 6 7 M = 1.0
213.	When the upper level of administration is no longer involved in the 'campus unification' process, I am optimistic that communication and management will be better.	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 4.0
214.	Communication between administration and department chairpersons is adequate.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 4.0
215.	NJSOM students should be involved in all institutional committees.	Q1 = 3.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 5.0
216.	The chairmanship of a department should be on a five-year or less rotation.	Q1 = 3.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 4.0

VI. TEACHING AND EVALUATION	AGREE 1 2 3 4 5 6 7 DISAGREE
217. I would welcome the opportunity for basic science/ clinical "team teaching".	Q1 = 1.0/Q3 = 3.0 M = 2.0
218. I would prefer to lecture to large groups of students without much personal contact.	Q1 = 5.0/Q3 = 7.0 M = 6.0
219. I would enjoy learning the role of 'small group facilitator'.	Q1 = 1.0/Q3 = 3.0 M = 2.0
220. Self-directed student learning is desirable because it releases me from my heavy teaching responsibility.	Q1 = 3.0/Q3 = 6.0 M = 5.0
221. I don't understand how 'student-directed' learning fits into a medical education program.	Q1 = 2.0/Q3 = 6.0 M = 4.0
222. I don't think self-directed learning is appropriate for most phases of medical education.	Q1 = 2.0/Q3 = 5.0 M = 4.0
223. All faculty should have more input into their individual course selection and content.	Q1 = 2.0/Q3 = 3.0 M = 3.0
224. The institution makes a fair and accurate evaluation of my teaching skills.	Q1 = 3.0/Q3 = 6.0 M = 4.0
225. Competent, and adequate secretarial support is available to assist me in teaching.	Q1 = 1.5/Q3 = 4.0 M = 3.0
226. I make use of simulation models, and/or computer-assisted instruction in my teaching.	Q1 = 4.0/Q3 = 7.0 M = 6.0
227. I would like information on the use of computer-assisted instruction.	Q1 = 1.0/Q3 = 3.0 M = 2.0

	AGREE DISAGREE
228. My teaching would benefit from a workshop on aspects of instructional preparation such as writing objectives, developing self-instructional materials, etc.	1 2 3 4 5 6 7 Q1 = 1.0/Q3 = 3.0 M = 2.0
229. I am in agreement with my departments approach to the selection of my teaching assignments.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 2.0
230. My department head 'dictates' what I teach.	1 2 3 4 5 6 7 Q1 = 4.0/Q3 = 7.0 M = 6.0
231. The present system of student course evaluation is adequate.	Q1 = 2.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 4.0
232. Peer review of teaching is a good idea.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 2.0
233. Administrative review of teaching is generally biased and of no real use.	Q1 = 2.0/Q3 = 5.0 1 2 3 M = 4.0 5 6 7
234. I am encouraged by my department head to try innovative course design and implementation.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 2.0
235. Student's test performance is the best measure of teaching effectiveness.	Q1 = 3.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 5.0
236. I offer assistance to students who are having academic difficulty.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 1.5
237. The curriculum committee should be dealing with the design and implementation of course evaluations.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 2.0
238. There is no consistent system for student evaluation of teaching.	Q1 = 1.0/Q3 = 4.0 1 2 3 M = 3.0 5 6 7

	AGREE DISAGREE
239. On-site evaluation of teaching by peers and administration is a violation of academic freedom.	1 2 3 4 5 6 7 Q1 = 4.0/Q3 = 7.0 M = 5.0
240. Intuitive measures of teaching effectiveness are more reliable than objective criteria.	Q1 = 4.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 5.0
241. Student performance on the 'Boards' is the best measure of institutional teaching effectiveness.	Q1 = 3.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 5.0
242. In the area of teaching, the association with RMS is not of benefit to NJSOM faculty.	Q1 = 2.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 4.0

VII. TENURE/PROMOTION; SALARY AND MERIT	AGREE ... DISAGREE
243. Clinical faculty do not practice their three-fold responsibility to the institution: teaching, research and service.	1 2 3 4 5 6 7 Q1 = 2.0/Q3 = 6.0 M = 4.0
244. I feel that the following percentages are utilized in tenure/promotion decisions: research 50% teaching 25% service 25% other 0%	Q1 = 2.0/Q3 = 4.0 M = 3.0 1 2 3 4 5 6 7
245. I feel that the following percentages are utilized in tenure/promotion decisions: research 25% teaching 25% service 0% 'good old boy' network 50%	Q1 = 3.0/Q3 = 7.0 M = 4.5 1 2 3 4 5 6 7
246. I feel that the following percentages are utilized in tenure/promotion decisions: research 33 1/3 % teaching 33 1/3 % service 33 1/3 %	Q1 = 4.0/Q3 = 7.0 M = 5.0 1 2 3 4 5 6 7
247. I feel that the following percentages <u>should</u> be utilized in tenure/promotion decisions: research 50% teaching 25% service 25%	Q1 = 4.0/Q3 = 7.0 M = 6.0 1 2 3 4 5 6 7
248. I feel that the following percentages <u>should</u> be utilized in tenure/promotion decisions: research 30% teaching 30% service 20% other 20%	Q1 = 2.0/Q3 = 6.0 M = 4.0 1 2 3 4 5 6 7

	AGREE 1 2 3 4 5 6 7 DISAGREE
249. I feel that the following percentages should be utilized in tenure/promotion decisions: research 20% teaching 40% service 40%	Q1 = 1.0/Q3 = 6.0 M = 4.0
250. I feel that the following percentages should be utilized in tenure/promotion decisions: research 33 1/3% teaching 33 1/3% service 33 1/3%	Q1 = 2.0/Q3 = 6.0 M = 4.0 1 2 3 4 5 6 7
251. All faculty on tenure track should be evaluated with the same criterion.	Q1 = 1.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 3.5
252. An annually renewable (non-tenure track) appointment should not be subject to the same evaluation criterion as a tenure-track position.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 2.0
253. The 'research/publication' pressure is generating a lot of useless paper that I don't want to be part of!	Q1 = 2.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 3.5
254. The procedures for terminating faculty appointments at NJSOM are appropriate and adequate.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 4.0
255. The procedures for a formal grievance appeal are stated clearly.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 4.0
256. I devote between one and four hours each week to active academic teaching in the classroom.	Q1 = 1.0/Q3= 7.0 1 2 3 4 5 6 7 M = 4.0
257. I devote more than four hours each week to active teaching in the classroom.	Q1 = 3.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0

	AGREE ... DISAGREE
258. I devote between ten and twenty hours each week to clinical teaching.	Q1 = 1.5/Q3 = 7.0 1 2 3 4 5 6 7 M = 4.0
259. I devote more than twenty hours each week to clinical teaching.	Q1 = 4.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
260. I devote between twenty and thirty hours each week to patient treatment.	Q1 = 2.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 5.0
261. I devote more than thirty hours each week to patient treatment.	Q1 = 4.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 7.0
262. I devote between five and fifteen hours each week to individual and/or institutional research.	Q1 = 4.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 7.0
263. I devote more than fifteen hours each week to individual and/or institutional research.	Q1 = 1.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
264. I devote between one and three hours each week to institutional committees.	Q1 = 1.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 3.0
265. I devote more than three hours each week to institutional committees.	Q1 = 1.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 3.0
266. I devote between twenty and thirty hours each week to administrative responsibilities.	Q1 = 1.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
267. I devote more than thirty hours each week to administrative responsibilities.	Q1 = 4.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 7.0
268. I devote three hours or more a week to travel between campuses.	Q1 = 1.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 4.5

