

FATHERS' RECREATION ROOM
PLEASE DO NOT TAKE TO
PRIVATE ROOM

Jesuit Educational Quarterly

— OCTOBER, 1964 —

CONSTITUTION OF THE JESUIT EDUCATIONAL
ASSOCIATION

JEA INSTITUTE FOR HIGH-SCHOOL ADMINISTRATORS

PLANT ORGANIZATION AND MANAGEMENT

NEWS FROM THE FIELD

— Vol. XXVII, No. 2 —

(FOR PRIVATE CIRCULATION)

Our Contributors

The JEA CONSTITUTIONS contained in this issue of the JEQ are the revision of the JEA CONSTITUTIONS which have been in force since September 27, 1948. Reprints of the new Constitution will be available from the JEA Central Office.

The article on the HIGH SCHOOL ADMINISTRATORS INSTITUTE at Santa Clara should have an authentic tone since they were written by the competent Director of the Institute.

Brother William Kenny, S.J., the Business Manager of Fordham University, returns to our pages with another article on management.

Jesuit Educational Quarterly

October, 1964

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THE JESUIT EDUCATIONAL QUARTERLY, published in June, October, January, and March by the Jesuit Educational Association, represents the Jesuit secondary schools, colleges, seminaries, and universities of the United States, and those conducted by American Jesuits in foreign lands.

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ADDRESS COMMUNICATIONS TO THE EDITOR

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JESUIT EDUCATIONAL QUARTERLY

**LETTER OF VERY REVEREND FATHER
GENERAL APPROVING THE PROMULGATION
OF THE REVISED CONSTITUTION OF THE
JESUIT EDUCATIONAL ASSOCIATION**

CURIA PRAEPOSITI GENERALIS
SOCIETATIS IESU
ROMA—BORGO S. SPIRITO, 5

June 22, 1964

Very Reverend John J. McGinty
New York Province Provincial
New York

Dear Father Provincial: P.C.

During the past twenty-five years the educational apostolate of the American Assistancy has matured academically and expanded significantly both in the number of its high schools, colleges and universities, and in the enrollment of its students. It is clear that God has given increase to the labors of the Fathers, Scholastics and Brothers who have dedicated their lives to this Ignatian apostolate.

A primary agent effecting union and cooperation among these educational institutions of the Assistancy, and strengthening their administrative and academic structure, has been the Jesuit Educational Association. Gratitude is due to the men who have conducted the affairs of the Association and especially to Father Edward B. Rooney, without whose energetic and talented efforts the JEA would not have attained its present level of achievement.

The growing complexity of organization and activity in present-day American education, plus its rate of change, made it advisable in 1959 to undertake the revision of the Constitution of the JEA, in order to involve a greater number of experienced administrators and faculty in charting new courses and formulating policies adapted to modern exigencies. This revision, now happily concluded after serious and lengthy discussion, modifies the organization of the JEA, by establishing four Commissions to promote the function and interests of their members: the Commission on Secondary Schools, the Commission on Colleges and Universities, the Commission on Houses of Studies, and the Commission of Province Directors of Education. A Coordinating Committee consisting of three

duly elected representatives of each of the four Commissions, with the President of the JEA as an *ex officio* member and Chairman of the Committee, will take the place of the former Executive Committee, and will serve to coordinate the activities common to the several Commissions and advise the Board of Governors in administering the Association. The institution of this Coordinating Committee in no way diminishes the importance of the Province Directors of Education to assist their respective Fathers Provincial in the supervision of education within their own Provinces.

The wisdom of these revisions will be proved by the readiness of local officials to share national responsibilities, and by the results achieved through their cooperative labors. Among these results may we see meaningful cooperation, especially on the level of graduate studies, and a sharpening of the profile of the Jesuit alumnus, as sketched by the Loyola Workshop. For this we must learn to make the humanities relevant to the modern mind, and Christ and Christian social thought practicable and pertinent to the day.

After thoughtfully considering the various provisions of the proposed Constitution, and noting that they merited the unanimous recommendation of the Fathers Provincial, I am pleased, at this time, to grant my approval for the promulgation of the revised Constitution of the JEA. May the spiritual purpose, academic idealism and mutual understanding, which have been characteristic of the JEA in the past, guarantee its vigor and fruitfulness in the years to come.

Begging a remembrance in the prayers and Masses of Your Reverence and of all the Provincials of the American Assistancy, I remain

Sincerely yours in Christ,

JOHN B. JANSSENS, S.J.

CONSTITUTION OF THE JESUIT EDUCATIONAL ASSOCIATION

ARTICLE I—NAME

The name of this organization shall be the Jesuit Educational Association.

ARTICLE II—MEMBERSHIP

1. There shall be two classes of membership, constituent and associate.

2. Jesuit provinces, houses of studies, universities, colleges and secondary schools of the American Assistancy of the Society of Jesus shall be constituent members of the Association.

3. Jesuit houses of studies, universities, colleges, and secondary schools other than those of the American Assistancy of the Society of Jesus, located in the present or former possessions of the United States, shall be eligible for associate membership in the Association.

4. Jesuit houses of studies, universities, colleges, and secondary schools in the Dominion of Canada shall be eligible for associate membership in the Association.

5. Jesuit houses of studies, universities, colleges, and secondary schools of provinces which at present belong to other assistancies, but which formerly belonged to the American Assistancy, shall be eligible for associate membership in the Association.

6. Applications for associate membership shall have the endorsement of the Provincial Superior of the applicant.

7. Associate members shall enjoy all the privileges of constituent members consonant with the government of the Society of Jesus and with other sections of this constitution and bylaws.

