

This dissertation has been  
microfilmed exactly as received

68-17,475

BAILEY, Robert Leslie, 1939-  
AN ANALYSIS OF CHANGE FACTORS IN THE  
MODIFICATION OF INSTRUCTIONAL PROGRAMS  
IN SELECTED DEPARTMENTS OF THE UNIVER-  
SITY OF OKLAHOMA.

The University of Oklahoma, Ed.D., 1968  
Education, administration

University Microfilms, Inc., Ann Arbor, Michigan

THE UNIVERSITY OF OKLAHOMA  
GRADUATE COLLEGE

AN ANALYSIS OF CHANGE FACTORS IN THE MODIFICATION  
OF INSTRUCTIONAL PROGRAMS IN SELECTED  
DEPARTMENTS OF THE UNIVERSITY  
OF OKLAHOMA

A DISSERTATION  
SUBMITTED TO THE GRADUATE FACULTY  
in partial fulfillment of the requirements for the  
degree of  
DOCTOR OF EDUCATION

BY  
ROBERT LESLIE BAILEY  
Norman, Oklahoma  
1968

AN ANALYSIS OF CHANGE FACTORS IN THE MODIFICATION  
OF INSTRUCTIONAL PROGRAMS OF SELECTED  
DEPARTMENTS OF THE UNIVERSITY  
OF OKLAHOMA

APPROVED BY

Herbert R. Hengst  
[Signature]  
Glenn Snyder  
Dorothy F. May  
William C. Price

DISSERTATION COMMITTEE

## ACKNOWLEDGEMENTS

The writer wishes to acknowledge his indebtedness to Dr. Herbert Hengst, who, as chairman of the dissertation committee, has given liberally of his time and assistance in directing the study. The writer wishes to express his appreciation to the other members of his committee, Dr. O. D. Johns, Dr. Glenn R. Snider, Dr. Dorothy Truex and Dr. William Price, for their services in the organization and preparation of the study.

The assistance and cooperation of Dr. Pete Kyle McCarter, Mrs. Jeanne Steele and Mrs. Marilyn Elliott is acknowledged. Individual indebtedness to the University faculty members who made this study possible is recognized.

And most especially to my wife, Marilyn, much credit and gratitude are given for her encouragement and assistance throughout the doctoral program and the preparation of this study.

## TABLE OF CONTENTS

	Page
LIST OF TABLES . . . . .	vi
 Chapter	
I. INTRODUCTION . . . . .	1
Need for the Study . . . . .	3
Statement of the Problem . . . . .	5
Major Assumptions . . . . .	5
Definition of Terms . . . . .	6
Limitation of the Study . . . . .	6
Organization of the Study . . . . .	8
II. REVIEW OF RELATED LITERATURE . . . . .	8
Summary . . . . .	26
III. DESIGN OF THE STUDY . . . . .	28
Identification of Change Factors . . . . .	30
Identification and Categorization of Instructional Program Revisions . . . . .	30
Collection of Data . . . . .	40
Statistical Treatment . . . . .	41
IV. FINDINGS . . . . .	44
V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS . . . . .	67
Purpose of the Study . . . . .	69
The Problem of the Study . . . . .	69
The Design . . . . .	70
The Instrument . . . . .	71
Summary of Findings . . . . .	71
Instructional Program Revision Data . . . . .	71
Change Factor Intensity of Importance . . . . .	72
Change Factor Rankings . . . . .	74
Conclusions . . . . .	75
Recommendations . . . . .	76
Implications for Further Research . . . . .	77

TABLE OF CONTENTS -- continued

	Page
APPENDIX . . . . .	78
BIBLIOGRAPHY . . . . .	99

## LIST OF TABLES

Table	Page
I. Departmental Division Figures for the Study	32
II. Original and Amplified Departmental Divisions	37
III. Types of Instructional Program Revisions According to Course Levels	45
IV. The Importance of Change Factors Relating to Instructional Program Revisions	48
V. Weighted Values and Rank of Change Factors	64
VI. Rank of the Five Highest Change Factors by Faculty A and B Members	66
VII. Rank of the Five Lowest Change Factors by Faculty A and B Members	67

AN ANALYSIS OF CHANGE FACTORS IN THE MODIFICATION  
OF INSTRUCTIONAL PROGRAMS IN SELECTED  
DEPARTMENTS OF THE UNIVERSITY  
OF OKLAHOMA

CHAPTER I

INTRODUCTION

The instructional program has long held the central place in the scheme of higher education. Beginning with the latter part of the 19th century, when institutions of higher education accepted the elective principle, the number and variety of courses have doubled and tripled.<sup>1</sup> As a result of this principle, expansion of course offerings has become a benchmark of progressive institutions during the development of twentieth century higher education.

To date the course expansion has increased. Institutions appear to vie with one another in making the instructional program respond to all kinds of students, to all kinds of faculty interests, and to all kinds of pressures from outside the institution.<sup>2</sup> Additional disciplines related to

---

<sup>1</sup>John S. Brubacher and Willis Rudy, Higher Education in Transition, New York: Harper & Row, 1958, p. 258.

<sup>2</sup>James W. Brown and James W. Thornton, College Teaching: perspectives and guidelines, New York: McGraw-Hill Book Company, 1967, p. 183.



developments in industry, commerce, and technology have appeared. More and more the major disciplines are splintering and the degree of specialization is increasing with the explosion of knowledge. If such a trend continues, all requests for modification of instructional programs might well be granted by an institution, regardless of its goals and purposes. Articles occasionally appear in professional publications that describe and condemn this situation. Such sources also report that universities have infrequently declared moratoria on "course proliferation" but they have had little effect on instructional program expansion.

The study of the Commission on Financing Higher Education and other published studies<sup>3</sup> suggest that instructional programs exceed the limits of necessity in almost every type of institution of higher education, implying that some better means must be found to control it. Limited resources might be expected to retard expansion. However, after instructional program revisions are approved, it then becomes the task of the administrators to secure the resources needed to implement such decisions.<sup>4</sup> Too often, faculty and

---

<sup>3</sup>Commission on Financing Higher Education, Nature and Needs of Higher Education, New York: Columbia University Press, 1952, p. 14; Theodore Caplow and Reece J. McGee, The Academic Marketplace, New York: Doubleday & Company, 1958, p. 203; Paul I. Dressel and Associates, Evaluation in Higher Education, Boston, Mass.: Houghton Mifflin Company, 1961, p. 64; Hugh S. Brown, "The Pattern of Curriculum Expansion in the University", College and University, Vol. 40, Winter, 1965, p. 191.

<sup>4</sup>Brown and Thornton, loc. cit., p. 186.

administration do not accept responsibility for the control of instructional program revisions and cite other factors as being the actuating force. Regardless of who is the controlling body, instructional program revisions represent a major item of instructional time and expense. It is reasonable to assume that those who are associated with instruction should have enough information available concerning factors that influence the modification of instructional programs so that more rational decisions will be made. Quality education relates directly to change factors which have significance in facilitating or hindering instructional program revision.

The University of Oklahoma was selected as the institution from which to gather instructional program information, as it is representative of a major complex university in contemporary American society.

#### NEED FOR THE STUDY

More efficient education and quality education could be simultaneously improved by rational instructional program revision. If the change factors interfering with achievement of rational modification of instructional programs are identified and the extent of their influence known, then instructional program revision can be made with rationality. Potential obstructions to rational instructional program revision such as the number of courses offered, small credit packages, class size, overlap or duplication, and contact hours could be reduced or eliminated. Faculty disinterest,

lethargy and outright resistance<sup>5</sup> could be redirected thus improving the quality and efficiency of the instructional program.

The need for understanding in this area has been recognized by some studies, among them the following: "The Pattern of Curriculum Expansion in the University,"<sup>6</sup> "Analysis of Teachers' Expressed Judgements of Barriers to Curriculum Change in Relation to the Factor of Individual Readiness to Change,"<sup>7</sup> "A Study of Factors Which Influence Curriculum Change in Secondary School Mathematics,"<sup>8</sup> and "Curriculum Change: Factors Which Affect the Development of Three Selected Changes in a New Jersey School System."<sup>9</sup>

As part of the progress reports on the efforts of committees developing the master plan for development of the University of Oklahoma, it was reported that an area in need

<sup>5</sup>Paul I. Dressel, The Undergraduate Curriculum in Higher Education, Washington D.C.: The Center for Applied Research in Education, Inc., 1963, p. 37.

<sup>6</sup>Brown, loc. cit.

<sup>7</sup>Richard Allen Dempsey, "Analysis of Teachers' Expressed Judgements of Barriers to Curriculum Change in Relation to the Factor of Individual Readiness to Change" (unpublished Ph.D. dissertation, College of Education, Michigan State University, 1963).

<sup>8</sup>Robert Lloyd Truex, "A Study of Factors Which Influence Curriculum Change in Secondary School Mathematics" (unpublished Ph.D. dissertation, College of Education, Oklahoma State University, 1964).

<sup>9</sup>Martin Siegel, "Curriculum Change: Factors Which Affect the Development of Three Selected Changes in a New Jersey School System" (unpublished Ed.D. dissertation, Teachers College, Columbia University, 1966).

of serious research is the process of instructional program revision.<sup>10</sup>

#### STATEMENT OF THE PROBLEM

The study reported in these pages is an investigation of particular instructional program revisions in selected departments of the University of Oklahoma. Specifically, it is an attempt to identify the change factors which were involved in producing instructional program revisions. In investigating the problem of the study the following problematic question arose: (1) Were there similarities and differences in perceptions of faculty members concerning change factors in the modification of instructional programs so that recommendations might be developed that promote rational instructional program revision.

#### MAJOR ASSUMPTIONS

The basic assumption necessary for pursuit of this study was that the descriptive statements selected from literature identifying the change factors related to the instructional program of higher education reflect a summation of attitudes and opinions of those who have studied and are familiar with instructional program revision in higher education. Further, it was assumed that the different instructional program revisions of the various departments of the University of Oklahoma could be identified. In

---

<sup>10</sup>Doyle Bishop, Chairman, "A Preliminary Statement of the Mission of the Sub-panel on Academic Administration" (unpublished committee report, University of Oklahoma, 1968).

addition, it was assumed that the faculty members of the University of Oklahoma were sufficiently competent to identify the change factors involved in instructional program revision and to evaluate the importance of each in regard to a particular revision.

#### DEFINITION OF TERMS

Analysis - the process of distinguishing the component parts and resolving them into a workable form.

Change factors - those forces or conditions acting together or separately, that produce a complete or partial revision of instructional programs in form, quality or relationship.

Instructional program - a statement of the contemplated subjects, courses and content offered by various departments of the University of Oklahoma in a given semester.

#### LIMITATIONS OF THE STUDY

This study is concerned with instructional program revisions that have taken place from September 1963 through August 1967 and have been officially sanctioned through the University structure. These instructional program revisions have been approved by the State Regents for Higher Education and are reflected in the records of the Council on Instruction.

The study includes the departments of the University of Oklahoma which had instructional program revisions from September 1963 through August 1967 and which have two or more faculty members currently employed, who were employed during

the time the instructional program revisions took place. These members were accessible, familiar with the instructional program revisions that had taken place and the change factors effecting them and, as such, were able to rate the change factors more accurately than other available groups.

An additional limitation of the study, is the unavailability of terminology that is equally meaningful for all the faculty of the various disciplines.

#### ORGANIZATION OF STUDY

Chapter I of this investigation introduces the study, states the need for the study, the problem, assumptions, definition of terms, limitations and organization of the study. A survey of professional research and literature related to the subject is presented in Chapter II. This includes a review of research and identification of factors that produce instructional program revision. Chapter III includes an explanation of the design of the study. This identifies the departments, instructional program revisions, and faculty members concerned with the study. Chapter IV is a presentation and analysis of the data pertaining to the instructional program revisions. This includes ranking of factors and a test of differences. Chapter V is composed of a summary of the study and conclusions and recommendations based upon this study.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

This chapter offers a review of investigations related to the problem of instructional program revision. Selection has been based on the recency and availability of the related research, and its relevance to the central purpose of the present investigation, that is, the factors that effect instructional program revision or change in colleges and universities. It was found through this review that there have been some advances in the study of instructional programs in higher education and more are expected in the near future. The study of change factors, as they concern instructional programs in higher education, is still relatively undeveloped, but this area of study is attracting an increasing amount of attention. One of the motivating factors for research in this field is the need for instructional program information, available to the administration and faculty, so that a sound basis for effective instructional program management is possible in institutions of higher education.

As a result of a careful analysis of the instructional program revision movement in higher education, Katz and Sanford maintain that in spite of the importance of the instructional program "rarely has it been made the objective

of systematic investigation."<sup>11</sup> An early illustration of this view is the change factor of imposed instructional program requirements used by state legislatures to influence educational policy. Very seldom were these requirements made on the basis of any objective research.<sup>12</sup> Fortunately for higher education, most of these requirements have been negligible; that is to say they enjoin upon the university the duty of teaching a designated course rather than prohibiting it from giving instruction in any particular area. Normally, this change factor is accepted by the institutions of higher education as a motivation for instructional program revision. It is only where governing bodies have attempted to require special political indoctrination for the students that institutions have rebuffed this change factor.<sup>13</sup>

A similar factor in determining instructional programs is the use of legal and state-wide coordinating agencies.<sup>14</sup> While state agencies have been unable to completely redefine and redistribute programs among the public and private institutions, they have been a change factor in preventing unnecessary proliferation of courses, services and

---

<sup>11</sup>Joseph Katz and Nevitt Sanford, "The Curriculum in the Perspective of the Theory of Personality Development," The American College: A Psychological and Social Interpretation of the Higher Learning, (ed.) Nevitt Sanford, New York: John Wiley & Sons, 1965, p. 430.

<sup>12</sup>Malcolm Moos and Francis E. Rourke, The Campus and the State, Maryland: The John Hopkins Press, 1959, p. 259.