	AGREE 1 2 3 4 5 6 7 DISAGREE
). I attend at least one professional meeting each year where I am on the program.	Q1 = 1.0/Q3 = 3.0 M = 1.0
0. I experience no difficulty receiving institutional funds to attend meetings when I am on the program.	Q1 = 1.0/Q3 = 4.0 M = 2.0
'1. I have published in the last academic year.	Q1 = 1.0/Q3 = 4.0 M = 1.0
72. I expect to publish in the up-coming academic year.	Q1 = 1.0/Q3 = 1.0 M = 1.0
73. I have sufficient time for research.	Q1 = 1.0/Q3 = 7.0 M = 5.0
274. I receive adequate institutional funding for research.	Q1 = 2.0/Q3 = 6.0 M = 4.0
275. I feel it is my obligation to obtain my own research grants.	Q1 = 1.5/Q3 = 6.0 M = 4.0
276. I receive adequate informational support to do my own research.	Q1 = 1.5/Q3 = 5.0 M = 3.0
277. I have adequate space and staff to do research.	Q1 = 3.5/Q3 = 7.0 M = 6.0
278. Pay scales for basic science and clinical faculty should be different.	Q1 = 1.0/Q3 = 4.0 M = 3.0
279. Basic science and clinical faculty should receive the same benefits.	Q1 = 1.0/Q3 = 2.0 M = 1.0
280. Present salaries are adequate to attract and retain quality basic science faculty.	Q1 = 1.0/Q3 = 4.0 M = 3.5

	AGREE ... DISAGREE
281. Present salaries are adequate to attract and retain quality clinical faculty.	Q1 = 2.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 4.0
282. Merit pay raises should be based on principles developed by discussion and agreement between faculty and administrators.	Q1 = 1.0/Q3 = 2.0 1 2 3 4 5 6 7 M = 2.0
283. Merit pay should be based on an assessment of each person as an individual, not on percentage weights.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 1.0
284. Equal pay raises for all members of a department are more desirable than pay raises based on merit.	Q1 = 3.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 5.0
285. Clear, visible academic standards for student performance is one of the most important features to attract and retain quality faculty.	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 3.0
286. Opportunities for clinical faculty to learn research techniques and concurrent support for clinical research is important to attract and retain quality faculty.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 2.0
287. A total program for research support is the most critical factor to attract and retain faculty.	Q1 = 2.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 4.0
288. Academic freedom and an atmosphere of collegiality are the most important features for attracting and retaining good faculty.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
289. A strong, working relationship with a graduate university is the most important feature for the attraction of basic science faculty to NJSOM.	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 3.0
290. Teaching and clinical expertise should be larger contributing factors than research for the promotion of clinical faculty.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 2.0

	AGREE 1 2 3 4 5 6 7 DISAGREE
291. Basic science faculty should expect more emphasis on research and publication, and less on teaching and service in matters of merit pay, promotion, and tenure.	Q1 = 2.0/Q3 = 6.0 M = 3.0
292. Basic science faculty contribute to the total institution by publication, reading papers, etc. and therefore should receive a small percentage of the faculty practice profit.	Q1 = 2.0/Q3 = 6.0 M = 4.0
293. A percentage of the faculty practice profit for basic science faculty would be an important feature to attract quality basic science people to a small institution such as NJSOM.	Q1 = 2.0/Q3 = 6.0 M = 3.0
294. Competitive salaries and pay raises are the most important way to attract and keep good faculty.	Q1 = 1.0/Q3 = 3.0 M = 2.0
295. Clinical faculty have less time for research therefore they should not be judged on the basis of publications.	Q1 = 2.0/Q3 = 5.0 M = 3.0
296. Clinical faculty should be reviewed yearly, including objective examinations, to determine levels of clinical competency.	Q1 = 3.0/Q3 = 6.0 M = 4.0
297. Incentive reimbursements for dollars brought in to NJSOM would be a way to attract and retain faculty.	Q1 = 1.0/Q3 = 4.0 M = 2.0
298. The clinical faculty practice plan should be more flexible.	Q1 = 1.0/Q3 = 4.0 M = 2.0
299. Family practitioners are critical to the efficiency of the "specialists" practice..they should be rewarded by an institution like NJSOM.	Q1 = 1.0/Q3 = 4.0 M = 3.0
300. Years of employment should be considered in pay/promotion decisions.	Q1 = 1.0/Q3 = 4.0 M = 3.0

	AGREE 1 2 3 4 5 6 7 DISAGREE
301. Merit pay raises should be judged by a committee of peers including the department chairpersons.	Q1 = 1.0/Q3 = 3.5 M = 2.0
302. The clinical faculty practice plan is not yet a reality.	Q1 = 2.0/Q3 = 4.0 M = 3.0
303. A good clinical practice plan is vital to attracting and maintaining clinical faculty; and should be a priority.	Q1 = 1.0/Q3 = 3.0 M = 2.0
304. The concept of tenure is outmoded.	Q1 = 2.0/Q3 = 6.0 M = 4.0
305. People who spend more than 50% of their time in administrative responsibility should be exempt from teaching and research.	Q1 = 4.0/Q3 = 6.0 M = 5.0
306. I would like more specific information on reasons for, and procedures for terminating faculty appointments.	Q1 = 1.0/Q3 = 4.0 M = 3.0
307. I have devoted twenty hours or more to postgraduate formal education this academic year.	Q1 = 1.0/Q3 = 5.0 M = 1.0
308. NJSOM needs the addition of support staff in the areas of health education, research nursing, psychology, and medical education.	Q1 = 1.0/Q3=4.0 M = 2.0
309. An adequate travel budget for all full-time faculty is needed to encourage faculty morale.	Q1 = 1.0/Q3 = 2.0 M = 1.0
310. In general terms the clinical faculty practice plan is disorganized, mismanaged and grossly unfair.	Q1 = 1.5/Q3 = 4.0 M = 4.0
311. It is inappropriate to expect clinical faculty to research just as it is inappropriate to expect basic scientists to treat patients.	Q1 = 4.0/Q3 = 6.0 M = 5.0

	AGREE ... DISAGREE
312. The faculty affairs committee should keep the faculty better informed on the tenure process.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 1.0
313. Salaries are adequate to attract basic science, and clinical faculty...but not to retain them.	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 4.0
314. Chairpersons should independently make evaluations concerning merit pay raises.	Q1 = 2.5/Q3 = 5.5 1 2 3 4 5 6 7 M = 4.0
315. Faculty should make merit "contracts" with their chairman at the beginning of each academic year; merit pay should be based on whether they meet the terms in their contracts.	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 3.0
316. The present clinical faculty practice plan does not encourage incentive.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
317. National and international recognition for contributions to the profession should be a requirement for merit in addition to, or in lieu of research.	Q1 = 3.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 4.0
318. A clinical faculty practice plan should be based on contingencies and profit incentives.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
319. Evidence of leadership, loyalty, and initiative are important in tenure and promotion decisions.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 2.0
320. Departmental autonomy is critical to a successful clinical faculty practice plan.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
321. Academic freedom is not practiced to any great extent at NJSOM.	Q1 = 3.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0

	AGREE 1 2 3 4 5 6 7 DISAGREE
322. Recruitment and selection of faculty is based on the individual's qualities and anticipated contribution to the missions and goals of NJSOM.	Q1 = 2.0/Q3 = 4.0 M = 3.0
323. The 'search' process for new faculty in clinical and basic science is a farce.	Q1 = 4.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 5.0
324. 'Loyalty' to the institution is best measured by a faculty members' commitment of time and energy to his job.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 2.0