ARTICLE III—OBJECTIVES

1. The general objectives of the Association shall be to foster the union and community of the members and to provide services which will promote the development and improvement of their educational activities.

2. Among the specific objectives shall be:

- a. Cooperation of member institutions in furthering the aims of Catholic education.
 - b. Effective presentation of the Catholic philosophy of life.
 - c. Development of Jesuit educational theory and practice in continuity with Jesuit traditions in the context of developing American culture.
 - d. Provision for wider knowledge of the Jesuit educational system, its theory and practice.
 - e. Promotion of good teaching.
 - f. Promotion in Jesuit institutions of scholarship, research, and scholarly publication.
 - g. Increased academic efficiency of all Jesuit educational institutions.
 - h. Collaboration with Jesuit educators in other countries on common educational problems.
 - i. Cooperation with other educational associations, Catholic and secular.
 - j. Promotion of experimental study of educational problems.
 - k. Beneficial influence upon principles and policies of American education.
3. Among the services to further the above objectives shall be:
- a. Provision of information and advice to assist in the development of national, regional, and provincial policies on educational matters.
 - b. Communication of reports, announcements of policies, and general information on education.
 - c. Planning of meetings, workshops, and institutes.
 - d. Preparation of studies and reports.
 - e. Promotion of the professional growth of teachers.
 - f. Cultivation of public understanding of Jesuit institutions and ideals.
 - g. Information on activities of associations and government agencies.

ARTICLE IV—DIVISIONS OF THE ASSOCIATION

1. The Association shall consist of all the constituent and associate member institutions.
2. As provided in the bylaws, the constituent member institutions shall be grouped into regional units; the regional units shall be divided into provincial units.

3. The purpose of the regional units shall be to exchange ideas and to further in the respective regions the objectives of the Association.

ARTICLE V—GOVERNMENT OF THE ASSOCIATION

A. *National*

1. There shall be a Board of Governors composed of the Provincial Superiors of the American Assistancy of the Society of Jesus.

2. The national authority in the government of the Association shall rest with the Board of Governors.

3. The Board of Governors shall have the power to determine policies for all the constituent members of the Association in accordance with the Provisions of Article X, E.

4. There shall be a President of the Association who shall be nominated by the Board of Governors and appointed by the Superior General of the Society of Jesus.

5. The duties and powers of the President shall be:

a. To direct for the Board of Governors the administration of the entire Association.

b. To participate personally or by delegate in the meetings of committees, commissions and conferences of the Association, when he shall judge such participation helpful or necessary for expediting the business of the said committees, commissions, and conferences.

c. To call meetings of the Association, as provided in Article X, A, 4, a.

d. To report to the Board of Governors resolutions passed by national meetings of the Association, the recommendations of the Coordinating Committee, and his own recommendations.

e. With the approval of the Board of Governors, to communicate to the entire Association, or to groups, all pertinent actions of the Board of Governors.

f. To make annual reports to the Superior General of the Society of Jesus on the general status of Jesuit education in the United States, and other special reports as needed or requested.

g. To represent the Association officially either personally or by delegate at meetings of other educational associations

h. To submit to the commissions, conferences, or other groups within the Association problems for study, and to see that their reports are presented in due time.

- i. To receive reports on the educational institutions from Province Directors of Education.
- j. To see that directives of the Board of Governors are observed by the constituent members of the Association.
- k. To visit, from time to time, the Jesuit educational institutions in the United States.

6. There shall be a Coordinating Committee composed of three duly elected representatives from each of the commissions. The President of the Association will be *ex officio* a member and Chairman of the Coordinating Committee. The functions of the Coordinating Committee shall be:

- a. To advise the Board of Governors in administering the Association.
- b. To coordinate such activities of the Association as transcend the limits of any given commission and require the cooperation of two or more commissions.
- c. To plan national meetings of the Association.
- d. To assist the several commissions in the pursuit of their objectives.

7. All recommendations of the President and of the Coordinating Committee, all resolutions passed at national meetings of the Association, or of national groups within the Association as well as all actions of the President that affect the educational policy or practice of the constituent members of the Association, shall be subject to the approval of the Board of Governors.

B. *Regional*

The function of the regional officers shall be to administer the affairs of the regional units.

C. *Provincial*

1. The government of the provincial unit shall be under the jurisdiction of the Provincial Superior.

2. The functions of the Province Directors of Higher and Secondary Education shall be:

- a. to assist the Provincial Superior in all matters pertaining to education.
- b. to supervise, under the Provincial Superior, the educational institutions of the province.
- c. to represent the province on the Commission of Province Directors.

3. It shall be the duty of each Province Director of Education, in

conformity with Article 12, 2, of the *Instructio*, to report annually to the Superior General on the institutions of higher and secondary education of the Province.

4. It shall be the duty of each Province Director of Education to visit the educational institutions of the province and to send a report to the Provincial Superior. After this report has been approved by the Provincial Superior, the Province Director will send it to the local rector, to the dean or principal and to the President of the Association.

ARTICLE VI—OFFICERS OF THE ASSOCIATION

1. There shall be national, regional, and provincial officers.
2. National Officers: These shall be the Chairman of the Board of Governors, the President, and the Treasurer.
 - a. The Chairman of the Board of Governors shall be elected by its own members.
 - b. The President shall be nominated by the Board of Governors, and appointed by the Superior General of the Society of Jesus.
 - c. The Treasurer shall be nominated by the President and elected by the Board of Governors.
3. Regional Officers: These shall be the Provincial Superiors and the Province Directors of Education of the region.
4. Provincial Officers: These shall be the Provincial Superior, the Province Director of Higher Education, and the Province Director of Secondary Education.
5. Province Directors of Education shall be appointed by the Provincial Superiors of their respective provinces with the approval of the Superior General of the Society of Jesus.