<sup>13</sup>Ibid., p. 271

<sup>14</sup>Lyman A. Glenny, Autonomy of Public Colleges, New York: McGraw-Hill Book, Inc., 1959, p. 88.



programs within the various institutions. For example, in Georgia, recommendations from such an agency were adopted and this resulted in the elimination of unnecessary overlap and duplication in instructional programs.<sup>15</sup>

World Affairs and the College Curriculum<sup>16</sup> took an early look at the influence of world and national affairs on the higher educational instructional program. The authors pointed out that colleges, no less than individuals, are aware of our interdependence and as a result are forced to take this into account when planning instructional programs. Being more fortunate than its medieval forebearer, the modern institution has improved its communications with most of the nations of this world and their ideas are common currency. As a result, the institutions are influenced by ideas and actions originating beyond the regional or local frontiers. While it is often hard to distinguish specific factors that effect instructional program revisions, it is certain that most institutions, colleges or universities, whether independent or state-financed, urban, suburban, or rural, have to face the pressures of the times and fashion an instructional program suited to their society. One group of such national forces can be described as selected social, economic and

---

<sup>15</sup>Ibid., p. 91.

<sup>16</sup>Richard Swift, World Affairs and the College Curriculum, Washington D.C.: American Council on Education, 1959, p. v.

<sup>17</sup>Frederick Shaw, "The Changing Curriculum", Review of Educational Research, Vol. XXXVI, No. 3, June 1966, p. 344.

demographic factors.<sup>17</sup> These forces have arisen from concern in American education in recent years for the problems of the culturally deprived. The same forces have started a reappraisal of the instructional program in higher education for all disciplines that contribute to the preparation of personnel for aiding the ghetto population. Identification of the educational implications of these concerns is a change factor of programs of instruction.

Harris reported as early as 1962 that the supply of faculty required by increasing enrollments was not maintaining traditional standards.<sup>18</sup> As a result some institutions of higher education have, of necessity, effected program revisions to make better use of the limited talent they had available. Such revisions frequently include one or more of the following: larger classes; greater use of visual aids; reduction of course requirements; greater student independent study; careful scrutiny of courses; evaluations of small classes; and a more receptive attitude toward the use of machines to supplement the teacher or even replace him to some extent.<sup>19</sup>

Hugh S. Brown apparently confirms this phenomenon as a change factor.<sup>20</sup> As reported in College and University,

<sup>17</sup>Frederick Shaw, "The Changing Curriculum", Review of Educational Research, Vol. XXXVI, No. 3, June 1966, p. 344.

<sup>18</sup>Seymour E. Harris, Higher Education: Resources and Finance, New York: McGraw-Hill Book Company, Inc., 1962, p. 522.

<sup>19</sup>Idid., p. 530.

<sup>20</sup>Brown, op. cit., p. 191

he analyzed the pattern of instructional program expansion in the university. The study was concerned with the rate at which the total number of courses in some university instructional programs is increasing in relation to the increase in student enrollment. The data provided in Brown's study indicated that as more students are enrolled additional courses appear in the catalogue.

Significant change factors related to the organization of instructional program developments are mentioned by Brown and Thornton: (1) broadening the offerings of institutions to meet all the educational needs of their students has been a motivating trend, and (2) the organizational pattern away from establishing separate schools for separate purposes. The idea now is to offer a comprehensive instructional program composed of general, liberal studies needed by all regardless of their vocational choice, and specialized instruction related to a particular occupation.<sup>21</sup>

The dominant change factor identified by a survey completed by B. Lamar Johnson<sup>22</sup> was the desire for improved teaching. Other factors Johnson described were attempts to accommodate and effectively teach increasing numbers of students and to achieve financial economy or a combination of these factors.

---

<sup>21</sup>Brown and Thornton, loc. cit., p. 83.

<sup>22</sup>B. Lamar Johnson, Islands of Innovation, Los Angeles: Junior College Leadership Program, 1964, p. 13.

Formerly, it was the expectations of the university regarding high school preparation that decided the beginning level of higher educational instructional program. Now there is a tendency for the proficiency level and graduation requirements to effect instructional program revision in the university. More often than faculty are willing to admit, the program offered is too elementary at the beginning level.<sup>23</sup>

Scholars who have concentrated on the massive reforms of the high school fields, along with the graduates of the new programs, are finding the first two years of instructional program wanting. As a direct result, the scholars, in a rather unusual way, are initiating revisions in the instructional program in higher education. In the mid-1950's when Professor Jerrold Zacharias of the Massachusetts Institute of Technology brought scientists together for discussions, three new high school programs emerged.<sup>24</sup> The "new" mathematics, physics and biology revised the instructional programs in higher education. Consequently there emerged high school and college instructors who teach these methods. Such an instructional program revolution promoted a coordination of efforts between high school and higher education.

Materials also aid the diffusion of instructional program revisions. If materials are comprehensive and designed

---

<sup>23</sup>John I. Goodlad, School Curriculum Reform in the United States, New York: The Fund for the Advancement of Education, 1964, p. 72.

<sup>24</sup>Ibid., p. 21.

to fit the demands of the teaching situations, faculty adoptions becomes more likely.<sup>25</sup> In fact it would not be surprising if materials have exerted far more influence in the actual teaching of some disciplines than has the available research. Wiles<sup>26</sup> believes that new materials provided by the commercial publishing companies do much to revise the instructional program development. Doll also verifies the fact that popularly-written books and articles sometimes intentionally and sometimes unintentionally contribute to the initiation of instructional program revision in higher education.<sup>27</sup>

Almost four billion dollars in federal aid has been made available in the mid-1960's to education at all levels<sup>28</sup> Some of these funds support the Curriculum Research and Development Program.<sup>29</sup> This program aims toward a break through in pre-planning, and gives continuous attention to all steps

---

<sup>25</sup>Matthew B. Miles, "Innovation in Education: Some Generalizations", Innovation in Education, (ed.). Matthew B. Miles, New York: Teachers College Press, 1964, p. 633.

<sup>26</sup>Kimball Wiles, "Contrasts in Strategies of Change", Strategy for Curriculum Change, (ed.). Robert Leeper, Washington D.C.: Association for Supervision and Curriculum Development, 1965, p. 5.

<sup>27</sup>Ronald C. Doll, Curriculum Improvement: Decision Making and Process, Boston: Allyn and Bacon, Inc., 1967, p. 189.

<sup>28</sup>Phyllis Ann Kaplan, Editor, Standard Education Almanac 1968, Los Angeles: Academic Media Inc., 1968, p. 41.

<sup>29</sup>Shaw, op. cit., p. 346.

in the research process seeking the solution to be found and translated into practice. Because instructional program revisions require inordinate outlays of money, energy or time, Miles<sup>30</sup> suggests that until the Federal grants became available, administration, faculty, and students were likely to accept revision more slowly. Of course, the cost question interacts with the profit-making possibilities associated with the revision. Generally, there is an absence of adequate funding so that higher educational institutions have a tendency to stress cost reduction.<sup>31</sup>

Helping to reduce the influence of the cost reduction element are the individuals or agencies that grant funds for projects they consider significant. As mentioned previously, these include departments of the federal government which express needs and goals they wish met. The influence of most donors seems to be constructive in instructional program revision. The number of donations has increased recently with the establishment of numerous tax exempt foundations and greater allocation of federal funds to education.<sup>32</sup>

By asking the question, "When will the curriculum revolution that has been stimulated by university scholars in the public schools hit college education?", Vernon E. Anderson<sup>33</sup>

---

<sup>30</sup>Miles, op. cit., p. 635.

<sup>31</sup>Ibid., p. 637.

<sup>32</sup>Ibid., p. 633.

<sup>33</sup>Vernon E. Anderson, "University Leadership in Social Planning," Educational Leadership, Vol. 25, No. 2, 1967, p. 115.

identified a factor related to instructional program revision. As effectively identified by Brown, the procedures for revising instructional programs in higher education normally follow a common university pattern. Generally, a proposal for a new course originates in the department but must be approved by the department head, the college dean, and a curriculum committee of the faculty. When presented with these recommendations for adoption, the vice-president for academic affairs is unlikely to reject the proposals. Probably the same may be said for the board of trustees. It can be concluded that while these procedures can provide the mechanics for measures of control, academic custom militates against this.<sup>34</sup> Anderson contends that the torturous process of going through the sequential order, the department committee, the department, the college committee, the university committee, the graduate school, the faculty assembly, the administrator in charge of instruction, and the board of regents ordinarily takes the minimum time of one year. Consequently, he suggests that the procedure itself is an inhibiting factor that must be modified if instructional program revision is to be facilitated.

It is said that human knowledge doubles every nine years.<sup>35</sup> Because of the inhibiting procedure for revising instructional programs, many subject matter specialists

---

<sup>34</sup>Brown, op. cit., p. 188.

<sup>35</sup>Shaw, op. cit., p. 343.

perceived that current conventional courses are not reflecting the growth of information. The increased specialization of knowledge not only augments the number of courses available, but also restructures courses to encourage students to relate facts to larger areas of knowledge, to exercise judgment, and to perform independent research. Brown states that unless these specialized courses with consequent limited enrollment are restructured in a more efficient way, institutions of higher education will find it more difficult to justify requests for greater financial support.<sup>36</sup>

Specialization has become the order of our times because of the vast amount of knowledge available.<sup>37</sup> In addition, all this information is more accessible than ever before because of modern communication media and technology. This growth of knowledge works together with specialization as a change factor in the revision of instructional programs.

A major impact in instructional program revision is made by regional accrediting associations and national accrediting commissions. The common purpose of both types of reviewing bodies has been to establish and to safeguard standards.<sup>38</sup> Normally, predetermined standards must be met before membership or accreditation will be approved by these

---

<sup>36</sup>Brown, op. cit., p. 185

<sup>37</sup>Shaw, op. cit., p. 346.

<sup>38</sup>J. G. Umstattd, College Teaching, Washington D.C.: Community College Press, 1964, p. 48.



organizations. Thus, instructional program revision is encouraged by these agencies.

In discussing the influences on instructional program revision in higher education, Umstattd<sup>39</sup> mentions two factors that may be either positive or negative in a given situation: (1) the chief administrator, as an influencing factor may or may not favor development and thus will determine success or failure of any proposal for program revision; (2) because a governing board sets broad policies and employs the administrator to direct them, it becomes another influencing factor. It can determine the limits, broad or narrow, within which instructional program development can operate, and instructional program revision is determined by the points of view and general quality of its governing body.

At Harvard, Yale, Stanford and other prestige institutions, a direct attempt has been made to clarify conflicting assumptions held concerning students. Through student participation in instructional program evaluation, the faculty inform themselves of students as an emerging motivator of instructional program revision.<sup>40</sup> An example of this attitude is the concept that the entering college student is a mature person who is expected to select his instructional program in accordance with his predilections and his conceptions of what he expects to do or be. Where this conception of entering students prevails, the emphasis is on free electives.

---

<sup>39</sup>Ibid., p. 52.

<sup>40</sup>Wiles, op. cit., p. 4

Conversely, where the opposite assumptions of student maturity are prevalent, the instructional program structure becomes less flexible. Therefore, it might logically be implied that the pre-conceived attitudes held by the faculty or the administration have a direct influence on the student participation that could occur in the instructional program.

Wiles states that some administrators concerned with higher education have advocated directed instructional program revision. The idea is that quality should not be equated with revision but goals. It is identification with this position that would encourage the following change factors as being primary in higher education:

- (1) Major instructional program revision needs to be introduced by the administration because the administration marshal the necessary authority and precipitate the decisions necessary for adoption.
- (2) Basic research, program design and field testing is accomplished by various departments in their own discipline, this, in turn, produces appropriate instructional program revision.
- (3) Real or assumed knowledge on the part of various faculty members is a major factor in the acceptance of particular instructional program revision.
- (4) The most persuasive experience that can be provided to convince faculty of the value of a revision is to make provision for them to investigate a successful new program and see it in action.

(5) Due to the staff turnover at the initial level, those departments that have some type of in-service education in the skills or necessity for instruction program revision usually are more effective and successful.

(6) Revisions in the instructional program are sometimes effected by adopting a new master plan drawn up by outside experts.

(7) When new courses of study or instructional program bulletins are written, this effects program revision.

(8) Most effective revisions in the instructional program take place at the department or discipline level.

(9) Many times when faculty change through their participation in decision making related to the instruction, the instructional program is revised.

(10) If a strong orientation program exists which develops new faculty perceptions and skills, this normally produces instructional program revision.

(11) If the faculty are active as consultants in the public school systems, private enterprise, and assisting them with innovation, many times revisions in the instructional program will be effected.

(12) If conference and convention attendance for key faculty in a department or college is encouraged, then they become resource persons and leaders for other staff members who in turn can effect revision in instructional programs.

(13) When faculty and staff are encouraged to interact and participate with other departments and college staff this

provides innovation in ideas and work style which in turn effect instructional program revision.<sup>41</sup>

Another area frequently discussed and germane to the topic is the bulk of instructional material which is represented by the large number of courses offered. The majority of the instructional program is a consequence not only of an ever-increasing specialization of knowledge, but also to the "conceptual omnivorousness" in the present stage of our culture. The faculty must be able to say that they have more courses available and require more course work completed than other rival institutions. The idea is that "more" is identified as "better"<sup>42</sup>

"Today, industrial and commercial enterprises have expanded and diversified to the extent that literally hundreds of new occupations exist that cannot be entered without some training at the higher educational level, and those who have studied the matter report that these occupations increase at the rate of ten or more a year."<sup>43</sup> All these developments require that institutions of higher education consider whether or not their present instructional program adequately can sustain them and if not, what revisions need to be made.

<sup>41</sup>Ibid., pp. 6-10.

<sup>42</sup>Katz and Sanford, op. cit., p. 48.

<sup>43</sup>Earl J. McGrath and L. Richard Meeth, "Organizing for Teaching and Learning: The Curriculum", Higher Education: Some Newer Developments, (ed.). Samuel Baskin, New York: McGraw-Hill Book Company, 1965, p. 31.

Holt and Senstegard assert that theory and research have not been an important change factor in influencing instructional programs.<sup>44</sup> This is not to say that they should not be included as a change factor but only that the influence is not nearly as significant as one might expect or desire. This would indicate that the faculty must improve the communication between the researcher and the practitioner.

It has been suggested that two types of technological advancements have influenced higher educational programs:<sup>45</sup> (1) industrial advances, often called automation; and (2) educational technology, which put new mechanical tools into the lecture hall. These advancements have increased the demand for faculty trained in their uses. Mechanized instruments available for the classroom include teaching machines, tapes, discs, television, radio, films, filmstrips, slides, classroom computers, and retrieval systems. Use of these instruments allow instructional program revisions relevant to the media, and afford aid and stimulus for better teaching.

Goodlad suggests that, traditionally, instructional programs are developed with minimum attention to how students learn and maximum concern with how knowledge may be logically organized on paper. This is normally done to insure the proper breadth or depth requirements for later courses. It was

---

<sup>44</sup>Leland Holt and Manford Stenstegard, "Relating Self-Concept to Curriculum Development," Journal of Educational Research, Vol. 58, April, 1965, p. 242.