VIII. STUDENTS/ADMISSIONS	AGREE 1 2 3 4 5 6 7 DISAGREE
325. The poor quality of applicants for admission is a serious concern to most faculty.	Q1 = 2.0/Q3 = 5.0 M = 3.0
326. The concept of meeting "quotas" (sex, minorities, etc.) is not appropriate in student admissions.	Q1 = 1.0/Q3 = 5.0 M = 3.0
327. Only G.P.A.'s well above 3.0 should be considered for admission to NJSOM.	Q1 = 2.0/Q3 = 5.0 M = 4.0
328. Students older than 25 should not be considered for admission to NJSOM.	Q1 = 6.0/Q3 = 7.0 M = 7.00
329. Appealing to the older, minority, non-traditionally prepared student is the only way NJSOM can survive.	Q1 = 5.0/Q3 = 7.0 M = 6.0
330. Preference should be given to prospective students with traditional pre-med preparation.	Q1 = 3.0/Q3 = 5.0 M = 4.0
331. MCAT scores are emphasized too much in the admissions process.	Q1 = 3.0/Q3 = 5.0 M = 4.0
332. I'm not familiar with the admissions requirements or the process of selection.	Q1 = 3.0/Q3 = 7.0 M = 6.0
333. Extensive counseling services should be available to students who may be having academic difficulties because of stress and personal problems.	Q1 = 1.0/Q3 = 3.0 M = 1.0
334. A counseling support staff for students and their families would be a good student recruitment incentive.	Q1 = 1.0/Q3 = 4.0 M = 2.0

	AGREE ... DISAGREE
335. A young, un-married student with good MCAT scores, & a high GPA is still the best candidate for med school (osteopathic or allopathic).	1 2 3 4 5 6 7 Q1 = 2.0/Q3 = 5.0 M = 4.0
336. Admitting students with degrees in other than pre-med virtually guarantees academic difficulty in the first two years.	Q1 = 4.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
337. Student Affairs should organize more combined faculty-administration-student social occasions to encourage a sense of camaraderie.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
338. Enrolled student representacives should participate in new student admissions.	Q1 = 3.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 3.0
339. The University granting the bachelor's degree, and the class rank are more significant than G.P.A. or MCATs.	Q1 = 3.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 4.0
340. My exposure to current students reflects the capability of our present admissions procedures.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
341. The concern to be addressed regarding admissions is not how to evaluate what we have, but how to improve the over-all quality of the applicant pool.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 2.0

APPENDIX F

NARRATIVE RESPONSES TO ROUND III INSTRUMENT INDICATING CONSENSUS WAS NOT OBTAINED

Narrative Responses to Round III Instrument Indicating Consensus Was Not Obtained

I. CAMPUS/CURRICULUM

Item #4: The present 'split campus' offers advantages to the students.

Q1 = 4.0/Q3 = 7.0
M = 6.5

One respondent remained in strong agreement with this statement based on the strength of RMS facilities and the feeling that separation of basic science and clinical courses is positive.

Item #7: A unified campus would encourage better faculty relations.

Q1 = 1.0/Q3 = 3.0
M = 1.0

Three respondents disagreed with this statement indicating that difficulties in faculty relations had little to do with the separate campus situation.

Item #29 The systems approach is artificial and needs revision.

Q1 = 2.0/Q3 = 5.0
M = 4.0

One respondent maintained strong disagreement with this statement.

Item #37 Removing basic science faculty from Piscataway will limit their professional growth.

Q1 = 2.0/Q3 = 6.0
M = 4.0

One respondent remained in strong agreement (outside the range) indicating that the tie to Rutgers medical and graduate schools is critical to basic science faculty.

Item #79 The reputation of any medical school is based on academic/research achievements.

Q1 = 1.0/Q3 = 4.0
M = 2.0

Two respondents remained in disagreement with this statement; both indicated feelings that the reputation of a medical school is based on the clinical skills of its graduates.

II. FUTURE GROWTH/MISSIONS AND GOALS

Item #117 The Division of Research is one of the most positive moves toward the growth of NJSOM.

Q1 = 1.0/Q3 = 4.0
M = 3.0

One respondent disagreed with this statement indicating that it was more of an administrative/political token than a functional entity.

Item #136 The establishment of a 'tenure' system for full-time clinical faculty is of importance to the institution; and should be a future goal.

Q1 = 1.0/Q3 = 3.0
M = 2.0

Two respondents disagreed with this statement indicating that the concept of academic tenure was inappropriate for clinicians who were involved in patient treatment.

Item #138 Post-graduate facilities to provide specialists and "super" specialists should be a goal of NJSOM.

Q1 = 1.0/Q3 = 4.0
M = 3.0

Four respondents disagreed with this statement indicating that emphasis should be on primary care, not specialties.

Item #144 A public relations office should be established to insure visibility of NJSOM and the profession.

Q1 = 1.0/Q3 = 3.0
M = 1.0

Two respondents insisted that such an office existed, but if this many faculty were not aware of it then it should be more visible.

III OSTEOPATHIC PERSPECTIVE AND IDENTITY

Consensus was obtained on all items in this section of the instrument

IV. CURRICULUM/LABORATORY SPACE

#185 Separate labs for NJSOM students will be an indication that they're inferior to RMS students, and perhaps to allopathic physicians.

Q1 = 4.0/Q3 = 7.0
M = 7.0

One respondent agreed strongly with this statement indicating the concern that the quality of instruction would be poor and standards would be lowered.

V. ADMINISTRATION

Consensus was obtained on all items in this section of the instrument

VI. TEACHING AND EVALUATION

Item #224 The institution makes a fair and accurate evaluation of my teaching skills.

Q1 = 3.0/Q3 = 6.0
M = 4.0

Six respondents remained in strong disagreement (outside the range) indicating that virtually no evaluation was made, and efforts were poor at best.

Item #231 The present system of student course evaluation is adequate.

Q1 = 2.0/Q3 = 6.0
M = 4.0

Four respondents remained in strong disagreement (outside the range) indicating inconsistencies in current course evaluation procedures.

VII. TENURE/PROMOTION; SALARY AND MERIT

Item #254 The procedures for terminating faculty appointments at NJSOM are appropriate and adequate.

Q1 = 2.0/Q3 = 4.0
M = 4.0

Three respondents remained in disagreement with this statement indicating that they did not know the procedures and thus disagreed with the statement.

Item #271 I have published in the last academic year.

Q1 = 1.0/Q3 = 4.0
M = 1.0

Two respondents disagreed indicating that they had not published in the last academic year.

Item #300 Years of employment should be considered in pay/promotion decisions.

Q1 = 1.0/Q3 = 4.0
M = 3.0

Four respondents strongly disagreed with this statement indicating that this would destroy the concept of "merit".

VIII. STUDENTS/ADMISSIONS

Item #335 A young, un-married student with good MCAT scores, and a high GPA is still the best candidate for med school (osteopathic or allopathic).

Q1 = 2.0/Q3 = 5.0
M = 4.0

Two respondents disagreed with this statement primarily because the statement included too many conflicting factors.