ARTICLE VII—COMMISSIONS OF THE ASSOCIATION

1. The Association shall organize four permanent commissions: the Commission on Colleges and Universities, the Commission on Secondary Schools, the Commission on Houses of Studies, and the Commission of Province Directors of Education.

2. These Commissions shall be constituted according to the provisions set forth in the bylaws.

3. Each Commission will receive and review the reports of its subordinate conferences and will in turn submit a written report directly to the Board of Governors.

4. The functions of the Commissions shall be:
 - a. to provide a suitable forum for the discussion of matters pertaining to their institutions and to represent the interests of these institutions;
 - b. to promote the identification and study of problems within the institutions in their field;
 - c. to arrange for the submittal to the Board of Governors of reports and recommendations arising from such studies;
 - d. to undertake studies referred to them by other elements of the Association;
 - e. to receive regular reports from the appropriate conferences, to review them, and to submit them, with recommendations, to the Board of Governors;
 - f. to appoint, with the approval of the Board of Governors, *ad-hoc* committees for the study of special problems, to review their reports and to submit them, with recommendations, to the Board of Governors;
5. The Commission of Province Directors of Education shall be available and ready to review for the Board of Governors when so requested reports and recommendations made by any other commission, offering such comments and advice as may seem desirable in each instance.

ARTICLE VIII—CONFERENCES OF THE ASSOCIATION

1. There shall be within the Association permanent groups of Jesuit schools having common objectives, and groups of individuals performing the same academic or administrative functions in Jesuit institutions. These groups shall be known as Conferences of the Jesuit Educational Association.
2. The purpose of these conferences shall be to promote in the areas of their special interest the objectives of the Association.
3. Conferences shall normally function under the immediate direction of the appropriate commission.
4. Conferences shall undertake studies on their own initiative, at the request of the appropriate commission, or of the Board of Governors.
5. Conferences shall report directly to the appropriate commission on regular meetings and on the studies undertaken.
6. Each conference shall adopt bylaws consistent with this constitution.

7. Each conference shall elect a chairman for a two-year term, and a secretary for a three-year term.

ARTICLE IX—JESUIT RESEARCH COUNCIL OF AMERICA

1. In order to advance the Association's objectives related to research, there shall be an organization of institutions known as the Jesuit Research Council of America.

2. Membership in the Jesuit Research Council of America shall be voluntary.

3. The Jesuit Research Council of America shall adopt bylaws consistent with this constitution.

ARTICLE X—MEETINGS OF THE ASSOCIATION

A. *Meetings*

1. National Meetings:

- a. The Board of Governors shall meet once or twice a year.
 - i. At one of these meetings the President shall submit his annual report in writing or in person, as requested by the Board of Governors.
 - ii. If at these meetings the presence of the chairman or other representative of any commission, conference, or other group within the Association shall be thought necessary or useful, the chairman of the Board of Governors shall arrange for his attendance.
- b. The Coordinating Committee shall meet twice a year.
- c. The Association shall hold national meetings at intervals to be determined by the Coordinating Committee and approved by the Board of Governors.
- d. The commissions shall meet annually and at such other times as the chairmen of the commissions may think necessary and the Board of Governors may approve.
- e. Conferences shall meet annually at the time and place judged most convenient for the majority of the members.

2. Regional Meetings:

- a. The regional units shall meet at such intervals and at a time and place approved by the Provincial Superiors concerned.
- b. The Province Directors of Education of the Region shall arrange for the meetings of the regional units.
- c. Recommendations of the regional units or of regional groups

shall be subject to the approval of the Provincial Superiors concerned.

3. Provincial Meetings:

- a. There shall be annual meetings at the province level of rectors, presidents, and other administrators.
- b. There shall be periodic meetings of teachers of separate and kindred subjects.
- c. If present, the Provincial Superior shall preside at these meetings.
- d. The appropriate Province Director of Education shall arrange and conduct the province meetings.

4. Special Meetings:

- a. With approval of the members of the Board of Governors concerned, the President, the Coordinating Committee, and the commissions may call meetings of representatives of academic and administrative areas, as circumstances require.

B. *Minutes or Reports of Meetings*

1. The secretary, or a secretary *pro tem*, shall record the minutes of all meetings.

2. The minutes of all meetings shall be distributed according to the provisions of the bylaws.

C. *Voting Procedure*

1. In the Coordinating Committee each member shall have one vote.

2. At the national, regional and provincial meetings of the Association, two kinds of votes shall be recognized, individual and institutional. When an individual vote is called for, each individual present shall be entitled to one vote, to be cast personally. When an institutional vote is called for, each constituent member shall be entitled to one vote, to be cast by an accredited representative.

3. At the special meetings referred to under Article X, A, 4, a, each individual present shall be entitled to one vote.

4. The chairman of a meeting shall vote only in case of a tie.

D. *Action on Recommendations*

1. The President of the Association shall submit to the Board of Governors recommendations and resolutions of national meetings and of the Coordinating Committee, as well as his own recommendations (Article V, A, 5, d). The commissions shall submit all their recommendations directly to the Board of Governors (Article VII, 3, a). The commission of Province Directors of Education shall be available to review for the Board of Governors when so requested

reports and recommendations made by any other commission, offering such comments and advice as may seem desirable in each instance (Article VII, 5).

2. Resolutions adopted by national institutes, workshops and other meetings, unless acted upon by the Board of Governors, shall have only the authority of the group adopting them.

3. All recommendations voted by regional units, or by groups within these units, shall be submitted to Provincial Superiors concerned by the appropriate Province Directors of Education.