<sup>45</sup>Shaw, op. cit. p. 345.

Goodlad's contention that each course should be conceived an end in itself; it should be designed first with attention to its own development objectives.<sup>46</sup>

Anderson stated that revisions are more frequently aimed outward than inward; i.e. - toward content rather than instruction. The fact is that the university professor's behavior is seldom the subject of research. When the individual is willing to evaluate his teaching in terms of behavioral goals, the revolution in university instructional programs will really have begun.<sup>47</sup> Once this occurs, it may well become the dominant factor in developing instructional program revisions in institutions of higher education.

Neagley and Evans<sup>48</sup> attribute revisions in instructional programs to many forces on the national, state and institutional level. In addition to these, they discuss two other change factors: (1) certain institutions of higher learning themselves, and (2) renowned and highly respected individuals. Certain colleges and universities have earned reputations for the excellence and timeliness of their instructional programs. The influences of these colleges and universities on instructional program revisions in other institutions are a direct result of the need to stay competitive in

---

<sup>46</sup>John I. Goodlad, and others, The Changing School Curriculum, New York: The Fund for the Advancement of Education, 1966, p. 92.

<sup>47</sup>Anderson, op. cit., p. 188.

<sup>48</sup>Ross L. Meagley and N. Dean Evans, Handbook for Effective Curriculum Development, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967, p. 81.

order to attract students and funds. Within the same conception, well known persons such as Admiral Rickover, James Conant, and U.S. Representative Green, who are often non-professional educators exert profound influence on the instructional programs of higher education.<sup>49</sup>

In attempting to identify instructional program revisions that should be covered by formal institutional policy, Patterson<sup>50</sup> reports factors that are customarily not considered in program revision because these factors are seldom recognized. One of these is curricular capacity, an index of capability determined by such elements as full-time-equivalent faculty, appropriate teaching load, number of courses taught on a rotating basis, and supervision of graduate theses. The concept is that identifiable revision could be motivated by modifying the instructional program capacity. Standards of optimum class size under recognized teaching procedures such as lecture, discussion, seminar and studio could impair or motivate instructional program revision. Whether such standards are determined by tradition, physical planning, or research is not in question here. The fact is that such information is normally available and can be understood by those involved in instructional program revision development. These change factors have an impact on instructional program revision.<sup>51</sup>

---

<sup>49</sup>Ibid., p. 192

<sup>50</sup>Kenneth D. Patterson, "The Administration of University Curriculum," The Journal of Higher Education, Vol. XXXVIII, No. 8, November, 1967, p. 442.

<sup>51</sup>Ibid., p. 446.

In part of his address at the 22nd National Conference on Higher Education, Edgar Dale<sup>52</sup> listed two factors that are responsible for the lack of instructional program revision. If stated in the reverse, there could be implication that they would initiate program revision. The factors positively stated are: (1) The machinery of instructional development in the institution is weighted for change. At most institutions the committee on instruction is demanding evidence favoring dis-continuing of the status quo. (2) Professional rewards are given to those involved in committee work on innovations that require extra curricular and instructional study. Committee work is considered as part of the regular load.

At the University of Oklahoma, as part of self-study, it was the opinion of the sub-committee studying faculty administration that instructional program revision is a matter uniquely within the faculty's province. It was the opinion of the committee that the faculty should be the governing body to make final approval or disapproval of requested instructional revisions.<sup>53</sup>

---

<sup>52</sup>Edgar Dale, "The Innovator and the Establishment", In Search of Leaders, Washington D.C.: American Association for Higher Education, 1967, p. 89.

<sup>53</sup>Jim P. Artman, Chairman, "Report No. 2 Concerning Administration at College and Department Level" (unpublished committee report, University of Oklahoma, 1968).



## SUMMARY

It is apparent from a review of the literature related to change factors in the instructional program of higher education that many individuals are aware of the problems that exist and are making efforts to delineate them. The review of related literature and research produced 44 descriptive statements identifying the change factors related to the instructional programs of higher education. These change factors briefly are as follows: maturity of the students; specialization of knowledge; organization of instructional content; graduate department of college; foundation and federal grants; instructional materials; "outside experts"; new courses of study; in-service training; personnel changes; admission requirements; faculty appointments; high schools; teaching loads; instructional techniques and aids; conference and convention attendance; self-studies; planning and coordination; administration; communication systems; non-academic staff; on-going programs; social and cultural phenomena; student needs; collegiate tradition; decision-making process; philosophic posture; short-term modifications; physical and personnel capacity; institutional policy; long range plans; purposes and effectiveness; grading practices; institutional wide guidelines; orientation program; off-campus activities; instructional research; technological advances; legal changes; high status institutions; accrediting associations; enrollment patterns; administrative procedures; and faculty reward. The review failed to reveal a study which dealt directly with the

determination of types of instructional program revisions that occur and the change factors related to instructional programs. The nature and scope of the research thus reviewed reinforced the need for a study such as the present investigation.

## CHAPTER III

### DESIGN OF THE STUDY

In order to investigate the change factors in the instructional programs of the selected departments of the University of Oklahoma, it was necessary to secure information and opinions from the faculty. The information obtained was used as a basis for testing the hypothesis. In this study the hypothesis involves change factors that modify instructional programs.

H<sub>0</sub>: The ratings given the change factors in terms of the influence the factors had on identified instructional program revisions are the same as the ratings given in terms of the influence the factors should have on instructional program revision in higher education.

#### Identification of "Change Factors"

To obtain sufficient data for valid conclusions, an instrument was developed that would elicit the necessary information. In developing the instrument a list of factors that promote change related to instructional program revision in higher education was identified through investigation and analysis of current, available professional literature. The change factors, obtained from the literature, were expressed as statements and appeared as items in the instrument. Two

forms of the instrument were developed so that similarities and differences in the opinions of the respondent groups could be identified and analyzed. The same items appeared on both Form A and Form B of the instrument. Faculty respondents using Form A were asked to indicate the importance that each of the change factors should have relative to instructional program revision in higher education. Respondents using Form B were asked to indicate the importance of the change factors listed regarding specific identified instructional program revisions that had occurred in the respondents' department. The importance scale included very important, important, somewhat important, and unimportant.

In the preparation of the instrument, the change factor statements were reviewed by the staff at the Center for Research and Development in Higher Education, University of California, Berkeley. Some suggestions were thus obtained, revisions were then made in the instrument and it was printed in its final form. In the final printing, the change factors were arranged by random selection in the instrument. An open-ended question was provided to give the respondents an opportunity to state opinions not called for by the structured items.<sup>54</sup>

It is apparent from the review of the literature that isolated and individual change factors have been identified with instructional program revisions in higher education, but

---

<sup>54</sup>Attached in Appendix A.

the review did not reflect any attempt to gather these factors and analyze their importance.

#### Identification and Categorization of Instructional Program Revisions

A list of official instructional revisions that had taken place in each respondent's department was attached to Form B. A sample of one of these lists that was sent with Form B to faculty members is included in the Appendix.<sup>55</sup> It was included for referral so that the responses to the items on the instrument would be as accurate as possible. The lists of instructional program revisions were obtained by reviewing the records of the Council on Instruction, central depository for all instructional program revisions that occur at the University of Oklahoma. The lists of instructional program revisions represent all revisions that were recorded from September 1963 through August 1967, a complete academic four year period. The official titles listed by the Council on Instruction in classifying all requests for instructional program revision were used as the categories. The number, sources and types of revisions are reported in the Appendix.<sup>56</sup>

#### Selection of Study Samples

The population investigated in this study included two samples randomly selected from the faculty members who were employed by the University of Oklahoma during the period

---

<sup>55</sup>Attached in Appendix B.

<sup>56</sup>Attached in Appendix C.

that the identified instructional program revisions took place. The required size of each of the two sample groups of selected faculty members needed to produce a given standard error was determined according to the method suggested by Cella, Sampling Statistics in Business and Economics.<sup>57</sup>

The faculty members were identified according to the various departments of the University of Oklahoma. The departmental divisions, together with their percentage of the total population as given in the Faculty Register<sup>58</sup> and within the limitations of the study, are reported in Table I.

In order to determine the required sample size the following formula was used. The sample was designed for a sampling error of 10 percent with a 95 percent confidence coefficient:

$$(1) \quad 1.96 \sigma \bar{x} = 5.0 \quad \%$$

$$(2) \quad \sigma \bar{x} = 2.551 \quad \%$$

Substituting these values in the formula for the standard error of the intensity sample,

$$\sigma \bar{x} = \sqrt{\left( \frac{N \text{ divisions}}{N} \sigma \text{ divisions} \right)^2}$$

(3) We will have

$$.02551 = \frac{(.1641)^2}{n}$$

$$n = \frac{.02693}{.0006508}$$

(4) Solving:  $n = 41.$

<sup>57</sup>Francis Cella, Sampling Statistics in Business and Economics, Oklahoma: Bureau of Business Research, 1950, p. 164.

<sup>58</sup>Faculty Register 1967-68, Norman, Oklahoma: University Press, 1967.

TABLE I  
DEPARTMENTAL DIVISION FIGURES FOR THE STUDY

Departmental Divisions	Relative Weight	Sample Computations	
	$\left( \frac{N}{N} \right)$	$\left( \frac{N}{N} \right)^2$	$\frac{P}{N} \frac{Q}{N}$
Accounting	.0196	.1385	.0027
Administrative Services	.0000	.0000	.0000
Aerospace and Mechanical Engineering	.0221	.1469	.0032
Anthropology	.0098	.0984	.0009
Architecture	.0196	.1385	.0027
Art	.0196	.1385	.0027
Astronomy	.0000	.0000	.0000
Aviation	.0074	.0854	.0006
Botany	.0172	.1300	.0022
Business Communications	.0000	.0000	.0000
Business Law	.0000	.0000	.0000
Chemical Engineering and Material Science	.0074	.0854	.0006
Chemistry	.0417	.1997	.0083

TABLE I - continued

Departmental Divisions	Relative Weight	Sample Computations		
	$\left( \frac{N}{\text{div}} \right)$	$\left( \frac{N}{\text{div}} \right)^2$	$\frac{P}{\left( \frac{N}{\text{div}} \right)^2} \frac{Q}{\text{div}}$	
Civil Engineering and Environmental Science	.0221	.1469	.0032	
Classical Language	.0049	.0692	.0003	
Drama	.0270	.1618	.0043	
Economics	.0221	.1469	.0032	
Education	.0735	.2607	.0191	
Electrical Engineering	.0147	.1200	.0017	
Engineering	.0098	.0984	.0009	
Engineering Physics	.0000	.0000	.0000	
English	.0343	.1819	.0062	
Finance	.0123	.1109	.0013	
Geography	.0123	.1109	.0013	
Geological Engineering	.0000	.0000	.0000	
Geology and Geophysics	.0343	.1819	.0062	
Health, Physical Education and Recreation	.0196	.1385	.0027	
History	.0368	.1881	.0069	
Home Economics	.0147	.1200	.0017	
Industrial Engineering	.0074	.0854	.0006	



TABLE I - continued

Departmental Divisions	Relative Weight	Sample Computations		
	$\left( \frac{N \text{ div}}{N} \right)$	$\left( \frac{N \text{ div}}{N} \right)^2$	$\frac{P \text{ div}}{\left( \frac{N \text{ div}}{N} \right)^2} \frac{Q \text{ div}}{2}$	
Journalism	.0221	.1469	.0032	
Law	.0245	.1542	.0037	
Library Science	.0172	.1300	.0022	
Management	.0098	.0984	.0009	
Marketing	.0123	.1109	.0013	
Mathematics	.0417	.1997	.0083	
Metallurgical Engineering	.0074	.0854	.0006	
Mechanical Engineering	.0000	.0000	.0000	
Meteorology	.0098	.0989	.0009	
Microbiology	.0098	.0989	.0009	
Modern Language	.0368	.1881	.0069	
Music	.0539	.2256	.0121	
Nursing	.0000	.0000	.0000	
Office Administration	.0000	.0000	.0000	
Petroleum Engineering	.0147	.1200	.0017	
Pharmacology	.0000	.0000	.0000	
Pharmacy	.0172	.1300	.0022	
Philosophy	.0123	.1109	.0013	
Physical Therapy	.0049	.0692	.0003	
Physics	.0245	.1542	.0037	

TABLE I - continued

Departmental Divisions	Relative Weight	Sample Computations		
	$\left( \frac{N}{\text{div}} \right)$	$\left( \frac{N}{\text{div}} \right)^2$	$P \left( \frac{\text{div}}{N} \right)^2$	$Q \left( \frac{\text{div}}{N} \right)^2$
Political Science	.0270	.1618	.0043	
Psychology	.0417	.1997	.0083	
Regional and City Planning	.0000	.0000	.0000	
Sanitary Science and Public Health	.0098	.0984	.0009	
Social Work	.0392	.1939	.0076	
Sociology	.0000	.0000	.0000	
Speech	.0147	.1200	.0017	
Zoology	.0392	.1939	.0076	
TOTAL			.1641	

The number of faculty members of each sample to be included in each departmental division was calculated by multiplying the relative weight of each division by the sample size ( $n=41$ ). Each percentage of a faculty member was increased to the next whole number. The number in each division of the two samples is reported in Table II. Since they did not fall within the limitations of this study, *i.e.*, they did not have at least two faculty members who were employed during the time the revisions took place or did not have any revisions reported for that period, the following departments of the University of Oklahoma were eliminated from the study: Administrative Services, Astronomy, Business Communications, Business Law, Engineering Physics, Geological Engineering, Mechanical Engineering, Nursing, Office Administration, Pharmacology, Regional and City Planning and Sociology.

In order to obtain two random samples of the faculty, the following procedure was ensued. The faculty members identified from the Register,<sup>59</sup> and within the limitations of the study, were listed with the number of names varying from two to 30. Using a table of random numbers, as given in Wallis and Roberts,<sup>60</sup> and the method of sampling suggested by the same authors, the numbers were read across the page. The first two digits on the sequence determined the page number;

---

<sup>59</sup>Ibid., pp. 7-43.

<sup>60</sup>W. Allen Wallis & Harry V. Roberts, Statistics: A New Approach, New York: The Free Press of Glencoe Inc., 1963.