APPENDIX G

ADDITIONS TO ROUND II INSTRUMENT

THE FOLLOWING ADDITIONS WERE RETURNED BY ROUND II RESPONDENTS:

	AGREE 1 2 3 4 5 6 7 DISAGREE
342. "Problem-Solving Techniques" are important in the first two years.	Q1 = 1.0/Q3 = 2.0 M = 1.0
343. Actual patient exposure isn't necessary in the first two years.	1 2 3 4 5 6 7 Q1 = 4.0/Q3 = 7.0 M = 5.5
344. The split campus is only one of many problems. If this is considered the only problem, others will be ignored.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 1.0
345. The current curricular policy adequately reflects the purposes for which NJSOM was established.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 1.0
346. An integrated curriculum means more work for me as an educator.	Q1 = 3.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 4.0
347. An integrated curriculum means less certainty for me in my role as an educator.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 2.0
348. NJSOM administration should stay in Camden.	1 2 3 4 5 6 7 Q1 = 2.5/Q3 = 4.0 M = 3.0
349. Phases of student education should stay split between Stratford and Camden.	Q1 = 4.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0

	AGREE ... DISAGREE
350. Part-time and volunteer faculty are a unique asset which NJSOM has failed to properly utilize.	1 2 3 4 5 6 7 Q1 = 2.0/Q3 = 5.0 M = 4.0
351. Recruiting and attracting quality clinical faculty is a severe inhibitor of continued institutional growth.	Q1 = 1.0/Q3 = 2.0 1 2 3 4 5 6 7 M = 1.0
352. A fair discussion of advantages of RMS affiliation, and advantages of being in Camden must be encouraged even if are perceived as anti-administrative policy.	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 3.5
353. As currently constituted, the time of a clinician is too limited for genuine research contributions.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 2.0
354. Inclusion of general internal medicine as a possible primary care experience combines primary care with a specialty experience.	Q1 = 2.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 3.0
355. Osteopathy is a culture group within medicine as a whole and as such is a unit within "allopathy".	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 4.0
356. Osteopathy is an alternative pathway to the larger profession of medicine.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 2.0
357. The greatest strength, and weakness, of NJSOM is that we function like an Italian/Jewish family.	Q1 = 3.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
358. Loyalty to an academic discipline should be a criterion for selection of all faculty.	Q1 = 1.0/Q3 = 2.0 1 2 3 4 5 6 7 M = 1.0
359. The current plans for a new curriculum have been stated clearly.	Q1 = 4.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
360. The whole section dealing with curriculum is a major topic for a retreat because without direct faculty input and consensus, restructuring will fail.	Q1 = 1.0/Q3 = 2.0 1 2 3 4 5 6 7 M = 1.0
361. Administration tends to make decisions from only unilateral input.	Q1 = 3.0/Q3 = 6.5 1 2 3 4 5 6 7 M = 4.0

		AGREE 1 2 3 4 5 6 7 DISAGREE
362.	Administrative decisions relating to faculty do not have judicial quality.	Q1 = 3.0/Q3 = 7.0 M = 6.0
363.	Decisions are idealistically framed, but dictated by economics.	Q1 = 2.0/Q3 = 5.0 M = 4.0
364.	The administration hears and amplifies most things and persons who voice agreement.	Q1 = 3.0/Q3 = 4.0 M = 4.0
365.	The 'non-working' whose voice is appreciated by administration may be rated higher than the 'working' whose voice is not.	Q1 = 3.0/Q3 = 4.0 M = 4.0
366.	Chairpersons should be elected.	Q1 = 2.0/Q3 = 3.0 M = 2.0
367.	The chair of a department should be a permanent position.	Q1 = 4.0/Q3 = 7.0 M = 6.0
368.	Powers now in the hands of UMDNJ administrators (purchasing, grant administration, personnel decisions, etc.) should be shifted to NJSOM administrators.	Q1 = 1.0/Q3 = 2.0 M = 1.0
369.	I have been shown a model of a team-teaching episode.	Q1 = 4.0/Q3 = 7.0 M = 6.0
370.	I have been shown a curriculum utilizing team teaching.	Q1 = 5.0/Q3 = 7.0 M = 7.0
371.	As a student I have been exposed to a team-teaching approach.	Q1 = 6.0/Q3 = 7.0 M = 7.0
372.	Small group teaching can help to identify students' adjustment problems early.	Q1 = 1.0/Q3 = 5.0 M = 1.5
373.	Small group teaching can help establish a camaraderie among D.O. students and faculty thus alleviating feelings of being 2nd class citizens.	Q1 = 4.0/Q3 = 6.0 M = 4.0
374.	Computer-assisted instruction should not be emphasized at the expense of small group teaching.	Q1 = 1.0/Q3 = 4.0 M = 2.0

		AGREE DISAGREE
375.	As long as there is a "need to earn" clinical faculty cannot practice a three-fold responsibility to the institution...notably research.	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 2.0
376.	Important promises made to me in my recruitment have all been fulfilled.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 2.0
377.	Incentive reimbursements for dollars brought in to NJSOM would incite departmental rivalry.	Q1 = 4.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
378.	Formal education courses given by Research Administration to clinicians would be beneficial research-clinical link.	Q1 = 1.0/Q3 = 2.0 1 2 3 4 5 6 7 M = 1.0
379.	"Salary" is the single most important consideration in clinical faculty recruitment.	Q1 = 2.5/Q3 = 4.0 1 2 3 4 5 6 7 M = 3.0
380.	The acceptable measure of "loyalty" is agreement with administration on all major issues.	Q1 = 2.0/Q3 = 6.0 1 2 3 4 5 6 7 M = 4.0
381.	Attendance at national and international meetings should be paid for by the institution when a faculty member is on the program.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 2.0
382.	It is imperative that we offer admission options to those students who are eligible but may not be "typical".	Q1 = 1.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 2.0
383.	The concern to be addressed is <u>how</u> <u>to</u> <u>choose</u> a better class from the applicant pool.	Q1 = 2.0/Q3 = 4.0 1 2 3 4 5 6 7 M = 4.0
384.	The early Rutgers dominated curriculum contributes strongly to poor 1st and 2nd year student performance.	Q1 = 4.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 6.0
385.	Minimum standards for admission should be observed, even if it means not "filling" a class.	Q1 = 1.0/Q3 = 2.0 1 2 3 4 5 6 7 M = 1.0
386.	Our applicant pool is limited because we do not do enough to attract non-traditional students.	Q1 = 2.0/Q3 = 5.0 1 2 3 4 5 6 7 M = 4.0
387.	Our applicant pool is limited because we are a new school, and are not yet widely known.	Q1 = 3.0/Q3 = 7.0 1 2 3 4 5 6 7 M = 4.5
388.	We need to examine how to prevent N.J. residents from leaving for other N.J. schools just before matriculation.	Q1 = 1.0/Q3 = 3.0 1 2 3 4 5 6 7 M = 2.0

APPENDIX H

DELPHI ROUND II STATISTICS

TABLE X

DELPHI ROUND II STATISTICS

ITEM NUMBER	MEAN	MEDIAN	MODE	STANDARD DEVIATION	VARIANCE	VALUES COUNTED	VALUES NOT COUNTED	QUARTILE (Q1)	QUARTILE (Q3)
1	5.88	7.00	7.00	2.07	4.31	50	0	6.0	7.0
2	2.82	1.50	1.00	2.34	5.49	50	0	1.0	5.0
3	2.26	1.00	1.00	2.21	4.89	50	0	1.0	2.0
4	5.28	6.50	7.00	2.18	4.77	50	0	4.0	7.0
5	2.76	1.50	1.00	2.17	4.71	50	0	1.0	4.0
6	2.36	1.00	1.00	2.08	4.35	50	0	1.0	4.0
7	2.00	1.00	1.00	1.74	3.06	50	0	1.0	3.0
8	2.74	2.00	1.00	2.10	4.44	50	0	1.0	4.0
9	2.44	1.00	1.00	2.13	4.57	50	0	1.0	3.0
10	2.32	1.00	1.00	1.94	3.77	50	0	1.0	3.0
11	2.36	1.50	1.00	1.73	3.01	50	0	1.0	4.0
12	5.32	6.00	7.00	1.91	3.65	50	0	4.0	7.0
13	4.64	4.00	4.00	1.79	3.21	50	0	4.0	6.0
14	2.36	1.00	1.00	1.92	3.70	50	0	1.0	3.0
15	5.10	5.50	7.00	1.84	3.41	48	2	4.0	7.0
16	2.75	2.00	1.00	1.89	3.60	49	1	1.0	4.0
17	4.54	4.00	4.00	1.98	3.95	48	2	3.0	6.5
18	1.98	1.00	1.00	1.70	2.91	50	0	1.0	2.0
19	4.61	4.00	7.00	2.15	4.65	49	1	3.0	7.0
20	2.18	1.00	1.00	1.84	3.41	50	0	1.0	3.0
21	2.75	2.00	1.00	1.83	3.35	49	1	1.0	4.0
22	2.00	1.00	1.00	1.72	2.97	50	0	1.0	3.0
23	4.83	6.00	7.00	2.18	4.76	49	1	3.0	7.0
24	4.00	4.00	4.00	1.98	3.95	46	4	2.0	6.0
25	3.64	3.00	3.00	1.75	3.08	48	2	2.5	4.0
26	5.47	6.00	7.00	1.48	2.21	46	4	4.0	7.0
27	3.61	4.00	4.00	1.55	2.41	47	3	2.0	4.0
28	3.68	4.00	1.00	2.25	5.07	50	0	1.0	6.0
29	3.50	4.00	4.00	1.97	3.88	50	0	2.0	5.0