4. All recommendations voted by meetings of provincial groups shall be submitted to the Provincial Superior by the appropriate Province Director of Education.

5. Action on recommendations referred to in #3 and #4 above shall be reported to the member institutions by the appropriate Province Director of Education.

E. Promulgation of Directives of Board of Governors

1. Policies established by the Board of Governors shall become effective through promulgation by the Superior General for the entire Assistancy or by each Provincial for his own Province. (Article V, A, 3.)

2. Under special circumstances, the Board of Governors may adopt other methods of promulgation.

ARTICLE XI—AMENDMENTS TO THE CONSTITUTION

1. Proposed amendments to this constitution shall be submitted through the Coordinating Committee to the Board of Governors.

2. Amendments shall become part of the constitution upon promulgation by the Board of Governors.

ARTICLE XII—BYLAWS

1. The Association shall have the power to draw up its own bylaws which shall be subject to the approval of the Board of Governors.

2. Amendments to the bylaws may be proposed to the Coordinating Committee by national, regional, or provincial meetings of the Association.

3. Proposed amendments to the bylaws shall be subject to the approval of the Board of Governors.

BYLAWS

1. Admission to associate membership shall be granted by the Board of Governors on recommendation of the Coordinating Committee of the Association.

2. The expenses of the Association shall be borne by the constituent members on a prorated basis to be determined by the Board of Governors.

3. Associate members shall share the expenses of the Association according to the decision of the Board of Governors.

4. The Eastern Regional Unit shall comprise the Buffalo, Maryland, New England, and New York Provinces of the Society of Jesus, and all the educational institutions of those Provinces.

5. The Central Regional Unit shall comprise the Chicago, Detroit, Missouri, New Orleans, and Wisconsin Provinces, and all the educational institutions of those Provinces.

6. The Western Regional Unit shall comprise the California and Oregon Provinces, and all the educational institutions of those Provinces.

7. The chairman of the Board of Governors shall have the power to act for the Board in the interval between meetings, as the Board itself shall determine.

8. The responsibility for the meetings of higher education and of secondary education of each regional unit shall rotate among the Province Directors of Education of that region.

9. The Province Director of Education shall be responsible for the scheduling and organizing of province meetings.

10. Each Province Director of Education shall have at least two consultants, appointed by the Provincial Superior, to aid him in promoting the efficiency of the educational work of the province.

11. In provinces where there is only one Director of Education he shall be assisted by at least two consultants for higher education and at least two for secondary education.

12. Any group within the Association or any person identified with a member institution of the Association may submit, in writing, proposals for consideration by the Coordinating Committee.

13. Reports or minutes of any meeting shall include a minority opinion when necessary or useful.

14. The minutes of the meetings of the Coordinating Committee shall be sent to the members of the Board of Governors, to the

President, to the members of the Coordinating Committee and the Commission of Province Directors of Education.

15. The minutes or a report of all national meetings shall be sent to the members of the Board of Governors, to the President, to the members of the Coordinating Committee and the Commission of Province Directors of Education and to other appropriate commissions.

16. The commissions shall be constituted as follows:

a. The Commission on Colleges and Universities: the presidents of the colleges and universities of the Assistancy.

b. The Commission on Secondary Schools: one high school rector, chosen by the high school rectors of each province of the Assistancy, and one principal, chosen by the principals of each province of the Assistancy, and approved by the Provincial Superior.

c. The Commission on Houses of Studies: the prefect of studies and dean of each theologate, philosophate and juniorate of the Assistancy.

d. The Commission of Province Directors of Education: the Province Directors of Education of the Assistancy.

17. Each commission shall elect its three representatives on the Coordinating Committee in such wise that one representative will be chosen from the Eastern Regional Unit, one from the Central Regional Unit and one from the Western Regional Unit. Membership on the Coordinating Committee will normally be for a period of three years, so arranged that a third of the members shall retire each year. Retiring members shall be eligible for reappointment for one term.

18. The term of appointment to the Commission on Colleges and Universities, to the Commission on Houses of Studies and to the Commission of Province Directors of Education will be coterminous with the term of office of each president, each prefect of studies and dean, and each Province Director of Education. The term of appointment to the Commission on Secondary Schools will be for three years, but coterminous with the term of office of each rector and principal and so arranged that a third of the members shall retire each year. Retiring members shall be eligible for reappointment for one term.

19. Each commission shall elect a chairman for a two-year term and a secretary for a three-year term.

20. Commissions shall present their reports to the Board of Gov-

ernors at least four weeks in advance of the next meeting of the Board.

21. The minutes of the regional and provincial meetings shall be sent to the Provincial Superiors of the provinces concerned; to the President of the Association; to the members of the Coordinating Committee; and to all Province Directors of Education, rectors, presidents, deans and principals of the Province or Provinces represented.

22. The minutes of all special meetings referred to under Article X, A, 4, a, shall be submitted to the President of the Association by the secretary of the meeting, for distribution to the persons concerned.

23. There shall be an official publication of the Association to be known as the *Jesuit Educational Quarterly*.

24. The Association shall issue other publications which may promote its objectives.

25. The editorial staff of the *Quarterly* shall consist of an editor, a managing editor, and an advisory board.

26. The advisory board shall consist of the Province Directors of Education and such persons as the President of the Association shall judge desirable.

JEA Institute for High-School Administrators University of Santa Clara—August 2-13, 1964*

LORENZO K. REED, S.J.