TABLE II  
ORIGINAL AND AMPLIFIED DEPARTMENTAL DIVISIONS

Departmental Divisions	Original	Amplified	Total for Two Samples
Accounting	.8	1	2
Administrative Services	.0	0	0
Aerospace and Mechanical Engineering	.9	1	2
Anthropology	.4	1	2
Architecture	.8	1	2
Art	.8	1	2
Astronomy	.0	0	0
Aviation	.3	1	2
Botany	.7	1	2
Business Communications	.0	0	0
Business Law	.0	0	0
Chemical Engineering and Material Science	.3	1	2
Chemistry	1.7	2	4
Civil Engineer and Environmental Science	.9	1	2
Classical Languages	.2	1	2

TABLE II - continued

Departmental Divisions	Original	Amplified	Total for Two Samples
Drama	1.1	2	4
Economics	.9	1	2
Education	3.0	3	6
Electrical Engineering	.6	1	2
Engineering	.4	1	2
Engineering Physics	.0	0	0
English	1.4	2	4
Finance	.5	1	2
Geography	.5	1	2
Geological Engineering	.0	0	0
Geology and Geophysics	1.4	2	4
Health, Physical Education and Recreation	.8	1	2
History	1.5	2	4
Home Economic	.6	1	2
Industrial Engineering	.3	1	2
Journalism	.9	1	2
Law	1.0	1	2
Library Science	.7	1	2
Management	.4	1	2
Marketing	.5	1	2
Mathematics	1.7	2	4
Mechanical Engineering	.0	0	0

TABLE II - continued

Departmental Divisions	Original	Amplified	Total for Two Samples
Metallurgical Engineering	.3	1	2
Meteorology	.4	1	2
Microbiology	.4	1	2
Modern Languages	1.5	2	4
Music	2.2	3	6
Nursing	.0	0	0
Office Administration	.0	0	0
Petroleum Engineering	.6	1	2
Pharmacology	.0	0	0
Pharmacy	.7	1	2
Philosophy	.5	1	2
Physical Therapy	.2	1	2
Physics	1.0	1	2
Political Science	1.1	2	4
Psychology	1.7	2	4
Regional and City Planning	.0	0	0
Sanitary Science and Public Health	.4	1	2
Social Work	1.6	2	4
Sociology	.0	0	0
Speech	.6	1	2
Zoology	1.6	1	2
TOTAL	41	61	122

the next two digits determined the faculty member listed on the chosen page. The numbering of the faculty members on each page began from top to bottem. The page to which the faculty member was assigned was determined according to his primary departmental assignment as given in the Register.<sup>61</sup> The same procedure was used to select each group. The two groups selected formed the sample for this study. A coin was flipped to determine which sample faculty group was sent instrument Form A and which sample faculty group was sent instrument Form B.

#### Collection of Data

The final form of the instrument and a reply envelope were mailed first class with a cover letter encouraging participation from the office of Pete Kyle McCarter, Vice President, University of Oklahoma, to all faculty members identified by the sampling procedure. Following a two weeks response period, a reminder letter from the office of William C. Price, Dean of Admissions and Registrar, University of Oklahoma, was sent to all those who had not replied.<sup>62</sup>

Some members of the faculty did not chose to participate in the study. In such instances an alternate member of the population was selected to replace them. These efforts resulted in responses from 100, or approximately 81 percent, of those to whom the instrument were mailed. Following a second

---

<sup>61</sup>Faculty Register, loc. cit., pp. 7-43.

<sup>62</sup>Attached in Appendix D.

two weeks, the remaining 22 faculty members were interviewed individually and answers solicited so that 100 percent of each sample was included in the study.

### Statistical Treatment

All the instruments completed by the faculty were analyzed, the data tabulated, and percentages calculated for responses by faculty members of both groups to each instrument item. The rank order of each of the change factors was determined according to their importance by assigning weights to the categories of responses as follows: very important, 4; important, 3; somewhat important, 2; and unimportant, 1. The percent of responses in each category was multiplied by the appropriate weight value and the products totaled to give weighted values to each change factor. From these weighted values, the rank order of importance of instructional program change factors was determined for each group of respondents.

After the data were obtained in terms of percentages and translated into weighted values, the Wilcoxon sign-rank test of difference<sup>63</sup> was figured to see if there was a statistically significant difference in the ratings given the change factors by the faculty A and the ratings given the change factors by faculty B. The following procedure was followed:

---

<sup>63</sup>J P. Guilford, Fundamental statistics in psychology and education, New York: McGraw-Hill Book Company, 1956, 1965, p. 255.



Step 1 - Recorded the weighted values for each change factor for both groups of faculty.

Step 2 - For every pair of values, determined the difference in values. Differences of  $A - B$  may be either positive or negative.

Step 3 - The differences were then ranked without regard to sign. The sign of the differences was attached to each rank.

Step 4 - Summed the ranks according to their sign, the smaller sum was denoted by the letter T.

Step 5 - Checked the T value with the appropriate table at the .01 level of difference, which would constitute evidence for rejection of the hypothesis.

The method of analysis of the response data used in this study was an application of a nonparametric test. In this study, where the population distributions were known to depart appreciably from normal and there are two correlated samples, the Wilcoxon matched-pairs sign rank test is appropriate.<sup>64</sup> The population was not normal because the sampling is from a group of faculty who are more alike than diverse since they are all employed by the University of Oklahoma.

The design of the study provided information to be used as a basis for a series of conclusions and recommendations concerning the instructional program revisions at the

---

<sup>64</sup>George A. Fergerson, Statistical Analysis in Psychology and Education, New York: McGraw-Hill Book Company, 1966, p. 354.

University of Oklahoma. Forty-four items reported in the literature were identified as change factors. The number, sources and types of instructional program revisions were obtained by reviewing the records of the Council on Instruction. The required samples of faculty members within the limitations of the study were selected using the appropriate sampling methods. Data were gathered by soliciting responses from the faculty concerning items on the instruments distributed to them. A statistical examination of the similarities and differences of faculty responses was used as evidence for testing the null hypothesis.

## CHAPTER IV

### FINDINGS

The primary purpose of this study is an analysis of change factors that influenced the modification of instructional programs of selected departments of the University of Oklahoma. More specifically, the study was designed to examine the similarities and differences in the opinions of faculty members regarding the importance of factors which were involved in producing instructional program revisions in one institution and consequently those factors that might well effect instructional program revision more generally.

In reviewing the instructional program revisions that had been officially sanctioned through the University structure, it is important to note the composite of the revisions. They are instructional program revisions that were approved between September 1963 and August 1967 and were used as a basis by one group of faculty members to indicate the importance of the change factors listed in effecting the revisions identified in the respondent's department. In Table III the number of instructional program revisions has been divided into groups of course numbers according to the type of revisions. It is noted that the 300-399 numbered courses had substantially more revisions than any of the other number levels. "Adding courses" and "change of prerequisites" were

TABLE III  
TYPES OF INSTRUCTIONAL PROGRAM REVISIONS  
ACCORDING TO COURSE LEVELS

TYPE OF CHANGE	COURSE LEVEL						TOTAL
	LOWER DIVISION 1 - 99	UPPER DIVISION 100 - 199      200 - 299		GRADUATE 300 - 399 400 - 499 599			
Change of Course Number	5	11	32	27	2		77
Change of Title	Not recorded by number						
Change of Course Credit	5	12	16	29	24		86
Change of Prerequisites	8	26	46	99	31		210
Change of Fee and/or Deposit	3	3	0	0	0		6
Change of Course	4	16	26	43	15		104
Deleting Courses	5	22	34	44	23		128
Adding Courses	4	12	31	107	65		219
Miscellaneous	4	6	10	9	7		36
TOTAL	38	108	195	358	167		1052

the two most frequently requested types of revisions. There were 834 credit hours added during this period and 456 credit hours deleted, for a net gain of 378 credit hours. The largest number of revisions recorded by any department during this period was 130 and the smallest number was zero. The average number of revisions was 18. The identified revisions were as follows: 8 percent revisions of course number, 17 percent revisions of title, 9 percent revisions of course credit, 19 percent revisions of prerequisites, 1 percent revisions of fee and/or deposit, 10 percent revisions of course content, 13 percent deleting courses, 20 percent adding courses and 3 percent miscellaneous.

To examine the similarities and differences in responses of faculty, the responses were reported by percentages to determine the relative intensity of importance the two faculty groups placed upon the change factors. In order to add clarity to the rankings and the test of differences reported in the latter part of this chapter, the results of the percentages of responses to the statements by both faculty groups are presented together. The change factors are reported in the same order as items in the instrument.

The faculty A members responses to Item No. 1.01, the maturity of the students enrolled, indicated 3 percent of the faculty rate the statement unimportant in comparison to 29 percent of the faculty B members. For Item No. 1.02, the increasing specialization of knowledge, 85 percent of the faculty A members responses fell within the important to very important

rating levels in comparison to 72 percent of the faculty B members responses in the two rating level. To Item No. 1.03, re-examining the organization of instructional content, 22 percent of the faculty A members believed the statement very important in comparison to 33 percent of the faculty B members. For Item No. 1.04, the influence of the graduate department or college, the faculty A members had 18 percent compared to 40 percent of the faculty B members in the unimportant rating level. Reviewing the responses of the two groups to the individual statement, it is apparent that faculty B members place little importance as shown in Table IV, Item No. 1.05, foundation and federal grants, since 67 percent of faculty B members rated it unimportant with regard to the identified instructional program revisions. Faculty A members responses to Item No. 1.05 indicated only 41 percent of the respondents rated the item as unimportant. Fifty-two percent of the faculty A members and 37 percent of the faculty B members rated Item No. 1.06, when new or additional materials are made available, important.

Table IV indicates that for Item No. 1.07, the opinions and actions of "outside experts", the faculty A members had 3 percent compared to 11 percent of the faculty B members in the very important rating levels. The faculty A members responses on Item No. 1.08, writing new courses of study, indicate 40 percent rate it somewhat important in comparison to 27 percent of faculty B members. To Item No. 1.09, in-service training activities, 8 percent of the faculty A

TABLE IV

## THE IMPORTANCE OF CHANGE FACTORS RELATING TO INSTRUCTIONAL PROGRAM REVISION

CHANGE FACTORS	DEGREE OF IMPORTANCE							
	VERY IMPORTANT		IMPORTANT		SOMEWHAT IMPORTANT		UNIMPORTANT	
	FACULTY A	FACULTY B	FACULTY A	FACULTY B	FACULTY A	FACULTY B	FACULTY A	FACULTY B
	%	%	%	%	%	%	%	%
1.01 Change in the instructional program is effected by the maturity of the students enrolled.	30%	17%	47%	29%	19%	25%	3%	29%
1.02 Change in the instructional program is effected by the increasing specialization of knowledge.	35%	30%	50%	42%	15%	16%	0%	12%
1.03 Change in the instructional program is produced by re-examining the organization of instructional content.	22%	33%	42%	47%	29%	12%	7%	8%
1.04 Change in the instructional program occurs under the influence of the graduate department or college.	12%	10%	23%	22%	47%	28%	18%	40%
1.05 Change in the instructional program is effected by Foundation and Federal grants	7%	6%	21%	12%	31%	15%	41%	67%

TABLE IV - continued

CHANGE FACTORS	DEGREE OF IMPORTANCE							
	VERY IMPORTANT		IMPORTANT		SOMEWHAT IMPORTANT		UNIMPORTANT	
	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY
	A	B	A	B	A	B	A	B
	%	%	%	%	%	%	%	%
1.06 Change in the instructional program is produced when new or additional instructional materials are made available.	17%	22%	52%	37%	29%	22%	2%	19%
1.07 Change in the instructional program is effected by the opinions and actions of "outside experts".	3%	11%	25%	17%	60%	36%	12%	36%
1.08 Change in the instructional program is effected by writing new courses of study.	16%	10%	28%	22%	40%	27%	16%	41%
1.09 Change in the instructional program is produced through in-service training activities.	14%	4%	34%	9%	44%	33%	8%	54%
1.10 Change in the instructional program is effected by personnel change in department or college administration.	1%	28%	14%	24%	49%	18%	36%	30%



members responses fell in the category of unimportant in comparison to 54 percent of the faculty B members. The faculty A members had only 1 percent in the very important rating level for Item No. 1.10, personnel change in department or college administration, in comparison to 28 percent of the faculty B members. To Item No. 1.11, change in admission requirements, 82 percent of the faculty A members rated the statement somewhat to very important in comparison to 69 percent of the faculty B members in these three importance rating levels. The responses of faculty A members to Item No. 1.12, intra-departmental appointments of faculty, indicated they had 59 percent of their responses in the categories important to very important. The faculty A members had 14 percent in the very important rating level for Item No. 1.13, coordination with the high schools, in comparison to 11 percent of the faculty B members.

For Item No. 1.14, reduced teaching loads for faculty, the faculty B members placed 63 percent of their responses in the category of unimportant in comparison to 4 percent of faculty A members. Forty-one percent of the faculty A members rated Item No. 1.15, introduction of newer instructional techniques and aids, from important to very important in comparison to 30 percent of faculty B members. Item No. 1.16, stimulating conference and convention attendance for faculty, as reflected in Table IV, 4 percent of the faculty A members rated the statement unimportant in comparison to 29 percent of faculty B members. Three percent of the faculty A members

TABLE IV - continued

CHANGE FACTORS	DEGREE OF IMPORTANCE							
	VERY IMPORTANT		IMPORTANT		SOMEWHAT IMPORTANT		UNIMPORTANT	
	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY
	A	B	A	B	A	B	A	B
	%	%	%	%	%	%	%	%
1.11 Change in the instructional program is effected by change in admission requirements.	2%	8%	28%	22%	52%	39%	18%	31%
1.12 Change in the instructional program is effected by intra-departmental appointments of faculty.	18%	19%	41%	29%	39%	23%	2%	29%
1.13 Change in the instructional program occurs when there is coordination with the high schools.	14%	11%	36%	23%	35%	30%	15%	36%
1.14 Change in the instructional program occurs when faculty are given reduced teaching loads.	13%	7%	28%	11%	54%	19%	4%	63%
1.15 Change in the instructional program is produced by the introduction of newer instructional techniques and aids.	11%	8%	30%	22%	55%	37%	3%	33%

rated Item No. 1.17, faculty participation in departmental or instructional program self-studies, unimportant, while the faculty B members had 18 percent in the category. On Item 1.18, inter-departmental planning and coordination, the faculty B members place more importance than the faculty A members.