TABLE X --Continued

ITEM NUMBER	MEAN	MEDIAN	MODE	STANDARD DEVIATION	VARIANCE	VALUES COUNTED	VALUES NOT COUNTED	QUARTILE (Q1)	QUARTILE (Q3)
30	4.55	5.00	6.00	1.94	3.79	49	1	3.0	6.0
31	4.23	4.00	6.00	1.94	3.79	47	3	2.0	6.0
32	2.53	2.00	1.00	1.84	3.42	49	1	1.0	3.0
33	3.59	4.00	4.00	1.33	1.78	49	1	3.0	4.0
34	2.50	1.00	1.00	1.92	3.72	50	0	1.0	4.0
35	2.15	2.00	1.00	1.42	2.04	46	4	1.0	3.0
36	4.48	6.00	6.00	2.26	5.11	50	0	2.0	6.0
37	3.98	4.00	4.00	2.19	4.83	50	0	2.0	6.0
38	4.56	4.50	7.00	2.17	4.74	50	0	3.0	7.0
39	2.16	1.00	1.00	1.97	3.89	50	0	1.0	2.0
40	5.16	6.00	7.00	2.04	4.18	48	2	4.0	7.0
41	4.48	5.00	n/u*	1.72	2.96	49	1	3.0	6.0
42	5.00	5.00	7.00	2.01	4.04	49	1	4.0	7.0
43	5.36	6.00	7.00	2.13	4.56	50	0	4.0	7.0
44	5.32	6.00	7.00	2.12	4.50	50	0	4.0	7.0
45	5.14	6.00	7.00	2.08	4.32	50	0	4.0	7.0
46	3.60	3.00	1.00	2.14	4.61	50	0	2.0	6.0
47	3.30	3.00	2.00	1.87	3.52	50	0	2.0	5.0
48	3.93	4.00	4.00	2.06	4.27	48	2	2.0	6.0
49	5.06	6.00	7.00	1.80	3.24	50	0	3.0	7.0
50	2.70	2.00	1.00	2.08	4.33	50	0	1.0	4.0
51	2.10	1.00	1.00	1.57	2.46	49	1	1.0	3.0
52	1.81	1.00	1.00	1.16	1.36	49	1	1.0	2.0
53	4.30	4.00	7.00	2.20	4.86	50	0	2.0	7.0
54	2.59	2.00	1.00	1.61	2.59	47	3	1.0	4.0
55	1.80	1.00	1.00	1.26	1.59	47	3	1.0	2.0
56	2.04	1.00	1.00	1.51	2.28	49	1	1.0	3.0
57	3.73	4.00	n/u*	1.97	3.88	46	4	2.0	5.0
58	5.64	7.00	7.00	1.83	3.37	50	0	5.0	7.0

TABLE X --Continued

ITEM NUMBER	MEAN	MEDIAN	MODE	STANDARD DEVIATION	VARIANCE	VALUES COUNTED	VALUES NOT COUNTED	QUARTILE (Q1)	QUARTILE (Q3)
59	5.72	7.00	7.00	1.92	3.71	50	0	5.0	7.0
60	3.93	4.00	7.00	2.08	4.35	48	2	2.0	6.0
61	3.32	2.00	2.00	2.28	5.20	50	0	1.0	6.0
62	4.14	4.00	7.00	2.04	4.16	50	0	2.0	6.0
63	3.55	4.00	4.00	1.91	3.66	45	5	2.0	5.0
64	5.20	6.00	n/u*	1.73	3.02	50	0	4.0	7.0
65	5.76	7.00	7.00	1.62	2.63	46	4	4.0	7.0
66	5.16	6.00	7.00	1.91	3.68	49	1	4.0	7.0
67	5.06	6.00	7.00	2.21	4.91	50	0	3.0	7.0
68	3.58	3.50	n/u*	1.89	3.59	50	0	2.0	5.0
69	4.94	6.00	7.00	2.10	4.42	50	0	3.0	7.0
70	3.83	4.00	4.00	1.80	3.26	49	1	2.0	5.0
71	2.93	3.00	1.00	1.82	3.33	45	5	1.0	4.0
72	2.64	2.00	1.00	1.71	2.92	50	0	1.0	4.0
73	2.79	2.00	1.00	1.86	3.46	50	0	1.0	4.0
74	3.36	3.00	1.00	2.17	4.72	50	0	1.0	5.0
75	3.36	3.00	1.00	2.36	5.57	49	1	1.0	6.0
76	3.63	4.00	4.00	1.52	2.32	46	4	3.0	4.0
77	3.80	3.50	3.00	1.95	3.80	46	4	2.0	6.0
78	4.62	5.00	7.00	2.18	4.77	50	0	3.0	7.0
79	2.72	2.00	n/u*	1.91	3.67	50	0	1.0	4.0
80	4.79	6.00	7.00	2.26	5.12	49	1	3.0	7.0
81	4.62	5.00	6.00	2.00	4.02	48	2	3.0	6.0
82	2.02	2.00	1.00	1.31	1.73	50	0	1.0	3.0
83	3.30	4.00	4.00	1.76	3.11	50	0	2.0	4.0
84	3.40	3.00	1.00	2.01	4.04	50	0	2.0	5.0
85	3.70	4.00	1.00	2.19	4.82	50	0	2.0	6.0
86	3.10	3.00	n/u*	1.93	3.76	49	1	2.0	4.0
87	4.06	4.00	n/u*	2.20	4.84	47	3	2.0	6.0