Introduction. The sun was turning ruddy in its gentle descent into the west. The palm trees grouped around the Spanish Mission structure of Nobili Hall stirred easily in the brisk air. In the new little theatre Fr. Patrick J. Donohoe, Rector and President of the University of Santa Clara, was giving his address of welcome to 134 Jesuit high-school administrators who had assembled from all parts of the United States, from Canada, West Indies, India. Inside and out, it was a perfect setting for the fifth Institute for Jesuit High-School Administrators.

Every six years since 1940 the Jesuit Educational Association has held an institute for high-school administrators. At West Baden College in July 1940, 27 principals and province prefects spent ten days discussing the new (1940) *Evaluative Criteria* and its application to Jesuit secondary schools. In 1946, at Regis College, Denver, the program was designed to cover all the important phases of school work, administration, curriculum, guidance, instruction, library, religious activities. There were 74 participants. The institute returned to Regis College in 1952, when 71 administrators followed a program built around the first edition of the *Manual for Jesuit High-School Administrators*. Again in August 1958, Regis College was host. For the first time there were delegates from schools outside of the continental United States among the 99 participants. The program centered almost entirely around discussions of curriculum and the improvement of teaching. The large increase in delegates in 1964 was due to the participation of 39 high-school rectors. A few rectors had attended the three previous institutes, all of which had been designated as "Principals' Institutes." The Santa Clara Institute was planned as an "Institute for Jesuit High-School Administrators," and rectors were regular delegates. The participation of the rectors contributed much to the success of the latest institute and it is hoped that henceforth they will attend regularly.

Another innovation which proved very productive was the par-

* The full Proceedings of this Institute will be available at a later date from the JEA Central Office.

participation of five Jesuit college deans. The program of the 1964 JEA Annual Meeting was devoted to articulation between our colleges and high schools. Shortly thereafter the Planning Committee for the 1965 Workshop of Liberal Arts Deans was appointed. It was a happy inspiration, therefore, to invite the members of the Planning Committee to join the Institute, where they could represent the colleges and further the articulation in a practical way while planning the 1965 Workshop program.

Planning. As long as September 1961, the JEA Executive Committee, at the instance of its Subcommittee on Institutes, recommended the holding of a national institute for high-school administrators in the summer of 1964. The Board of Governors gave its approval in May 1962, at the same time endorsing the general plan and appointing Fr. Lorenzo K. Reed as director. At each subsequent and semi-annual meeting of the Executive Committee a progress report was discussed. Fr. Reed made progress reports also to the principals' sectional group during the JEA Annual Meetings of 1963 and 1964.

The first general announcement was sent to principals on February 25, 1963, in which principals were urged to begin preparing and, especially, to design experiments for academic 1963-64 which would further the purposes of the Institute. A follow-up announcement was mailed on May 9, 1963, and with it a checklist on which principals were asked to indicate areas of interest and competence. A mailing of October 9, 1963 announced the assignment of 36 principals to 12 committees which were to study areas of curriculum and instructional technology. A similar procedure was followed in planning several special sessions for the rectors, beginning with an announcement and a checklist on February 20, 1964. Between May 9, 1963 and June 10, 1964 three bibliographies containing a total of 504 entries were mailed to prospective delegates. The last general announcement, which contained travel instructions and described arrangements at Santa Clara, was sent on July 18, 1964. Altogether 21 items were sent out in 13 general mailings.

Purpose and Scope. The general purpose of the Institute was to induce our schoolmen to strive for excellence and in so doing consciously to give leadership to Catholic secondary education. The means intended for the accomplishment of the general purpose was a study of the general topic, "New Developments in Secondary Education." These new developments were separated into two main categories, the secondary curriculum and "instructional technology."

Three more particular aims were identified for the study of the new developments: A. *Information* about the latest stage in the new developments. B. *Evaluation* of the new developments, through scrutiny of the basic principles and theory, and through reports on practices in schools generally and experience in Jesuit schools. The focus of the evaluation was appropriateness for Jesuit high schools and that led to the third aim, C. *Application* to Jesuit high schools, possibly in modified form.

General Plan. The program was divided into three blocks of three days each, separated by break days. On each day there was a morning session and an afternoon session. Evenings were left unscheduled, to allow for committee work and informal discussions. The backbone of the program was the series of committee reports. Individual committee members came to the Institute well prepared through intensive study of their assigned topics. They met as committees each afternoon and some evenings during the sessions. Each of the nine morning sessions was taken up with the presentation of committee reports and discussion by the full assembly. (Much to the relief of the Director, the timing worked out just right.) After each discussion the committee sat down again to revise its report in the light of the comments and suggestions of the delegates.

There was more variety in the nine afternoon sessions. On the first afternoon in each block of days a nationally recognized specialist addressed the full assembly on some phase of "New Developments in Secondary Education." Two afternoons were devoted to addresses by Jesuit speakers and one to a panel discussion of the "Related Functions of Rectors and Principals." On two afternoons special sessions were held for rectors in which topics of special interest to rectors were discussed. During these two sessions the other delegates held an open discussion about six administrative problems that had been identified by questionnaire as matters of special concern to principals.

The Program. The following is an outline of the complete program.

THE PROGRAM

Sunday, August 2

7:30 P.M.: Opening Session.

Monday, August 3

Morning: Joint Session—Committee Reports: Mathematics; Advanced Placement.

Afternoon: Joint Session—"Appraisal of New Developments in Secondary Education." Dr. Robert N. Bush, Professor, and Chairman of the Committee on Secondary Education, School of Education, Stanford University; Chairman, National Commission for Teacher Education and Professional Standards.

Tuesday, August 4

Morning: Joint Session—Committee Reports: Advanced Placement; Team Teaching.