Twenty-four percent of the faculty A members and 67 percent of the faculty B members rated Item No. 1.19, administrative insistence for revision, unimportant. To Item No. 1.20, the informal communication system, 25 percent of the faculty A members rated the statement unimportant in comparison to 42 percent of the faculty B members. On Item No. 1.21, suggestions from the non-academic staff, 33 percent of the faculty A members thought the statement should be rated somewhat important, but only 14 percent of the faculty B members indicated the statement to be somewhat important to instructional program revision. The faculty A members had a 14 percent very important response to Item No. 1.22, faculty relating with successful on-going programs, equating a 14 percent response of the faculty B members. Eleven percent of the faculty A members rated Item No. 1.23, recent social and cultural phenomena, unimportant in contrast to 24 percent of the faculty B members. To Item No. 1.24, needs and opinions expressed by students, 39 percent of faculty A members responses fell in the category of somewhat important in comparison to 29 percent of the faculty B members. For Item No. 1.25, the collegiate tradition, the faculty A members placed

TABLE IV - continued

CHANGE FACTORS	DEGREE OF IMPORTANCE							
	VERY IMPORTANT		IMPORTANT		SOMEWHAT IMPORTANT		UNIMPORTANT	
	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY
	A	B	A	B	A	B	A	B
	%	%	%	%	%	%	%	%
1.16 Change in the instructional program is effected by stimulating conference and convention attendance for faculty.	9%	19%	48%	19%	39%	33%	4%	29%
1.17 Change in the instructional program occurs when faculty participate in departmental or instructional program self-studies.	33%	27%	36%	37%	28%	18%	3%	18%
1.18 Change in the instructional program is effected by inter-departmental planning and coordination.	27%	11%	43%	25%	27%	28%	3%	36%
1.19 Change in the instructional program occurs with administrative insistence for revision.	0%	7%	18%	10%	38%	19%	24%	64%
1.20 Change in the instructional program is effected by the informal communication system.	5%	4%	20%	14%	50%	40%	25%	42%

TABLE IV - continued

CHANGE FACTORS	DEGREE OF IMPORTANCE							
	VERY IMPORTANT		IMPORTANT		SOMEWHAT IMPORTANT		UNIMPORTANT	
	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY
	A	B	A	B	A	B	A	B
	%	%	%	%	%	%	%	%
1.21 Change in the instructional program is effected by suggestions from the non-academic staff.	0%	0%	3%	2%	33%	14%	64%	84%
1.22 Change in the instructional program is effected when the faculty can relate with successful on-going programs.	14%	14%	36%	37%	36%	37%	14%	12%
1.23 Change in the instructional program is effected by recent social and cultural phenomena.	27%	16%	33%	30%	29%	30%	11%	24%
1.24 Change in the instructional program is effected by the needs and opinions expressed by the students.	20%	16%	39%	40%	39%	29%	2%	15%
1.25 Change in the instructional program is effected by collegiate tradition.	2%	3%	12%	11%	36%	22%	50%	64%

50 percent of their responses in the category of unimportant in comparison to 64 percent of the faculty B members.

Forty-one percent of the faculty A members and 46 percent of the faculty B members rated Item No. 126, the involvement of staff in decision-making, very important. For Item No. 1.27, when proposed innovation "fit" philosophic posture of the faculty, 40 percent of the faculty A members rated the statement somewhat important compared to 22 percent of the faculty B members. To Item No. 1.28, short-term modification, 18 percent of the faculty A members rated the statement important in comparison with 5 percent of the faculty B members. The responses indicated on Item No. 1.29, physical and personnel capacity of the system, that faculty A members placed 49 percent on the rating level important and faculty B placed 28 percent on the same level. For Item No. 1.30, standardization of administrative policy on an institutional level, 74 percent of the faculty A members responses fell within the somewhat important to unimportant rating levels. The faculty B members responses on this same item had 89 percent in the same two rating levels. Seven percent of the faculty B members rated Item No. 1.31, development of long range plans, unimportant compared to 0 percent of the faculty A members. The faculty A members responded with 60 percent of their replies in the very important category for Item No. 1.32, continuous examination of purposes and effectiveness, while the faculty B members had 32 percent in that rating level. To Item No. 1.33, examination of departmental grading

TABLE IV - continued

CHANGE FACTORS	DEGREE OF IMPORTANCE							
	VERY IMPORTANT		IMPORTANT		SOMEWHAT IMPORTANT		UNIMPORTANT	
	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY
	A	B	A	B	A	B	A	B
	%	%	%	%	%	%	%	%
1.26 Change in the instructional program occurs through involvement of staff in decision-making.	41%	46%	35%	29%	19%	18%	5%	7%
1.27 Change in the instructional program occurs when proposed innovation "fit" philosophic posture of the faculty.	16%	25%	28%	31%	40%	22%	16%	22%
1.28 Change in the instructional program is produced by the introduction of the short-term modification.	0%	1%	18%	5%	45%	35%	35%	59%
1.29 Change in the instructional program is effected by physical and personnel capacity of the system.	31%	45%	29%	28%	19%	18%	1%	9%
1.30 Change in the instructional program is produced by standardization of administrative policy on an institutional level.	0%	1%	26%	10%	35%	27%	39%	62%

TABLE IV - continued

CHANGE FACTORS	DEGREE OF IMPORTANCE							
	VERY IMPORTANT		IMPORTANT		SOMEWHAT IMPORTANT		UNIMPORTANT	
	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY
	A	B	A	B	A	B	A	B
	%	%	%	%	%	%	%	%
1.31 Change in the instructional program occurs with the development of long range plans.	37%	22%	48%	51%	15%	20%	0%	7%
1.32 Change in the instructional program occurs as there is continuous examination of purposes and effectiveness.	60%	32%	27%	52%	13%	14%	0%	2%
1.33 Change in the instructional program is produced by examination of departmental grading practices.	0%	1%	15%	0%	51%	21%	34%	78%
1.34 Change in the instructional program occurs when institutional wide guidelines are adopted. (i.e. course-hour standards.)	2%	6%	28%	10%	50%	29%	20%	55%
1.35 Change in the instructional program occurs when a strong faculty orientation program exists.	4%	7%	42%	25%	32%	31%	22%	37%



practices, 15 percent of the faculty A members rated the statement important in comparison to 0 percent of the faculty B members. For Item No. 1.34, adoption of institutional wide guidelines, 50 percent of the faculty A members rated the change factor unimportant while the faculty B members had only 29 percent in the same category.

To Item No. 1.35, strong faculty orientation program, 40 percent of the faculty A members rated the statement somewhat important in comparison to only 22 percent of the faculty B members. The faculty A members had a 52 percent somewhat important response to Item No. 1.36, faculty are active in off-campus service endeavors, in comparison to 27 percent of the faculty B members. The faculty A members responses to Item No. 1.37, formal program of basic instructional research, indicated 7 percent of the faculty A rate the statement unimportant in comparison to 38 percent of the faculty B members. For Item No. 1.38, technological advances in instruction-related activities, the faculty A members placed 13 percent of their responses in the category of very important in comparison to 12 percent of the faculty B members. On Item No. 1.39, legal changes in the total society, 55 percent of the faculty B members rated the statement unimportant in comparison to 39 percent of the Faculty A members. For Item No. 1.40, emulation of high status institutions, the faculty A members had 18 percent to 23 percent of the faculty B members in the important rating level. To Item No. 1.41, standards of accrediting associations 15, percent of the faculty A

TABLE IV - continued

CHANGE FACTORS	DEGREE OF IMPORTANCE							
	VERY IMPORTANT		IMPORTANT		SOMEWHAT IMPORTANT		UNIMPORTANT	
	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY
	A	B	A	B	A	B	A	B
	%	%	%	%	%	%	%	%
1.36 Change in the instructional program is effected when faculty are active in off-campus service endeavors.	6%	6%	21%	28%	52%	27%	21%	39%
1.37 Change in the instructional program occurs when there is a formal program of basic instructional research.	15%	6%	33%	21%	45%	35%	7%	38%
1.38 Change in the instructional program is effected by technological advances in instruction-related activities.	13%	12%	47%	36%	35%	32%	5%	20%
1.39 Change in the instructional program is produced by legal changes in the total society.	6%	3%	18%	10%	37%	32%	39%	55%
1.40 Change in the instructional program is effected by emulation of high status institutions.	7%	7%	18%	23%	43%	38%	32%	32%

members rated the item very important in comparison to 28 percent of the faculty B members. On Item No. 1.42, modification of enrollment patterns, 13 percent of faculty A members rated the item unimportant. The faculty B members on the other hand, had 22 percent of the responses in the unimportant category. Regarding Item No. 1.43, streamlined (effective) administrative procedures, 19 percent of the faculty A members rated the statement unimportant while 48 percent of the faculty B members believed it unimportant with regard to actual instructional program revisions. Finally, for Item No. 1.44, rewarding faculty involved in change-oriented activities, 15 percent of the faculty A members responses rated the change factor unimportant. However, 50 percent of the faculty B members rated the statement unimportant.

When analyzed further the additional similarities and differences of opinions the faculty groups considered relevant were the opinions expressed in Item No. 1.45, the open-ended question. Faculty A members expressed several additional change factors that should effect modification of instructional programs. One faculty A member stated that revision should occur on the basis of a regular re-evaluation of purpose and effectiveness. Another faculty A member believed that recruiting and retaining capable faculty effected instructional program revision. In addition, it was suggested that different philosophies of teaching should produce revision. Apparently, the internal attitude of staff will effect revisions that are not recorded on the formal records. A faculty

TABLE IV - continued

CHANGE FACTORS	DEGREE OF IMPORTANCE							
	VERY IMPORTANT		IMPORTANT		SOMEWHAT IMPORTANT		UNIMPORTANT	
	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY	FACULTY
	A	B	A	B	A	B	A	B
	%	%	%	%	%	%	%	%
1.41 Change in the instructional program is effected by the standards of accrediting associations.	15%	28%	33%	24%	49%	14%	3%	34%
1.42 Change in the instructional program is effected by modification of enrollment patterns. (quantitative).	11%	14%	30%	28%	46%	36%	13%	22%
1.43 Change in the instructional program occurs where there are streamlined effective procedures.	13%	11%	26%	15%	42%	27%	19%	48%
1.44 Change in the instructional program is produced by rewarding faculty involved in change-oriented activity.	11%	8%	33%	16%	41%	26%	15%	50%

A member suggested that departmental staff rotation should be scheduled as a means of effecting revision within the instructional program. Finally, systematic review by a research agency should be considered by a department to produce instructional program modification. It should be noted that 50 percent of the thirty-two faculty A members who completed Item No. 1.45 qualified their responses with the sentiment that change does not guarantee improvement and in itself is not necessarily desirable.

In response to Item No. 1.45, faculty B members suggested the following regarding change factors that effected identified modifications of instructional program: revisions are frequently made by the departments within the existing framework without formal application due to the length of time involved in formal procedures; instructional program description does not reflect mode, method or media, so individual faculty members make modifications all the time. One faculty B member stated that instructional program revisions were effected to accommodate special students. Another faculty B member expressed the opinion that revisions are made to meet the needs of an expanding or additional graduate program. In response to the change factors that effected instructional program revisions, it was the opinion of several faculty B members that many revisions do not alter the basic instructional program; they only rearrange the same problems. In addition, eight faculty B members, representing eight different departments, stated that the attachment

reflecting all the officially approved instructional program revisions did not include all the revisions that had been made for that period of time.

In order to determine the rank order of the change factors based on intensity of importance, weights were assigned to the response categories as follows: very important, 4; important, 3; somewhat important, 2; and unimportant, 1. The percentage of replies in each rating level was then multiplied by the appropriate weight value and the results were totaled to give the weight value of each change factor. The weighted value and the rank of each change factor appear in Table V, the change factors being identified by the number assigned to them in the instrument. From these weighted values, the rank order of each change factor was determined for both faculty A and faculty B groups.

An analysis of the data received from the responses of the faculty A members and faculty B members to selected change factors indicates the two group rankings differed. The significant difference between the indicated ranking of the faculty A members who rated the 44 change factors according to how they should effect instructional program revision in higher education and faculty B, who rated the same statements according to how they effected certain identified instructional revisions in the various departments, was computed by using the data in the preceding tables and the Wilcoxon matched-pairs signed-ranks test.<sup>61</sup> A T value of

---

<sup>61</sup>Ibid., p. 356

TABLE V  
WEIGHTED VALUES AND RANK OF CHANGE FACTORS

CHANGE FACTORS	WEIGHTED VALUE		RANK		CHANGE FACTORS	WEIGHTED VALUE		RANK	
	FACULTY A	FACULTY B	FACULTY A	FACULTY B		FACULTY A	FACULTY B	FACULTY A	FACULTY B
1.01	161	112	5.5	17.5	1.23	129	119	20	12
1.02	166	145	4	5	1.24	141	130	11.5	8
1.03	140	149	13	4	1.25	83	78	43	39
1.04	117	96	30	29	1.26	161	152	5.5	3
1.05	123	112	24	17.5	1.27	122	126	25.5	10
1.06	148	129	10	9	1.28	90	74	40	41.5
1.07	121	95	27	31	1.29	160	153	20	2
1.08	122	96	25.5	29	1.30	88	74	41.5	41.5
1.09	133	97	18.5	26.5	1.31	167	143	3	6
1.10	96	116	38.5	14	1.32	180	154	1	1
1.11	101	106	37	21	1.33	96	63	38.5	43
1.12	141	108	11.5	20	1.34	104	81	36	38
1.13	128	99	21	24.5	1.35	114	100	33	23
1.14	135	110	16	19	1.36	110	88	34.5	36
1.15	134	101	17	22	1.37	133	94	18.5	32
1.16	155	93	9	33	1.38	139	114	14	16
1.17	137	133	8	7	1.39	88	97	41.5	26.5
1.18	173	99	2	24.5	1.40	116	96	31	29
1.19	119	76	28.5	40	1.41	137	115	15	15
1.20	110	84	34.5	37	1.42	127	117	22	13
1.21	76	58	44	44	1.43	119	90	28.5	34.5
1.22	125	124	23	11	1.44	115	90	32	34.5

38 was obtained by this computation. This value indicates a statistically significant difference at the .01 level of difference between perceptions of faculty A members and faculty B members regarding the effect of identified change factors.

The differences of opinions, between faculty A members rating the importance that major change factors should have with regards to instructional program revision in higher education and faculty B members rating the importance of major change factors with regard to identified instructional program revisions that have occurred, has been presented in this chapter. The five change factors ranked highest and lowest by both faculty groups in Table VI and VII.