TABLE X --Continued

ITEM NUMBER	MEAN	MEDIAN	MODE	STANDARD DEVIATION	VARIANCE	VALUES COUNTED	VALUES NOT COUNTED	QUARTILE (Q1)	QUARTILE (Q3)
88	4.89	6.00	7.00	2.17	4.71	49	1	3.0	7.0
89	3.22	3.00	4.00	1.73	3.01	49	1	2.0	4.0
90	3.87	4.00	4.00	1.73	3.02	47	3	3.0	6.0
91	3.32	3.50	4.00	1.72	2.98	46	4	2.0	4.0
92	2.65	2.00	1.00	1.96	3.85	49	1	1.0	4.0
93	2.26	2.00	1.00	1.50	2.27	50	0	1.0	3.0
94	3.61	4.00	4.00	1.76	3.11	49	1	2.0	4.0
95	2.54	2.00	2.00	1.52	2.33	48	2	1.0	3.5
96	3.87	4.00	6.00	1.97	3.90	49	1	2.0	6.0
97	5.30	6.50	7.00	2.20	4.86	50	0	4.0	7.0
98	3.06	3.00	1.00	2.06	4.26	50	0	1.0	5.0
99	5.66	7.00	7.00	2.15	4.63	50	0	5.0	7.0
100	5.18	6.00	7.00	2.22	4.94	49	1	4.0	7.0
101	4.25	4.00	n/u*	2.12	4.53	48	2	3.0	6.5
102	2.48	2.00	1.00	1.96	3.84	50	0	1.0	3.0
103	4.45	4.50	7.00	2.08	4.33	48	2	3.0	6.0
104	2.70	2.00	1.00	1.76	3.11	50	0	1.0	4.0
105	2.96	2.50	1.00	1.84	3.38	50	0	1.0	4.0
106	2.38	2.00	1.00	1.62	2.64	50	0	1.0	3.0
107	2.56	2.00	1.00	1.64	2.70	50	0	1.0	4.0
108	3.12	3.00	3.00	1.66	2.76	50	0	2.0	4.0
109	3.87	4.00	2.00	1.83	3.35	49	1	2.0	5.0
110	1.88	2.00	1.00	1.00	1.00	50	0	1.0	2.0
111	1.70	1.00	1.00	0.88	0.78	50	0	1.0	2.0
112	2.26	2.00	1.00	1.59	2.53	49	1	1.0	3.0
113	4.12	4.00	7.00	2.08	4.35	50	0	3.0	6.0
114	2.28	1.00	1.00	1.74	3.04	49	1	1.0	3.0
115	3.10	3.00	1.00	1.90	3.63	49	1	1.0	4.0
116	1.75	1.00	1.00	1.37	1.89	49	1	1.0	2.0

TABLE x --Continued

ITEM NUMBER	MEAN	MEDIAN	MODE	STANDARD DEVIATION	VARIANCE	VALUES COUNTED	VALUES NOT COUNTED	QUARTILE (Q1)	QUARTILE (Q3)
117	3.02	3.00	1.00	1.88	3.57	50	0	1.0	4.0
118	2.38	2.00	1.00	1.52	2.32	47	3	1.0	3.0
119	2.93	2.00	n/u*	1.87	3.51	49	1	1.0	4.0
120	2.60	2.50	1.00	1.56	2.44	50	0	1.0	4.0
121	3.20	3.00	1.00	1.94	3.79	49	1	1.0	4.0
122	3.28	3.00	2.00	1.93	3.75	49	1	2.0	5.0
123	2.93	3.00	3.00	1.59	2.55	49	1	2.0	4.0
124	1.46	1.00	1.00	0.78	0.62	50	0	1.0	2.0
125	3.35	4.00	4.00	1.32	1.76	48	2	3.0	4.0
126	2.20	2.00	1.00	1.30	1.70	49	1	1.0	3.0
127	2.64	3.00	n/u*	1.34	1.80	48	2	1.0	4.0
128	4.91	5.00	7.00	2.01	4.07	47	3	3.0	7.0
129	3.53	4.00	4.00	1.63	2.67	49	1	2.0	4.0
130	2.02	2.00	1.00	1.09	1.20	50	0	1.0	3.0
131	3.38	3.00	3.00	1.76	3.11	49	1	2.0	5.0
132	2.91	3.00	1.00	1.66	2.75	48	2	1.5	4.0
133	2.58	2.00	1.00	1.42	2.03	48	2	1.0	4.0
134	3.78	4.00	n/u*	1.87	3.51	47	3	2.0	5.0
135	2.51	2.00	1.00	1.71	2.95	47	3	1.0	4.0
136	2.34	2.00	1.00	1.53	2.35	49	1	1.0	3.0
137	2.25	2.00	1.00	1.34	1.80	48	2	1.0	3.0
138	3.00	3.00	1.00	1.85	3.42	40	0	1.0	4.0
139	4.77	5.00	7.00	2.17	4.71	49	1	3.0	7.0
140	1.90	1.00	1.00	1.47	2.17	50	0	1.0	2.0
141	2.22	2.00	1.00	1.46	2.13	50	0	1.0	3.0
142	2.89	2.00	1.00	2.11	4.46	49	1	1.0	4.0
143	1.85	2.00	1.00	1.00	1.00	49	1	1.0	3.0
144	2.02	1.00	1.00	1.58	2.50	50	0	1.0	3.0
145	4.56	5.00	7.00	2.36	5.59	50	0	2.0	7.0

TABLE X --Continued

ITEM NUMBER	MEAN	MEDIAN	MODE	STANDARD DEVIATION	VARIANCE	VALUES COUNTED	VALUES NOT COUNTED	QUARTILE (Q1)	QUARTILE (Q3)
146	2.10	2.00	1.00	1.40	1.96	49	1	1.0	3.0
147	2.00	1.00	1.00	1.55	2.40	50	0	1.0	2.0
148	4.48	6.00	7.00	2.40	5.79	49	1	2.0	7.0
149	5.77	6.00	7.00	1.57	2.46	49	1	5.0	7.0
150	5.06	6.00	6.00	1.74	3.05	49	1	4.0	6.0
151	2.96	3.00	n/a*	1.53	2.36	50	0	2.0	4.0
152	1.75	1.00	1.00	1.08	1.17	48	2	1.0	2.0
153	4.00	4.00	4.00	1.84	3.39	47	3	3.0	6.0
154	3.04	2.00	1.00	2.07	4.29	48	2	1.0	4.5
155	3.96	4.00	5.00	1.99	3.99	48	2	2.5	5.0
156	3.39	3.00	3.00	1.73	3.01	48	2	2.0	4.5
157	4.89	5.00	7.00	2.14	4.60	48	2	4.0	7.0
158	1.97	1.00	1.00	1.65	2.72	49	1	1.0	3.0
159	5.83	7.00	7.00	1.79	3.22	49	1	5.0	7.0
160	4.70	5.00	7.00	2.08	4.33	48	2	3.0	7.0
161	3.75	4.00	4.00	2.07	4.32	45	5	2.0	5.0
162	1.85	1.00	1.00	1.48	2.21	48	2	1.0	2.5
163	4.58	4.00	n/a*	1.80	3.24	43	7	3.0	6.0
164	2.97	3.00	n/a*	1.63	2.67	44	6	1.0	4.0
165	3.11	3.00	1.00	2.05	4.23	45	5	1.0	4.0
166	5.52	7.00	7.00	1.94	3.79	44	6	4.0	7.0
167	3.96	4.00	7.00	2.29	5.28	46	4	2.0	7.0
168	2.82	2.00	1.00	2.19	4.81	46	4	1.0	4.0
169	5.56	6.00	7.00	1.72	2.96	46	4	4.0	7.0
170	3.36	3.00	2.00	1.84	3.40	47	3	2.0	4.0
171	4.55	5.00	6.00	2.03	4.12	47	3	3.0	6.0
172	3.04	2.00	1.00	2.06	4.25	48	2	1.0	4.0
173	5.41	6.00	7.00	1.67	2.80	46	2	4.0	7.0
174	2.41	2.00	1.00	1.52	2.33	46	2	1.0	3.5