Afternoon: Rectors' Session—"The Rector's Relations with Various School Personnel." Panel Discussion. Fr. Francis D. Masterson, Chairman; Fr. Jerome T. Boyle, Fr. William F. Graham, Fr. Robert F. Grewen, Fr. J. Robert Koch, Fr. Julian L. Maline, Fr. Emmet J. Norton, Fr. Louis A. Sauvain.

Afternoon: Principals' Session—Discussion of Administrative Problems

Wednesday, August 5

Morning: Joint Session—Committee Reports: Team Teaching; Latin.

Afternoon: Joint Session—"The Related Functions of Rector and Principal." Panel Discussion. Fr. John P. Foley, Chairman; Fr. Donald L. Kirsch, Fr. William J. Schmidt, Fr. John W. Kelly, Fr. John F. Sullivan.

Thursday, August 6

Intermission: A Tour of the Bay Area.

Friday, August 7

Morning: Joint Session—Committee Report: Science.

Afternoon: Joint Session—"New Developments in the Secondary Curriculum." Dr. Ole Sand, Director, Center for the Study of Instruction, National Education Association.

Saturday, August 8

Morning: Joint Session—Committee Reports: Science, English.

Afternoon: Joint Session—"Diocesan Relationships." Fr. Edward B. Rooney, President, Jesuit Educational Association.

Sunday, August 9

Morning: Joint Session—Committee Reports: Educational Facilities; Programed Instruction.

Afternoon: Joint Session—"High-School Retreats." Fr. Thomas A. Burke, Director, Program to Promote the Spiritual Exercises.

Monday, August 10

Intermission: A Tour in the Mission Country.

Tuesday, August 11

Morning: Joint Session—Committee Reports: Modern Foreign Language and Language Laboratories; Instructional Television.

Afternoon: Joint Session—"New Developments in Instructional Technology." Dr. James D. Finn, Professor, and Director, Instructional Technology and Media Project, School of Education, University of Southern California.

Wednesday, August 12

Morning: Joint Session—Committee Reports: Instructional Television; Related Functions of Rector and Principal.

Afternoon: Rectors' Session—"The Rector's Administration of Finances." Panel Discussion. Fr. William T. Wood, Chairman; Fr. Francis A. Moore, Fr. William J. Schmidt, Fr. Thomas J. Sexton.

Afternoon: Principals' Session—Discussion of Administrative Problems.

Thursday, August 13

Morning: Joint Session—Committee Reports: Religion; English-Reading.

Afternoon: Joint Session—Closing Session of the Institute.

Committees of the Institute. There follows a list of the Committees.

*Committees of the Institute**Advanced Placement*

- Fr. Bernard J. Dooley, Province Prefect, Maryland, *Chairman*
- Fr. Thomas J. Bain, St. Ignatius High, Cleveland
- Fr. Charles E. Burke, Cranwell Preparatory
- Fr. William C. McCusker, Brooklyn Preparatory

English

- Fr. Joseph D. Ayd, St. Joseph's Preparatory, *Chairman*
- Fr. Joseph T. Browne, Province Prefect, New York
- Fr. Edward J. McFadden, St. Ignatius High, San Francisco

Latin

- Fr. John R. Vigneau, Xavier High, Concord, *Chairman*
- Fr. Robert J. McAuley, University of Detroit High
- Fr. Anthony I. McHale, Gonzaga High, Washington, D.C.

Mathematics

- Fr. James R. Eatough, Regis High, Denver, *Chairman*
- Fr. John J. McDonald, Xavier High, New York
- Fr. Joseph E. Perri, Jesuit High, Portland

*Modern Foreign Languages
Language Laboratories*

- Fr. Louis A. Munteer, Canisius High, *Chairman*
- Fr. James A. Reinert, Chaplain Kapaun Memorial High
- Fr. John L. Vessels, Jesuit High, El Paso

Religion

Fr. John F. Sullivan, Province Prefect, Chicago, *Chairman*
 Fr. William J. Doran, Campion Jesuit High
 Fr. Edwin J. McDermott, Loyola High, Los Angeles

Science

Fr. Carl G. Kloster, Rockhurst High, *Chairman*
 Fr. Willard J. Dressel, Creighton Preparatory
 Fr. Joseph G. Musselman, Brooklyn Preparatory
 Fr. Robert C. Ostertag, Marquette University High
 Dr. Marsdon Blois, Stanford University, Consultant

Instructional Television

Fr. John W. Kelly, Brooklyn Preparatory, *Chairman*
 Fr. William J. Walsh, Bishop's Latin School

Programed Instruction

Fr. John H. Reinke, Loyola Academy

Educational Facilities

Fr. Paul V. Siegfried, Province Prefect, Detroit, *Chairman*
 Fr. Bernard R. McIlhenny, Scranton Preparatory
 Fr. Thomas A. Reed, University of San Francisco

Team Teaching and Flexible Scheduling

Fr. Richard M. Seaver, Seattle Preparatory, *Chairman*
 Fr. Cornelius J. Carr, Province Prefect, Buffalo
 Fr. Robert J. Haskins, Loyola School
 Fr. Richard H. Maher, Bellarmine Preparatory

Related Functions of Rector and Principal

Fr. John F. Foley, Xavier High, Concord, *Chairman*
 Fr. J. Robert Koch, St. Ignatius High, Chicago
 Fr. William T. Wood, Regis High and Loyola School
 Fr. Anthony I. McHale, Gonzaga High, Washington, D.C.
 Fr. Gerald R. Sheahan, St. Louis University High

Resolutions: Fr. Vincent L. Decker, *Chairman*
 Fr. Joseph P. Duffy
 Fr. William E. Hayes
 Fr. Louis A. Sauvain
 Fr. C. Vincent Sykes

Chairmen of Principals' Sessions on Administrative Problems

Fr. Eugene J. O'Brien, Fordham Preparatory
 Fr. Gerald R. Sheahan, St. Louis University High

Opening Session. After Fr. Donohoe's gracious welcome to the delegates Fr. Reed introduced the general subject of the Institute, "New Developments in Secondary Education." He asserted that a study of the new developments was most timely. Secondary education has been popping like two strings of fire-crackers. Two strings, because at the same time a great deal of sound study and experimentation is being carried out along two lines: new developments in curriculum, new developments in "instructional technology."