The nature of the significant difference requires additional comment. The data demonstrate that even where there is some agreement between faculty A members and faculty B members on certain items, there is, in fact, difference in degree of importance. For example, faculty A members and faculty B members both ranked Items No. 1.21, suggestions from non-academic staff, - 44th, 1.30, standardization of administrative policy on an institutional level, - 41.5, 1.32, continuous examination of purposes and effectiveness, -1st and 1.41, the standards of accrediting associations, -15th respectively. Yet in examining these change factors according to percentage of opinion in each rating level, there is an obvious degree of difference. For Item No. 1.21, faculty A members had 64 percent fall in the unimportant level



TABLE VI

RANK OF THE FIVE HIGHEST  
CHANGE FACTORS BY FACULTY A AND B MEMBERS

Rank	Item No.	FACULTY A Change Factors	Rank	Item No.	FACULTY B Change Factors
1	1.32	Continuous examination of purposes and effectiveness.	1	1.32	Continuous examination of purposes and effectiveness.
2	1.18	Interdepartmental planning and coordination.	2	1.29	Physical and personnel capacity of the system.
3	1.31	Development of long range plans.	3	1.26	Involvement of staff in decision-making.
4	1.02	Increasing specialization of knowledge.	4	1.03	Reexamining the organization of instructional content.
5.5	1.01	Maturity of the students enrolled.	5	1.02	Increasing specialization of knowledge.
5.5	1.26	Involvement of staff in decision-making.			

TABLE VII  
RANK OF THE FIVE LOWEST  
CHANGE FACTORS BY FACULTY A AND B MEMBERS

Rank	Item No.	FACULTY A Change Factors	Rank	Item No.	FACULTY B Change Factors
38.5	1.10	Personnel change in department or college administration.			
38.5	1.33	Examination of departmental grading practices.	39	1.25	Collegiate tradition.
40	1.28	Introduction of short-term modification.	40	1.19	Administrative insistence for revision.
41.5	1.30	Standardization of administrative policy on an instructional level.	41.5	1.28	Introduction of short-term modification.
41.5	1.39	Legal changes in the total society.	41.5	1.30	Standardization of administrative policy on an institutional level.
43	1.25	Collegiate tradition.	43	1.33	Examination of Departmental grading practices.
44	1.21	Suggestions from the non-academic staff.	44	1.21	Suggestions from the non-academic staff.

while faculty B members had 84 percent in the same rating level. Specifically, Item No. 1.32, which was ranked first by both faculty groups, reflected that 60 percent of the faculty A members rate the change factor very important in comparison to 32 percent of the faculty B. Similar degrees of difference appear in the responses on Items, 1.30, 1.41 and 1.21. A summary of these differences and the implications are treated in chapter five.

## CHAPTER V

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### SUMMARY

##### Purpose of the Study

This study proposes to investigate the effect of one set of change factors in the modification of instructional programs at the University of Oklahoma, a complex state university in contemporary American society. The University of Oklahoma, as such an institution, is faced with numerous requests for instructional program revisions each year. Understanding change factors in the modification of instructional programs is related to rational instructional program decisions. Specific information about change factors related to instructional program revision appears to be a meaningful determinant of the future development of the University of Oklahoma.

##### The Problem of the Study

The problem of this study was to investigate particular instructional program revisions in selected departments of the University of Oklahoma. More specifically, the study represents an attempt to identify and analyze the change factors that were involved in producing instructional program revisions. The investigation also attempted to determine

similarities and differences in perceptions of faculty members concerning change factors in the modifications of instructional programs, so that recommendations might be developed that promote rational instructional program revision.

### The Design

The study was concerned primarily with those statements, descriptive of change factors that bring about instructional program revisions, collected from current, published materials. The study of these factors included the selected departments of the University of Oklahoma which had instructional program revisions, officially approved through the normal structure, during the four year, 1963 through 1967, academic period. Information was obtained through a survey of two sample groups of the University faculty. These two groups, representative of the selected departments, rated the importance that major change factors should have regarding instructional program revisions in higher education in general, and their impact on actual instructional program revisions that occurred within their departments. The intensity of importance the faculty members placed on the statements was determined by the use of percentages. Weighted values were calculated according to the responses. From these weighted values the rank order of importance of the change factors was determined for each group of respondents. A test of difference between the ranking, indicated by the opinions of the two groups of faculty members, was computed in accordance with appropriate statistical techniques.

### The Instrument

An instrument, consisting of 44 change factors, identified by reviewing pertinent literature, was used to obtain the necessary information. The change factors were expressed as statements and appeared as items in the instrument. Completed instruments were returned by 100 percent of the University faculty members needed to maintain the two sample sizes.

### SUMMARY OF FINDINGS

An interpretation of the responses to the instrument provided the following summary of findings presented as follows: Instructional program revisions data, change factors intensity of importance and change factor rankings.

#### Instructional Program Revision Data

There were 1052 instructional program revisions recorded during the four year period of this study. The range of revisions for the selected departments was from 0 to 130. The average number of revisions were as follows: 8 percent revisions of course number, 17 percent revisions of title, 9 percent revisions of course credit, 19 percent revisions of prerequisites, 1 percent revisions of fee and/or deposit, 10 percent revisions of course content, 13 percent deleting courses, 20 percent adding courses and 3 percent miscellaneous. There were 834 semester hours of new course credit added and 456 semester hours of course credit deleted.

Change Factor Intensity of Importance

There was a significant difference between the indicated opinions of faculty A members, who rated the factors according to how they should effect instructional program revision in higher education and faculty B members, who rated the same factors according to how they effected certain instruction program revisions. An interpretation of the responses indicated that faculty B members were aware that physical and personnel capacity of the institution produced instructional program revision, but that this should not be a dominant factor, according to the faculty A responses, which does produce significant program revision. Faculty A members indicated that students should not be as important a change factor in producing instructional program revision as they are. In three of the four change factors identified with students, the faculty A indicated that these three items; needs and opinions expressed by the students, the collegiate tradition, and modification of enrollment patterns, should not effect instructional program revisions to any greater degree. As indicated by the faculty A members, the fourth change factor, maturity of the students, should be considered more important than it is.

Four of the change factors concerning faculty were rated among the important that should effect instructional program revision. These were: intra-departmental appointments of faculty, stimulating conference and convention attendance for faculty, faculty active in off-campus service

endeavors and rewarding faculty involved in change-oriented activity. Faculty B members rated two change factors, involvement of staff in decision-making, and innovations "fit" philosophic posture of the faculty in the most important intensity level of those that modify instructional programs.

There was virtually unanimous indication by both faculty member groups that; influence of the graduate department or college, personnel change in department or college administration, change in admission requirements, administrative insistence for revision, standardization of administrative policy on an institutional level and streamlined administrative procedures were of low intensity importance in regard to instructional program revisions with the exception of interdepartmental planning and coordination, which had high intensity as a change factor that should produce modifications of instructional programs. In-service training activities and introduction of newer instructional techniques and aids seem to be two change factors that should be more important in effecting instructional program revisions. According to the opinions of the faculty members, five items currently producing modification of instructional programs which should continue to be influential are: continuous examination of purpose and effectiveness; development of long range plans; increased availability of new or additional instructional materials; re-examination of the organization of instructional content; and continued awareness of the increasing specialization of knowledge. These are instructional change factors



that are important in effecting revisions and they should be continued in the future. Seemingly, the responses of the faculty A members reflect that recent social and cultural phenomena and legal changes in the total society have effected instructional program revisions more than they should have. Standards suggested by accrediting associations are effecting revisions and they, according to the faculty A have a higher rate of importance than they should have. Eight faculty B members felt that the attachments to their instruments did not reflect all the instructional program revisions that had occurred in their department during the stated period. It was also indicated that some revisions are made without formal approval.

#### Change Factor Rankings

Three change factors that have had an impact on actual instructional program revision were: continuous examination of purposes and effectiveness, the increasing specialization of knowledge and involvement of staff in decision-making. Faculty B members ranked these change factors 1st, 5th, and 3rd, while faculty A members ranked the same factors 1st, 4th and 5.5, respectively as having impact in modifying programs of instruction. Those change factors recognized by faculty B members that have not effected instructional program revision and as indicated by faculty A members should not effect revisions were: suggestions from the non-academic staff, standardization of short-term modifications and examination of departmental grading practices.

## CONCLUSIONS

A motivating force for this investigation of change factors in the modification of instructional programs in selected departments of the University of Oklahoma, is an attempt to determine if comparisons between the change factors that have effected instructional program revisions and the change factors that should effect instructional program revisions would provide significant data for developing rational instructional program revisions.

As previously reported in this study, the research information supported the following conclusions:

- (1) Change factors that influenced instructional program revision are not the factors that faculty members think ought to effect instructional program revision in higher education.
- (2) Continuous examination of purposes and effectiveness was ranked the number one change factor by both faculty groups. It was identified as having effected instructional program revision at the University of Oklahoma and as a factor that ought to effect revision. Therefore, it is reasonable to conclude that institutional operation should continue activities that promote examination of purposes and effectiveness.
- (3) Too often the philosophic posture of the faculty is so traditional that serious consideration is not given to certain new types of instructional program innovations.
- (4) Those change factors which can be identified with the democratic process and involve faculty participation are more likely to effect instructional program revision in higher education.

(5) Students and other non-faculty personnel should not be given a formal voice in the consideration of instructional program revisions. This should not preclude consideration of the student along with other factors by the faculty when considering revisions.

(6) Formal administrative procedures for instructional program revision needs to be simplified in light of the opinions expressed by faculty members concerning recording inaccuracies and present practice of making revisions without formal approval.

#### RECOMMENDATIONS

The following recommendations are based on the conclusions which are logically related to the findings within the limits of the study:

(1) It is recommended that because faculty members are involved in the instructional program revision process, they become cognizant of the change factors identified by this study so that more rational revisions can be accomplished.

(2) It is recommended that because respondents stated that the revision attachments were inaccurate, all departments review their current instructional programs and formally request approval of all revisions that have not been approved and recorded previously.

(3) It is recommended that the instructional program committee review at regular intervals instructional program requirements and course offerings and make recommendations to the faculty of the department. Along with this recommendation

(5) The sample of faculty studied indicated that students do not and should not participate formally in the revision of instructional programs. This finding suggests that the contemporary pressure for student involvement has not been present on the University campus nor has the faculty perceived student involvement to be a current need.

(6) Formal administrative procedures for instructional program revision needs to be simplified in light of the opinions expressed by faculty members concerning recording inaccuracies and present practice of making revisions without formal approval.

#### RECOMMENDATIONS

The following recommendations are based on the conclusions which are logically related to the findings within the limits of the study:

(1) It is recommended that because faculty members are involved in the instructional program revision process, they become cognizant of the change factors identified by this study so that more rational revisions can be accomplished.

(2) It is recommended that because respondents stated that the revision attachments were inaccurate, all departments review their current instructional programs and formally request approval of all revisions that have not been approved and recorded previously.

(3) It is recommended that the instructional program committee review at regular intervals instructional program requirements and course offerings and make recommendations to the faculty of the department. Along with this recommendation

is the idea that departments should take the initiative in the development of long range plans.

(4) It is recommended that departments and/or colleges within the university attempt greater cooperation among themselves, specifically designed to serve the instructional program and in the interest of promoting higher orders of faculty participation.

#### IMPLICATIONS FOR FURTHER STUDY

Certain implications may be drawn from the information secured in this study. A careful analysis of the available data indicates that the following areas may be proposed for additional research:

- (1) An investigation designed to determine the efficiency of instructional program scheduling in terms of monies expended.
- (2) Additional research in the publication of the university bulletins in relation to modification of instructional programs.
- (3) A study should be conducted involving the opinions of students concerning programs in an attempt to identify their level of effectiveness. In addition, specific and well considered involvement techniques, such as, group meetings, questionnaires, and informal discussion, should be investigated to determine which more effectively reflects student opinions and provides for student involvement in instructional program revision activities.

## APPENDIX A

COLLEGE OF EDUCATION  
UNIVERSITY OF OKLAHOMA

Norman, Oklahoma

QUESTIONNAIRE

FORM A

Research Topic: An Analysis of change factors in the instructional program of the various departments of the University of Oklahoma.

Information: The purpose of this instrument is to rate the importance that major change factors should have with regards to instructional program revision in higher education. The kinds of instructional program revisions include the following: change of course number; change of course title; change of course credit; change of prerequisites; change of fee and/or deposit; change of course content; deleting courses and adding courses. The change factors are expressed as statements and appear as items to which you are asked to respond. The content of the items has been derived from review of pertinent literature.

Directions: Please indicate the importance that each of the listed change factors should have as an influence for instructional program revision in higher education. Circle the number which most adequately describes the importance of each change factor.

Example:

0.00      Change in the instructional program is effected by the sex of the students that enroll in the classes.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

COLLEGE OF EDUCATION  
UNIVERSITY OF OKLAHOMA

Norman, Oklahoma

QUESTIONNAIRE

FORM B

Research Topic: An Analysis of change factors in the instructional program of the various departments of the University of Oklahoma.

Information: The purpose of this instrument is to rate the importance of major change factors with regard to the identified instructional program revisions that have occurred in your department. Attached to this instrument in order to refresh your memory is a list of official instructional program revisions that have taken place in your department over a four year period as identified in the records of the Council on Instruction. The change factors are expressed as statements and appear as items to which you are asked to respond. The content of the items has been derived from review of pertinent literature.

Directions: Please indicate the importance of each of the listed change factors in terms of the influence they had on the instructional program revisions that have been identified. Circle the number which most adequately describes the importance of each change factor.

Example:

0.00 Change in the instructional program is effected by the sex of the students that enroll in the classes.

1	2	3	4
Unimportant	Somewhat Important	Important	Very Important



- 1.01 Change in the instructional program is effected by the maturity of the students enrolled.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.02 Change in the instructional program is effected by the increasing specialization of knowledge.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.03 Change in the instructional program is produced by reexamining the organization of instructional content.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.04 Change in the instructional program occurs under the influence of the graduate department or college.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.05 Change in the instructional program is effected by Foundation and Federal grants.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.06 Change in the instructional program is produced when new or additional instructional materials are made available.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.07 Change in the instructional program is effected by the opinions and actions of "outside experts".