TABLE X --Continued

ITEM NUMBER	MEAN	MEDIAN	MODE	STANDARD DEVIATION	VARIANCE	VALUES COUNTED	VALUES NOT COUNTED	QUARTILE (Q1)	QUARTILE (Q3)
175	3.30	3.00	4.00	1.71	2.92	46	4	2.0	4.0
176	3.40	3.00	1.00	2.00	4.02	47	3	1.0	5.0
177	3.39	3.00	1.00	2.16	4.66	48	2	1.0	5.0
178	4.29	4.00	7.00	2.36	5.57	48	2	2.0	7.0
179	4.91	5.50	7.00	2.08	4.33	48	2	4.0	7.0
180	2.97	3.00	1.00	1.89	3.59	48	2	1.0	4.0
181	4.47	5.00	7.00	2.30	5.31	48	2	3.0	7.0
182	3.67	4.00	1.00	2.26	5.14	49	1	1.0	6.0
183	3.95	4.00	1.00	2.26	5.12	49	1	1.0	6.0
184	2.87	2.00	1.00	1.92	3.69	49	1	1.0	4.0
185	5.51	7.00	7.00	1.96	3.88	49	1	4.0	7.0
186	3.75	4.00	1.00	2.28	5.23	49	1	1.0	5.0
187	2.66	2.00	1.00	1.66	2.78	48	2	1.0	4.0
188	4.08	4.00	1.00	2.21	4.90	49	1	2.0	6.0
189	4.24	4.00	4.00	1.90	3.64	49	1	3.0	6.0
190	3.45	3.00	n/u*	1.87	3.53	48	2	2.0	5.0
191	3.82	4.00	2.00	1.99	3.97	47	3	2.0	6.0
192	3.23	3.00	n/u*	1.89	3.57	47	3	2.0	4.0
193	3.59	4.00	4.00	1.70	2.91	49	1	2.0	4.0
194	3.27	4.00	4.00	1.63	2.66	48	2	2.0	4.0
195	2.91	3.00	1.00	1.62	2.63	48	2	1.5	4.0
196	2.79	2.00	1.00	1.98	3.95	48	2	1.0	4.0
197	2.85	3.00	1.00	1.76	3.10	48	2	1.0	4.0
198	4.31	5.00	6.00	2.10	4.43	47	3	3.0	6.0
199	4.10	4.00	4.00	2.00	4.01	48	2	2.5	6.0
200	3.61	3.00	3.00	2.10	4.45	49	1	2.0	5.0
201	3.46	4.00	4.00	1.93	3.75	49	1	2.0	5.0
202	3.75	4.00	4.00	2.02	4.10	49	1	2.0	5.0
203	3.69	3.00	1.00	2.15	4.63	49	1	2.0	5.0

TABLE X --Continued

ITEM NUMBER	MEAN	MEDIAN	MODE	STANDARD DEVIATION	VARIANCE	VALUES COUNTED	VALUES NOT COUNTED	QUARTILE (Q1)	QUARTILE (Q3)
204	2.46	2.00	1.00	1.77	3.16	47	3	1.0	4.0
205	2.27	2.00	1.00	1.45	2.11	48	2	1.0	3.0
206	3.29	3.00	4.00	1.39	1.95	47	3	2.0	4.0
207	3.33	3.00	n/u*	1.53	2.35	48	2	2.0	4.0
208	3.72	3.00	2.00	2.03	4.15	48	2	2.0	5.5
209	3.51	3.00	1.00	2.12	4.50	49	1	1.0	5.0
210	4.70	5.00	n/u*	1.80	3.27	48	2	3.0	6.0
211	3.52	3.00	2.00	1.94	3.78	48	2	2.0	4.5
212	1.85	1.00	1.00	1.32	1.75	49	1	1.0	2.0
213	3.72	4.00	4.00	1.95	3.81	47	3	2.0	5.0
214	3.58	4.00	4.00	1.66	2.78	46	4	2.0	4.0
215	4.65	5.00	7.00	2.10	4.43	49	1	3.0	7.0
216	4.20	4.00	4.00	2.04	4.16	48	2	3.0	6.0
217	2.30	2.00	1.00	1.51	2.30	49	1	1.0	3.0
218	5.57	6.00	7.00	1.70	2.91	49	1	5.0	7.0
219	2.38	2.00	1.00	1.85	3.45	49	1	1.0	3.0
220	4.69	5.00	7.00	1.82	3.34	49	1	3.0	6.0
221	3.89	4.00	n/u*	2.07	4.30	49	1	2.0	6.0
222	3.87	4.00	4.00	1.93	3.72	48	2	2.0	5.0
223	2.77	3.00	2.00	1.51	2.30	49	1	2.0	3.0
224	4.15	4.00	4.00	1.71	2.93	46	4	3.0	6.0
225	2.97	3.00	1.00	1.71	2.95	48	2	1.5	4.0
226	5.08	6.00	7.00	2.12	4.50	48	2	4.0	7.0
227	2.30	2.00	1.00	1.86	3.46	49	1	1.0	3.0
228	2.54	2.00	1.00	1.96	3.87	48	2	1.0	3.0
229	2.61	2.00	1.00	1.56	2.45	47	3	1.0	4.0
230	5.12	6.00	7.00	1.89	3.59	47	3	4.0	7.0
231	3.95	4.00	4.00	2.04	4.17	46	4	2.0	6.0
232	2.33	2.00	2.00	1.50	2.26	48	2	1.0	3.0

TABLE X --Continued

ITEM NUMBER	MEAN	MEDIAN	MODE	STANDARD DEVIATION	VARIANCE	VALUES COUNTED	VALUES NOT COUNTED	QUARTILE (Q1)	QUARTILE (Q3)
233	3.67	4.00	4.00	1.89	3.59	49	1	2.0	5.0
234	2.93	2.00	1.00	1.84	3.40	47	3	1.0	4.0
235	4.29	5.00	5.00	2.02	4.08	48	2	3.0	6.0
236	1.89	1.50	1.00	1.09	1.20	48	2	1.0	3.0
237	2.77	2.00	1.00	1.63	2.67	49	1	1.0	4.0
238	2.91	3.00	n/u*	1.61	2.61	49	1	1.0	4.0
239	5.06	5.00	7.00	1.77	3.14	49	1	4.0	7.0
240	4.93	5.00	4.00	1.47	2.18	48	2	4.0	6.0
241	4.52	5.00	4.00	1.84	3.40	48	2	3.0	6.0
242	3.91	4.00	4.00	2.19	4.82	49	1	2.0	6.0
243	3.97	4.00	n/u*	2.01	4.06	47	3	2.0	6.0
244	3.43	3.00	4.00	1.99	3.98	46	4	2.0	4.0
245	4.63	4.50	7.00	1.90	3.61	46	4	3.0	7.0
246	5.06	5.00	7.00	1.65	2.74	45	5	4.0	7.0
247	5.24	6.00	7.00	2.01	4.05	45	5	4.0	7.0
248	4.15	4.00	n/u*	2.14	4.62	46	4	2.0	6.0
249	3.74	4.00	1.00	2.35	5.54	47	3	1.0	6.0
250	4.04	4.00	4.00	2.05	4.21	47	3	2.0	6.0
251	3.64	3.50	1.00	2.41	5.85	48	2	1.0	6.0
252	2.91	2.00	2.00	1.90	3.61	49	1	2.0	4.0
253	3.89	3.50	3.00	2.06	4.26	48	2	2.0	6.0
254	3.57	4.00	4.00	1.63	2.68	47	3	2.0	4.0
255	3.68	4.00	4.00	1.75	3.08	45	5	2.0	4.0
256	4.00	4.00	1.00	2.55	6.52	47	3	1.0	7.0
257	4.86	6.00	7.00	2.24	5.04	46	4	3.0	7.0
258	4.29	4.00	7.00	2.57	6.63	44	6	1.5	7.0
259	5.17	6.00	7.00	2.26	5.12	46	4	4.0	7.0
260	4.61	5.00	7.00	2.49	6.24	44	6	2.0	7.0
261	5.19	7.00	7.00	2.36	5.58	46	4	4.0	7.0