Consider the secondary curriculum: with the possible exception of the social studies, every one of our fields or disciplines is bright with new prospects. New national programs have been developed in mathematics, physics, chemistry, and biology. The audio-lingual approach has won general acceptance in the teaching of modern foreign languages. At least four new ways of teaching Latin are crowding out the extreme forms of the grammar-translation routine. The English program is undergoing reform under the guidance of the CEEB Commission on English, with the strong support of Project English of the Office of Education. The kerygmatic approach to the teaching of high-school religion is sweeping the country.

Certain broad common characteristics can be recognized in most of the curriculum developments. Perhaps most significant of all is the unwonted union of recognized scholars and college and high-school teachers working together to produce better courses of study. Another is the prestige and financial support which have been provided by the federal government and the great foundations. A third characteristic is the organized effort to update and upgrade the competence of high-school teachers.

Developments in each discipline have their own particular characteristics. Thus, mathematics and science programs are built around unifying central concepts rather than on a mass of factual information or practical applications of science. Hence the stress is on the understanding of principles rather than on the learning of facts or mere manipulation. Laboratory work is an integral part of the science course, not the former "cookbook" type of experiments, but true scientific investigation. The audio-lingual approach to modern language learning takes the student through a planned sequence of listening—speaking—reading—writing. At the high-school level, the emphasis is on language rather than literature. The Commission on English is attempting to strip away the appendages that have attached themselves to the English curriculum and to reduce it to

three essential phases: language, composition, and literature. There is a concerted effort to improve the teaching of writing.

What promises to become the most significant movement of all for Catholic education is the new religion program in the secondary schools. This is the kerygmatic approach or "salvation history." This approach is a shift from either the catechism or the conventional high-school course, which has been a systematic theology course, junior grade, almost a miniature seminary course. The new program is a blending of the four aspects of our living faith: the biblical, the liturgical, the doctrinal, and the living witness through commitment to Christ. Instead of presenting each aspect as a separate treatise, the new approach fuses them into an integrated synthesis of the Christian message. Now religion comes alive in the classroom. I have never seen anything like the spontaneous reaction that has been sweeping the Catholic high schools all over the country. This program could really make our Catholic schools distinctive and could make living Catholics of our graduates in a way that we have not accomplished thus far.

Advanced placement is one of the most important developments in curriculum. It has already upgraded both the secondary and college programs. Not the least of its accomplishments has been to stir the college faculties out of their complacency and inertia! At the high-school level it has done two good things: it has permitted gifted students to bring the level of their work closer to the level of their capacities, and in the process to find pleasure and satisfaction in intellectual activities; and it has upgraded the quality of the regular courses in the school. Quality has proved to be catching. Incidentally, the Advanced Placement Program and the general quest for excellence have taught us educators that we have consistently underestimated the capacities of our better students.

Curriculum development makes up one of the strings of firecrackers; instructional technology makes up the other. Language laboratories, electronic classrooms, closed-circuit instructional television, programmed instruction, team teaching and flexible scheduling, all of these are new developments. The curriculum developments are safe; with the gadgets there is more danger of being trapped in a fad that will pass and leave us holding an expensive collection of hardware. Still, the very expense tends to hold us back and while we are waiting for the money we can evaluate the developments. It seems to me that every one of these devices can be put to good use in our schools, but we shall have to plan

very carefully and prudently how to fit them into our programs.

Tape teaching in electronic classrooms and language laboratories can make for more efficient drilling without deadening the minds of the teachers and can give students far more individual practice in pronouncing and listening; but the equipment need not be so elaborate and expensive as some I have seen. *Closed-circuit television* multiplies good teaching, demonstrates vividly, brings the world into the classroom. *Programed instruction*, used to supplement the regular courses, can really individualize instruction and make the curriculum flexible in ways nothing else can do. *Team teaching* can make the best use of the peculiar talents of a group of teachers, notably improve lesson planning, and provide a workable apprenticeship for new teachers. *Flexible scheduling* used with team teaching can vary the approach to suit the purpose of the lesson, make possible more personal contact and student participation, and encourage independent study. Various combinations of several of these devices can be used. The task of the teacher using the new technology will be more interesting, more satisfying—and more difficult!

It has been charged that American education was scared into striving for excellence by the rocketing of Sputnik I into space in October 1957. Actually, I don't think that this is true. The College Board took over the Advanced Placement Program in 1955. The two curriculum groups which led the way in reform were the College Board Commission on Mathematics, which was organized in 1955, and the Physical Science Study Committee, which was formed in 1956, both before Sputnik burst into the black. Indeed, the study which led to the publication of the famous Report V of the Rockefeller Brothers Fund, "The Pursuit of Excellence," was off the launching pad before the rocket. Rather, the aberrations of Progressive Education, the absurdities of extreme forms of Life Adjustment Education, and some other factors caused a groundswell of criticism of public education, which in turn undermined the dominance of public school people and educationists. At this critical moment the scientists and scholars became aroused and joined forces with college and high-school teachers to produce better courses. The National Science Foundation, the National Defense Education Act, and large independent foundations supplied ample funds. Now the programs have taken hold and secondary education has reached new levels of excellence. We find ourselves in a novel situation, in that we can accept the basic principles of the

new movements, rather than being forced to resist them, as we have been forced to resist former general movements. We are fortunate in this, because circumstances would have made it very difficult for us to work against the new developments. Now we have a responsibility for keeping secondary education on this high plane and never allowing it to fall back into the anti-intellectual swamp of Life Adjustment Education or similar movements.