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

1.08 Change in the instructional program is effected by writing new courses of study.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

1.09 Change in the instructional program is produced through in-service training activities.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

1.10 Change in the instructional program is effected by personnel change in department or college administration.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

1.11 Change in the instructional program is effected by change in admission requirements.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

1.12 Change in the instructional program is effected by intra-departmental appointments of faculty.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

1.13 Change in the instructional program occurs when there is coordination with the high schools.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

1.14 Change in the instructional program occurs when faculty are given reduced teaching loads.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.15 Change in the instructional program is produced by the introduction of newer instructional techniques and aids.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.16 Change in the instructional program is effected by stimulating conference and convention attendance for faculty.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.17 Change in the instructional program occurs when faculty participate in departmental or instructional program self-studies.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.18 Change in the instructional program is effected by inter-departmental planning and coordination.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.19 Change in the instructional program occurs with administrative insistence for revision.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.20 Change in the instructional program is effected by informal communication system.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.21 Change in the instructional program is effected by suggestions from the non-academic staff.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.22 Change in the instructional program is effected when the faculty can relate with successful on-going programs.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.23 Change in the instructional program is effected by recent social and cultural phenomena.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.24 Change in the instructional program is effected by the needs and opinions expressed by the students.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.25 Change in the instructional program is effected by the collegiate tradition.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.26 Change in the instructional program occurs through involvement of staff in decision-making.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.27 Change in the instructional program occurs when proposed innovation "fits" philosophic posture of the faculty.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.28 Change in the instructional program is produced by the introduction of short-term modifications.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.29 Change in the instructional program is effected by physical and personnel capacity of the system.

1-----2-----3-----4  
Unimportant                  Somewhat                  Important                  Very  
   Important                                  Important

- 1.30 Change in the instructional program is produced by standardization of administrative policy on an institutional level.

1-----2-----3-----4  
Unimportant      Somewhat      Important      Very  
                         Important                                      Important

- 1.31 Change in the instructional program occurs with the development of long range plans.

1-----2-----3-----4  
Unimportant                  Somewhat                  Important                  Very  
                                 Important    Important

- 1.32 Change in the instructional program occurs as there is continuous examination of purposes and effectiveness.

1-----2-----3-----4  
Unimportant      Somewhat      Important      Very  
                 Important                              Important

- 1.33 Change in the instructional program is produced by examination of departmental grading practices.

1-----2-----3-----4  
Unimportant      Somewhat      Important      Very  
                    Important                      Important

- 1.34 Change in the instructional program occurs when institutional wide guidelines are adopted. (i.e. course-hour standards)

1-----2-----3-----4  
Unimportant      Somewhat      Important      Very  
                 Important                              Important

- 1.35 Change in the instructional program occurs when a strong faculty orientation program exists.

1-----2-----3-----4  
Unimportant      Somewhat      Important      Very  
                    Important                      Important

- 1.36 Change in the instructional program is effected when faculty are active in off-campus service endeavors.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.37 Change in the instructional program occurs when there is a formal program of basic instructional research.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.38 Change in the instructional program is effected by technological advances in instruction-related activities.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.39 Change in the instructional program is produced by legal changes in the total society.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.40 Change in the instructional program is effected by emulation of high status institutions.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.41 Change in the instructional program is effected by the standards of accrediting associations.

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

- 1.42 Change in the instructional program is effected by modification of enrollment patterns. (quantitative)

1-----	2-----	3-----	4-----
Unimportant	Somewhat Important	Important	Very Important

1.43 Change in the instructional program occurs where there are streamlined (effective) administrative procedures.

1-----2-----3-----4  
Unimportant      Somewhat      Important      Very  
                    Important                      Important

1.44 Change in the instructional program is produced by rewarding faculty involved in change-oriented activity.

1-----2-----3-----4  
Unimportant      Somewhat      Important      Very  
                    Important                      Important

1.45 Remarks (Optional)

---

---

---

---

---

COLLEGE OF EDUCATION  
UNIVERSITY OF OKLAHOMA

Norman, Oklahoma

BASAL TEXT MATERIAL FOR DETERMINATION  
OF CHANGE FACTORS

Reference  
Number

- 1.01 Joseph Katz and Nevitt Sanford, "The Curriculum in the Perspective of the Theory of Personality Development," Nevitt Sanford, Edited by, the American College, John Wiley & Sons, Inc., 1962, p. 430.
- 1.01 J. G. Umstatted, College Teaching, Washington D.C.: Community College Press, 1964, p. 48.
- 1.02 Katz and Sanford, op. cit., p. 436.
- 1.02 Frederick Shaw, "The Changing Curriculum," Review of Educational Research, Vol. XXVI, No. 3, June 1966, p. 65.
- 1.03 Katz and Sanford, op. cit., p. 432.
- 1.04 Matthew B. Miles, "Innovation in education: some generalizations," Matthew B. Miles, Edited by, Innovation in Education, New York: Teachers College Press, 1964, p. 633.
- 1.05 Ibid., p. 635.
- 1.05 Shaw, op. cit., p. 67.
- 1.05 Umstatted, op. cit., p. 50.
- 1.06 Miles, op. cit., p. 636.
- 1.06 Kimball Wiles, "Contrasts in Strategies of Change," Robert Leeper, Edited by, Strategy for Curriculum Change, Washington D.C.: Association For Supervision And Curriculum Development, 1965, p. 5.
- 1.07 Wiles, op. cit., p. 4.



- 1.08 Ibid., p. 4.
- 1.09 Ibid., p. 5.
- 1.10 Ibid., p. 5.
- 1.10 Umstatted, op. cit., p. 47.
- 1.11 Doll, Ronald C., Curriculum Improvement: Decision-Making and Progress, Boston: Allyn and Bacon, Inc., 1965, p. 146.
- 1.12 Dressel, Paul L., The Undergraduate Curriculum in Higher Education, Washington D.C.: The Center for Applied Research in Education, Inc., 1963, p. 87.
- 1.13 Kenneth D. Patterson, "The Administration of University Curriculum," The Journal of Higher Education, Vol. XXXVIII, November, No. 8, 1967, p. 442.
- 1.14 Richard O. Carlson, Adoption of Educational Innovations, Eugene, Oregon: The Center for the Advanced Study of Educational Administration, 1967, p. 59.
- 1.15 Miles, op. cit., p. 636.
- 1.16 Wiles, op. cit., p. 5.
- 1.17 John S. Brubacher, and Willis Rudy, Higher Education in Transition, New York: Harper & Row, 1958, p. 238.
- 1.18 Wiles, op. cit., p. 6.
- 1.19 Wiles, op. cit., p. 7.
- 1.20 Ibid.
- 1.21 Ibid.
- 1.21 Ross L. Neagley and N. Dean Evans, Handbook for Effective Curriculum Development, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967, p. 67.
- 1.21 Miles, op. cit., p. 641.
- 1.22 Wiles, op. cit., p. 8.
- 1.23 Ibid.

- 1.23 Shaw, op. cit., p. 347.
- 1.24 Wiles, op. cit., p. 4.
- 1.25 Brown, op. cit., p. 187.
- 1.26 Wiles, op. cit., p. 4
- 1.27 Miles, op. cit., p. 634.
- 1.27 Katz and Sanford, op. cit., p. 444.
- 1.28 Miles, op. cit., p. 643.
- 1.29 Patterson, op. cit., p. 442.
- 1.30 Ibid.
- 1.31 Ibid.
- 1.32 Ibid.
- 1.33 Ibid., p. 443.
- 1.34 Ibid.
- 1.35 Wiles, op. cit., p. 7.
- 1.36 Doll, op. cit., p. 152.
- 1.37 G. M. Inlow, "Factors that influence curriculum change," Educational Leadership, Vol. 23, October, 1965, p. 45.
- 1.38 Shae, op. cit., p. 345.
- 1.39 Ibid., p. 348.
- 1.40 Umstatted, op. cit., p. 50.
- 1.41 Ibid., p. 48.
- 1.42 Hugh S. Brown, "The Pattern of Curriculum Expansion in the University," College and University, Winter, 1967, p. 185.
- 1.42 Seymour E. Harris, Higher Education: Resources and Finance, New York: McGraw-Hill Book Company, Inc., 1962, p. 522.
- 1.43 Vernon E. Anderson, "University Leadership in Social Planning," Educational Leadership, Vol. 25, No. 2, p. 115.

- 1.43 Theodore Caplow & Reece J. McGee, The Academic Marketplace, New York: Doubleday & Company, Inc., 1958.
- 1.44 Edgar Dale, "The Innovator and the Establishment," In Search of Leaders, Washington D.C.: American Association of Higher Education, 1967, p. 88.
-

## APPENDIX B

AN EXAMPLE OF THE ATTACHMENTS  
FOR FORM B OF THE INSTRUMENT

Department ACCOUNTING Instructional program  
revisions September 1963  
through August 1967.

Change of Course Number: Accounting 151 to Accounting 200  
Accounting 152 to Accounting 201  
Accounting 155 to Accounting 202  
Accounting 202 to Accounting 204  
Accounting 251 to Accounting 300

Change of Title: Elements of Accounting to Elementary  
Accounting I  
Elements of Accounting to Elementary  
Accounting II  
Elements of Accounting to Elementary  
Accounting I  
Intermediate Accounting to Intermediate  
Accounting I  
Intermediate Accounting to Intermediate  
Accounting II  
Municipal Accounting to Governmental  
Accounting  
Elementary Costs Accounting to Cost  
Accounting  
Advanced Accounting to Advanced Accounting I  
Consolidated Statements to Advanced Account-  
ing II  
Advanced Cost Accounting to Cost Analysis  
Accounting System to Seminar in Accounting  
Systems  
Controllershship to Seminar in Controllershship  
Advanced Accounting Theory to Seminar in  
Accounting Theory

Change of Course Credit: No instructional program revisions  
of this type during this period.

Change of Prerequisites: Income Tax Accounting 203: Account-  
ing 151 or 155 to Accounting  
201 or 202  
Governmental Accounting 204:  
Accounting 151 or 155 to Account-  
ing 201 or 202  
Cost Accounting 205: Accounting 151  
or 155 to Accounting 201 or 202

Accounting 300: Accounting 152 or 155 to 201 or 202  
 Accounting 301: 15 hours including 251 or 300  
 Accounting 303: 203 or 251 to 203 and 300  
 Accounting 306: 152 or 155 or 205 to 21 hours including 205  
 Accounting 320: 21 hours and 251 to 24 hours  
 Accounting 350: 21 hours to 24 hours  
 Accounting 402: Graduate Standing, 24 hours and 303 to 301, 302, permission  
 Accounting 406: 251, and 305, graduate standing and permission to 24 hours graduate standing and permission  
 Accounting 410: 24 hours, graduate standing to graduate standing and permission  
 Accounting 421: 18 hours and graduate standing to 24 hours and graduate standing

Change of Fee and/or Deposit: No instructional program revisions of this type during this period.

Change of Course Content: Description of Accounting 205

Deleting Courses: No instructional program revisions of this type during this period.

Adding Courses: No instructional program revisions of this type during this period.

Miscellaneous: Accounting 240/Economics 240 - Cross reference

## APPENDIX C

COLLEGE OF EDUCATION  
UNIVERSITY OF OKLAHOMA

Norman, Oklahoma

INSTRUCTIONAL PROGRAM REVISION TABLE  
SOURCE, NUMBER AND TYPE OF INSTRUCTIONAL  
PROGRAM REVISIONS

Department	Change of Course Number	Change of Title	Change of Course Credit	Change of Prerequisites	Change of Fee and/or Deposit	Change of Course Content	Deleting Courses	Adding Courses	Miscellaneous	Total Changes
Accounting	5	13	0	13	0	1	0	0	1	33
Administrative Services	0	0	0	0	0	0	0	0	0	0
Aerospace and Mechan- ical Engineering	9	27	6	19	0	9	26	32	2	130
Anthropology	1	1	1	1	0	2	0	3	0	9
Architecture	0	0	1	0	0	0	0	0	0	1
Art	0	1	0	0	0	0	0	2	0	3
Astronomy	0	0	0	1	0	0	0	1	0	2
Aviation	0	0	2	2	6	2	0	0	0	12
Botany	0	0	0	0	0	0	0	2	1	3
Business Communications	0	0	0	0	0	0	0	0	0	0
Business Law	0	0	0	0	0	0	0	0	0	0
Chemical Engineering and Material Science	0	6	4	5	0	7	1	4	0	27



Department	Change of Course Number	Change of Title	Change of Course Credit	Change of Prerequisites	Change of Fee and/or Deposit	Change of Course Content	Deleting Courses	Adding Courses	Miscellaneous	Total Changes
Chemistry	0	5	8	9	0	3	9	9	0	43
Civil Engineering and Environmental Science	1	18	7	20	0	7	12	4	4	73
— Classical Language	0	0	0	0	0	0	0	0	3	3
Drama	1	3	5	5	0	5	2	10	2	33
Economics	11	8	0	1	0	2	5	11	2	40
Education	0	15	2	14	0	15	27	21	0	94
Electrical Engineering	3	6	0	15	0	7	1	17	0	49
Engineering	4	3	3	8	0	2	2	0	6	28
Engineering Physics	0	0	0	1	0	0	0	0	0	1
English	1	1	1	1	0	0	1	1	0	6
Finance	2	0	0	3	0	0	2	1	1	9
Geography	1	1	1	1	0	0	0	2	2	8
Geological Engineering	1	1	0	0	0	0	0	1	3	6
Geology and Geophysics	1	1	3	2	0	1	0	5	1	14
Health, Physical Edu- cation and Recreation	1	0	2	0	0	0	0	2	0	5
History	6	3	0	3	0	3	2	11	0	28
Home Economics	0	3	2	9	0	0	0	0	0	14
Industrial Engineering	5	8	1	10	0	2	1	6	1	34

Department	Change of Course Number	Change of Title	Change of Course Credit	Change of Prerequisites	Change of Fee and/or Deposit	Change of Course Content	Deleting Courses	Adding Courses	Miscellaneous	Total Changes
Journalism	0	1	0	2	0	0	0	0	0	3
Law	0	0	1	0	0	0	0	1	0	2
Library Science	1	4	0	4	0	0	0	3	0	12
Management	1	3	0	0	0	3	0	0	2	9
Marketing	0	1	0	1	0	0	3	2	0	7
Mathematics	2	4	4	8	0	5	1	6	1	31
Mechanical Engineering	0	0	0	0	0	0	0	0	0	0
Metallurgical Engineering	0	1	1	3	0	2	1	1	0	9
Meteorology	1	2	1	6	0	10	0	9	0	29
Microbiology	0	0	2	1	0	2	4	2	0	11
Modern Language	7	6	2	2	0	0	10	9	0	36
Music	2	3	3	3	0	2	2	13	0	28
Nursing	2	2	1	1	0	2	2	0	0	10
Office Administration	0	0	0	0	0	0	0	0	0	0
Petroleum Engineering	1	3	2	11	0	1	0	0	0	18
Pharmacology	0	0	0	0	0	0	0	0	0	0
Pharmacy	0	0	0	0	0	0	1	1	0	2
Philosophy	0	1	0	0	0	1	0	1	0	3
Physical Therapy	1	0	1	1	0	0	0	0	0	3

Department	Change of Course Number	Change of Title	Change of Course Credit	Change of Prerequisites	Change of Fee and/or Deposit	Change of Course Content	Deleting Courses	Adding Courses	Miscellaneous	Total Changes
Physics	1	3	2	7	0	0	2	3	0	18
Political Science	2	5	5	2	0	0	0	6	1	21
Psychology	0	1	0	0	0	0	0	1	0	2
Regional and City Planning	0	0	0	0	0	0	0	0	0	0
Sanitary Science and Public Health	0	13	9	7	0	2	10	3	2	46
Social Work	0	0	1	0	0	0	0	0	0	1
Sociology	2	1	0	2	0	2	0	5	0	12
Speech	1	7	1	4	0	3	1	5	0	22
Zoology	0	1	1	2	0	1	0	3	1	9
Total Changes	77	186	86	210	6	104	128	219	36	1052

## APPENDIX D

Item One: Cover Letter Faculty Members

UNIVERSITY OF OKLAHOMA  
COLLEGE OF EDUCATION

Norman, Oklahoma

March 20, 1968

Faculty Member  
(location)  
Norman, Oklahoma 73069

Dear Faculty Member:

You are, undoubtedly, well aware of the general concern about the operation of major, complex universities in contemporary American society. One central problem in attempts to understand such institutions is the serious lack of meaningful information about their operation. We are attempting to gather such information about one aspect of the university function -- the instructional program.