TABLE X --Continued

ITEM NUMBER	MEAN	MEDIAN	MODE	STANDARD DEVIATION	VARIANCE	VALUES COUNTED	VALUES NOT COUNTED	QUARTILE (Q1)	QUARTILE (Q3)
262	5.36	7.00	7.00	2.14	4.59	46	4	4.0	7.0
263	4.65	6.00	7.00	2.70	7.34	46	4	1.0	7.0
264	3.93	3.00	7.00	2.67	7.12	46	4	1.0	7.0
265	3.46	3.00	1.00	2.59	6.75	45	5	1.0	6.0
266	4.31	6.00	7.00	2.69	7.24	44	6	1.0	7.0
267	5.40	7.00	7.00	2.37	5.65	45	5	4.0	7.0
268	4.19	4.50	n/u*	2.65	7.04	46	4	1.0	7.0
269	2.20	1.00	1.00	2.02	4.08	49	1	1.0	3.0
270	2.68	2.00	1.00	1.92	3.70	47	3	1.0	4.0
271	2.58	1.00	1.00	2.44	5.99	48	2	1.0	4.0
272	1.36	1.00	1.00	1.05	1.11	49	1	1.0	1.0
273	4.39	5.00	n/u*	2.49	6.20	48	2	1.0	7.0
274	4.14	4.00	n/u*	2.23	4.97	48	2	2.0	6.0
275	3.85	4.00	1.00	2.18	4.76	48	2	1.5	6.0
276	3.43	3.00	1.00	2.12	4.50	48	2	1.5	5.0
277	4.85	6.00	7.00	2.24	5.02	48	2	3.5	7.0
278	3.22	3.00	1.00	2.10	4.43	48	2	1.0	4.0
279	1.93	1.00	1.00	1.65	2.72	49	1	1.0	2.0
280	2.84	3.50	1.00	1.78	3.19	46	4	1.0	4.0
281	4.02	4.00	1.00	2.15	4.64	46	4	2.0	6.0
282	2.08	2.00	1.00	1.45	2.11	49	1	1.0	2.0
283	2.24	1.00	1.00	1.76	3.10	49	1	1.0	4.0
284	4.29	5.00	5.00	1.98	3.95	48	2	3.0	6.0
285	3.20	3.00	1.00	1.76	3.12	49	1	2.0	5.0
286	2.36	2.00	1.00	1.25	1.58	47	3	1.0	3.0
287	3.89	4.00	6.00	1.91	3.66	48	2	2.0	6.0
288	2.97	3.00	2.00	1.70	2.89	49	1	2.0	4.0
289	3.55	3.00	1.00	1.93	3.75	49	1	2.0	5.0
290	2.83	2.00	1.00	1.83	3.37	48	2	1.0	4.0

TABLE X --Continued

ITEM NUMBER	MEAN	MEDIAN	MODE	STANDARD DEVIATION	VARIANCE	VALUES COUNTED	VALUES NOT COUNTED	QUARTILE (Q1)	QUARTILE (Q3)
291	3.63	3.00	1.00	2.13	4.57	49	1	2.0	6.0
292	4.10	4.00	7.00	2.30	5.30	49	1	2.0	6.0
293	3.75	3.00	7.00	2.25	5.10	49	1	2.0	6.0
294	2.33	2.00	1.00	1.47	2.18	48	2	1.0	3.0
295	3.18	3.00	n/u*	1.81	3.27	49	1	2.0	5.0
296	4.25	4.00	n/u*	2.05	4.23	48	2	3.0	6.0
297	2.70	2.00	1.00	1.71	2.95	47	3	1.0	4.0
298	2.24	2.00	1.00	1.22	1.50	45	5	1.0	4.0
299	3.17	3.00	1.00	1.96	3.87	45	5	1.0	4.0
300	2.93	3.00	n/u*	1.83	3.35	49	1	1.0	4.0
301	2.75	2.00	1.00	1.85	3.42	48	2	1.0	3.5
302	3.28	3.00	4.00	1.61	2.61	45	5	2.0	4.0
303	2.02	2.00	1.00	1.20	1.44	46	4	1.0	3.0
304	3.89	4.00	4.00	2.10	4.42	49	1	2.0	6.0
305	4.97	5.00	6.00	1.72	2.97	49	1	4.0	6.0
306	3.08	3.00	1.00	2.08	4.32	49	1	1.0	4.0
307	2.73	1.00	1.00	2.45	6.03	49	1	1.0	5.0
308	2.41	2.00	1.00	1.77	3.14	48	2	1.0	4.0
309	1.83	1.00	1.00	1.32	1.76	49	1	1.0	2.0
310	3.36	4.00	4.00	1.75	3.07	44	6	1.5	4.0
311	4.68	5.00	6.00	1.91	3.65	47	3	4.0	6.0
312	2.10	1.00	1.00	1.66	2.76	49	1	1.0	3.0
313	3.54	4.00	4.00	1.93	3.74	48	2	2.0	5.0
314	3.87	4.00	3.00	1.93	3.72	48	2	2.5	5.5
315	3.45	3.00	3.00	1.84	3.40	48	2	2.0	5.0
316	2.80	3.00	1.00	1.58	2.52	45	5	1.0	4.0
317	3.87	4.00	4.00	1.74	3.04	48	2	3.0	5.0
318	2.88	3.00	4.00	1.36	1.86	43	7	2.0	4.0
319	2.48	2.00	n/u*	1.53	2.34	47	3	1.0	3.0

TABLE x --Continued

ITEM NUMBER	MEAN	MEDIAN	MODE	STANDARD DEVIATION	VARIANCE	VALUES COUNTED	VALUES NOT COUNTED	QUARTILE (Q1)	QUARTILE (Q3)
320	2.97	3.00	1.00	1.89	3.60	44	6	1.0	4.0
321	4.97	6.00	7.00	1.89	3.58	47	3	3.0	7.0
322	2.83	3.00	n/u*	1.63	2.68	49	1	2.0	4.0
323	4.93	5.00	6.00	1.68	2.84	47	3	4.0	6.0
324	2.76	2.00	2.00	1.68	2.83	47	3	2.0	4.0
325	3.45	3.00	3.00	1.97	3.91	48	2	2.0	5.0
326	3.34	3.00	1.00	2.20	4.85	49	1	1.0	5.0
327	3.95	4.00	5.00	2.02	4.08	49	1	2.0	5.0
328	6.18	7.00	7.00	1.16	1.36	49	1	6.0	7.0
329	5.70	6.00	7.00	1.61	2.59	48	2	5.0	7.0
330	3.93	4.00	4.00	1.64	2.69	48	2	3.0	5.0
331	3.87	4.00	4.00	1.70	2.90	49	1	3.0	5.0
332	4.93	6.00	7.00	2.20	4.85	49	1	3.0	7.0
333	2.32	1.00	1.00	1.79	3.22	49	1	1.0	3.0
334	2.83	2.00	1.00	1.81	3.29	48	2	1.0	4.0
335	3.48	4.00	4.00	1.76	3.13	49	1	2.0	5.0
336	5.43	6.00	7.00	1.45	2.12	48	2	4.0	7.0
337	2.89	3.00	3.00	1.73	3.01	47	3	1.0	4.0
338	3.81	3.00	3.00	1.99	3.98	49	1	3.0	5.0
339	4.38	4.00	6.00	1.70	2.90	49	1	3.0	6.0
340	3.09	3.00	4.00	1.42	2.03	44	6	2.0	4.0
341	2.48	2.00	1.00	1.48	2.21	47	3	1.0	3.0

*Not unique

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