The attached questionnaire is a part of this attempt. It requests your reaction to a list of statements that describe selected factors related to change in formal instructional programs. The statements have been selected from the published work of accepted scholars. This study will provide faculty members with additional information concerning factors that effect changes in formal instructional programs.

Your participation is respectfully requested. Because of the sampling procedure utilized, it is important to the study that you complete and return the attached questionnaire. If for some reason you prefer not to be involved, please call the principal investigator, Robert L. Bailey (campus phone 5-2111). The study is being conducted under the guidance of Professor H. R. Hengst (College of Education) and Dean William C. Price. In addition, the study will be useful to the Deans and to the Council on Instruction.

Thank you for your assistance.

Sincerely,

Pete Kyle McCarter  
Vice President

PKM:mt

Item Two: Follow-up to Faculty Members

UNIVERSITY OF OKLAHOMA  
COLLEGE OF EDUCATION

Norman, Oklahoma

April 5, 1968

Faculty Member  
(location)  
Norman, Oklahoma 73069

Dear Faculty Member:

Recently you should have received a questionnaire pertaining to one aspect of the University function -- the instructional program. Faculty response to the questionnaire has been good; however, 100 per cent participation is needed. If you have not already mailed your questionnaire, would you please do so at the earliest convenience. In event that you did not receive the original mailing, a second questionnaire is enclosed. Please feel free to telephone me (5-2258) if you need more information relative to this request.

Cordially yours,

William C. Price  
Dean of Admissions  
and Registrar

WCP:lr

enclosure

## BIBLIOGRAPHY

## BIBLIOGRAPHY

### Books

- Alexander, William M. Changing Curriculum Content. Washington D.C.: Association for Supervision and Curriculum Development, 1964.
- Association for Supervision and Curriculum Development. Research for Curriculum Improvement. Washington D.C.: The Association, 1957.
- Association for Supervision and Curriculum Development. Leadership for Improving Instruction. Washington D.C.: The Association, 1960.
- Association for Supervision and Curriculum Development. New Insights and the Curriculum. Washington D.C.: The Association, 1963.
- Baskin, Samuel. (ed.). Higher Education: Some Newer Development. New York: Holt, Rinehart and Winston, 1961.
- Bennis, Warren., et al. The Planning of Change. New York: Holt, Rinehart and Winston, 1961.
- Brown, James W., and Thornton, James W. College Teaching: Perspective and Guidelines. New York: McGraw-Hill Book Company, Inc., 1967.
- Brubacher, John S., and Rudy, Willis. Higher Education in Transition. New York: Harper & Row, 1958.
- Bryant, Edward C. Statistical Analysis. New York: McGraw-Hill Book Company, 1966.
- Campbell, Ronald F., and Bunnell, Robert A. (ed.). Nationalizing Influences on Secondary Education. Chicago: Midwest Administration Center, 1963.
- Caplow, Theodore, and McGee, Reece J. The Academic Marketplace. New York: Doubleday & Company, Inc., 1958.
- Carlson, Richard O., et al. Change Processes in the Public Schools. Eugene, Oregon: University of Oregon Press, 1965.



- Carlson, Richard O. Adoption of Education Innovations. Eugene, Oregon: The Center for the Advanced Study of Educational Administration, 1965.
- Cella, Francis. Sampling Statistics in Business and Economics. Oklahoma: Bureau of Business Research, 1950.
- Commission on Financing Higher Education. Nature and Needs of Higher Education. New York: Columbia University Press, 1952.
- Conner, Forrest E., and Ellena, William. (ed.). Curriculum Handbook for School Administrators. Washington D.C.: American Association of School Administrators, 1967.
- Doll, Ronald C. Curriculum Improvement: Decision-Making and Process. Boston: Allyn and Bacon, Inc., 1965.
- Dressel, Paul I. The Undergraduate Curriculum in Higher Education. Washington D.C.: The Center for Applied Research in Education, Inc., 1963.
- \_\_\_\_\_. (ed.). Evaluation in the Basic College at Michigan State University. New York: Harper & Brothers, 1958.
- Dressel, Paul I., and Associates. Evaluation in Higher Education. Boston, Mass.: Houghton Mifflin Company, 1961.
- Dressel, Paul I., and Lorimer, Margaret F. Attitudes of Liberal Arts Faculty Members Toward Liberal and Professional Education. New York: Teachers College Press, 1960.
- Dressel, Paul I., and Mayhew, L. General Education: Explorations in Evaluation: the Final Report. Washington D.C.: American Council on Education, 1954.
- Estrin, Herman A., and Goode, Delmer M. College and University Teaching. Dubuque, Iowa: Wm. C. Brown Company Publishers, 1964.
- Faculty Register 1967-1968. Norman, Oklahoma: University Press, 1967.
- Ferguson, George A. Statistical Analysis in Psychology and Education. New York: McGraw-Hill Book Company, 1966.
- Ford, G. W., and Pugno, Lawrence. (ed.). The Structure of Knowledge and the Curriculum. Chicago: Rand McNally & Company, 1964.

- Fraser, Dorthy M. Current Curriculum Studies in Academic Subjects. Washington D.C.: National Education Association, 1962.
- Gibson, Richard C. The Challenge of Leadership in Higher Education. Iowa: Wm. C. Brown Co., Inc., 1964.
- Glenny, Lyman A. Autonomy of Public Colleges. New York: McGraw-Hill Book, Inc., 1959.
- Goodlad, John I. School Curriculum Reform in the United States. New York: The Fund for the Advancement of Education, 1964.
- \_\_\_\_\_, et al. The Changing School Curriculum. New York: The Fund for the Advancement of Education, 1966.
- Guilford, J. P. Psychometric Methods. New York: McGraw-Hill Book Company, 1954.
- \_\_\_\_\_. Fundamental Statistics in Psychology and Education. New York: McGraw-Hill Book Company, 1956, 1965.
- Harris, Seymour E. Higher Education: Resources and Finance. New York: McGraw-Hill Book Company, Inc., 1962.
- Hungate, Thad L. Management in Higher Education. New York: Teachers College Press, 1964.
- Inlow, Gail. The Emergent in Curriculum. New York: John Wiley & Sons, Inc., 1966.
- Jacob, Philip. Changing Values in College. New York: Harper & Brothers, Publishers, 1957.
- Johnson, B. Lamar. Islands of Innovation. Los Angeles: Junior College Leadership Program, 1964.
- Kaplan, Phyllis Ann. (ed.). Standard Educational Almanac 1968. Los Angeles: Academic Media Inc., 1968.
- Katz, Joseph, and Sanford, Nevitt. "The Curriculum in the Perspective of the Theory of Personality Development", Nevitt Sanford. (d.). The American College: A Psychological and Social Interpretation of the Higher Learning. New York: John Wiley & Sons, 1965.
- Kerlinger, Fred N. Foundations of Behavioral Research. New York: Holt, Rinehart and Winston, Inc., 1965.
- King, Arthur R., and Brownell, John A. The Curriculum and the Disciplines of Knowledge. New York: John Wiley and Sons, Inc., 1966.

- Kurland, Norman D, and Miller, Richard I. Selected and Annotated Bibliography on the Processes of Change. New York: Center on Innovation, 1966.
- Lee, James Michael. Catholic Education in the Western World. Indiana: University of Notre Dame Press, 1967.
- Leeper, Robert R. (ed.). Curriculum Change: Direction and Progress. Washington, D.C.: Association for Supervision and Curriculum Development, 1966.
- McGlothin, William J. The Professional Schools. New York: The Center for Applied Research in Education, Inc., 1967.
- McNeil, John D. Curriculum Administration: Principles and Techniques of Curriculum Development. New York: The MacMillian Company. 1965.
- Mayhew, Lewis B. Curriculum Innovation from the Nature of the Process. Frontiers in Teacher Education, Washington D.C.: The American Association of Colleges for Teacher Education, 1966.
- Miles, Matthew B. (ed.). Innovation in Education. New York: Bureau of Publications, Teachers College, Columbia University, 1964.
- Miller, Richard. (ed.). Perspectives on Educational Change. New York: Appleton-Century-Crofts, 1967.
- Moos, Malcolm, and Rourke, Francis E. The Campus and the State. Maryland: The John Hopkins Press, 1959.
- Neagley, Ross L., and Evans, N. Dean. Handbook for Effective Curriculum Development. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967.
- Swift, Richard N. World Affairs and the College Curriculum. Washington D.C.: American Council on Education, 1959.
- Tyler, Ralph W. Basic Principles of Curriculum and Instruction. Chicago: The University of Chicago Press, 1950.
- Umstatted, J. G. College Teaching. Washington D.C.: Community College Press, 1964.
- Wallis, W. Allen, and Roberts, Harry V. Statistics: A New Approach. New York: The Free Press of Glencoe, Inc., 1963.
- Wiles, Kimball. "Contrast in Strategies of Change", Strategy for Curriculum Change. (ed.). Robert Leeper. Washington D.C.: Association for Supervision and Curriculum Development, 1965.

Zacharias, Jerrold R., and White, Stephen. "The Requirements for Major Curriculum Revision", New Curricula. (ed.). Robert W. Health. New York: Harper & Row Publishers, 1964.

#### Articles and Periodicals

Anderson, Vernon E. "University Leadership in Social Planning". Educational Leadership, Vol. XXIV (November, 1967), pp. 115-18.

Brown, Hugh S. "The Pattern of Curriculum Expansion in the University", College and University, Vol. XL (Winter, 1965), pp. 185-93.

Dale, Edgar. "The Innovator and the Establishment". In Search of Leaders, (Washington D.C.: American Association of Higher Education, 1967), pp. 88-92.

Dressel, Paul I. "Specific Points of Attack in Curriculum and Course Revision". Journal of Educational Research. Vol. LIX (March, 1966), pp. 310-15.

\_\_\_\_\_. "Need for Curriculum Review; Course, Quality and Costs". Journal of Higher Education, Vol. XXVI (November, 1965). pp. 443-48.

Fields, R. R., et al. "Educational Programs; Curriculum Development in Higher Education". Review of Educational Research, Vol. XXXV (October, 1965), pp. 292-304.

Gayles, A. R. "Program for Instructional Improvement". Improving Colleges and University Teaching, Vol. XI (Spring, 1963), pp. 65-68.

Holt, Leland and Stenstegard, Manford. "Relating Self-Concept to Curriculum Development". Journal of Educational Research, Vol. LVIII (April, 1965).

Inlow, G. M. "Factors that Influence Curriculum Change". Educational Leadership, Vol. XXIII (October, 1965), pp. 39-49.

Lorish, R. E. "Politics of Curriculum Revision". Journal of General Education, Vol. XXXVII (January, 1966), pp. 273-87

Patterson, Kenneth D. "The Administration of University Curriculum". The Journal of Higher Education, Vol. XXXVIII (November, 1967), pp. 438-444.

- Shaw, Frederick. "The Changing Curriculum". Review of Educational Research, Vol. XXXVI (June, 1966), pp. 343-353.
- Upton, Miller, "Acceptance of Major Curricular Changes". In Search of Leaders, (Washington D.C.: American Association of Higher Education, 1967), pp. 101-6.
- Winthrop, H. "Needed Reconstruction in Education for a Cybernating Society". Educational Record, Vol. XLVI (Fall, 1965), pp. 400-12.

#### Unpublished Material

- Artman, Jim P. "Report No. 2 Concerning Administration at College and Department Level" (unpublished committee report, University of Oklahoma, 1968).
- Bishop, Doyle. "A Preliminary Statement of the Mission of the Sub-panel on Academic Administration" (unpublished committee report, University of Oklahoma, 1968).
- Dempsey, Richard Allen. "Analysis of Teachers' Expressed Judgements of Barriers to Curriculum Change in Relation to the Factor of Individual Readiness to Change" (unpublished Ph.D. dissertation, College of Education, Michigan State University, 1964).
- Truex, Robert Lloyd. "A Study of Factors Which Influence Curriculum Change in Secondary School Mathematics" (unpublished Ph.D. dissertation, College of Education, Oklahoma State University, 1967).
- Siefel, Martin. "Curriculum Change: Factors Which Affect the Development of Three Selected Changes in a New Jersey School System" (unpublished Ed.D. dissertation, Teachers College, Columbia University, 1966).

#### Letters

- Martin, Warren Bryan, Research Educator, Center for Research and Development in Higher Education, University of California, Berkeley, California. January 9, 1968.