There is another reason for saying that a conscious drive for excellence is timely. Our schools no longer have a virtual monopoly on excellence among Catholic schools. It would be most untimely for us to nurse any sense of complacency. Our schools are still good, but relatively they are not as good as they used to be, simply because the other schools are catching up. This is a strange paradox. I am convinced that our American Jesuit high schools are better than they ever were, and yet they are not as good as they were formerly—by comparison with the competition. This much is sure: our schools are not good enough; and it is the purpose of this Institute to make them better.

I offer one last consideration. We know that there is a new generation of Jesuit scholastics moving along in the course. They have fine ability, high ideals, and great potential as Jesuits. But for the first time in the history of this Assistancy, at least, we have to justify to them the worth of the educational apostolate. They see other apostolates that seem to them more fruitful. We have to convince them that teaching in Jesuit high schools is an *apostolate*. They want to sell their religious lives for the highest price, spiritually and intellectually. So, we have to strive for spiritual and intellectual excellence if we want to attract them. And we do want them! When we have attracted them, the schools will rise to a still higher level of excellence.

We come together, therefore, to renew our determination to strive for excellence, to renew ourselves and our schools. The way we have chosen this time is to study the strong movements now underway in American education, to evaluate them, to choose what is sound and applicable and to blend it into our well-tried system. This is the genuine Jesuit way, to combine the best of the new with the best of the old, and so to move forward again.

Committee Reports. Only brief summaries of committee reports and discussions of the twelve topics of the program can be given here. The full reports will appear in the *Proceedings*.

Advanced Placement. Essentially, "advanced placement" is an

arrangement whereby talented students follow college courses in high school and upon entering college are placed in advanced classes, usually receiving college credit for the previous courses. The official Advanced Placement Program, now operated by the College Entrance Examination Board, developed out of two experiments in the 1950s, the Three School—Three College Study and the Kenyon Plan. The basic purpose of both plans was to unify the middle years of the eight-year sequence, the last two years of high school and the first two years of college, so as to avoid duplication, challenge superior students, and improve the quality of their courses.

In the spring of 1954 the first examinations were given, 532 students from 18 schools taking 959 examinations. In the spring of 1956, the first year of operation under the College Board, 1,229 students from 104 schools took 2,199 examinations. In the spring of 1964, 28,857 students from 2,098 schools took 37,802 examinations. The number of colleges receiving the scores went from 150 in 1956 to 851 in 1964. Clearly, the Advanced Placement Program is established.

At the 1958 JEA Institute the Jesuit principals endorsed the theory of advanced placement and discussed plans for introducing it. At Santa Clara in 1964 it was reported that 24 Jesuit schools now offer advanced placement courses and four schools will introduce them in 1964-65. The most common subjects are English and mathematics, but nine of the eleven AP subjects are offered, all but French and biology. Students from the 24 schools submitted a total of 617 papers in the 1964 AP Program examinations. Of these, 89.6 percent received at least a grade of 2, the "passing" grade; 48.6 percent scored 3 or better; 15 percent achieved grades of 4 or 5. Clearly, the programs are successful.

Replies from 26 of the 28 Jesuit colleges indicated that 18 will grant both advanced placement and advanced credit for a grade of 3 or higher; three require a grade of 4 for placement and six the same grade for credit. Three colleges will grant placement but not credit for a grade of 2. Interesting is the fact that 11 Jesuit colleges have agreements with Jesuit high schools to grant advanced placement, with or without credit, through procedures other than the examinations of the Advanced Placement Program of the College Board.

The Institute's Committee on Advanced Placement endorsed the idea of advanced placement and credit and urged all Jesuit schools to offer programs for their superior students. It recommended that

the schools use the CEEB Advanced Placement Program because it is recognized nationally. It urged the deans of Jesuit colleges to give placement and credit automatically for grades of 3, 4, or 5 and to consider placement and credit for a grade of 2 if the principal and the instructor in the high school so recommend. The Committee also recommended that teachers of AP courses should have a lighter teaching schedule, that they should be encouraged to attend the annual Advanced Placement Conferences, and that efforts should be made to place them on the College Board correcting committees.

English. By way of defining the issues, the English Committee first addressed itself to a series of questions propounded by a joint conference of national associations in 1958 which considered "The Basic Issues in the Teaching of English." The positions of our Committee can be stated very briefly as follows. (1) The program of English in Jesuit schools should be confined to the basic components, language, composition, and literature. (2) A body of knowledge and a set of skills to be mastered by each school division can be agreed upon, so that at each level the teacher can plan the next stage of instruction confidently. The Committee commended the work now being done in the Buffalo and Maryland Provinces and urged that groups in other provinces cooperate rather than initiate parallel projects. (3) The teaching of certain literary works, technical vocabulary, and concepts of literary form should be required at each level. Again the Committee praised the work of the syllabus committees in the Buffalo and Maryland Provinces. (4) The historical approach or survey, which attempts to impart an understanding of the chronological development of literature, is inappropriate for high-school classes. (5) More adequate tests should be developed to measure more objectively the more important objectives of the course, the acquisition of writing skills, knowledge and appreciation of literature. As models the Committee recommended the tests for each year contained in the 1963 publication of the College Board, *End-of-Year Examinations in English for College-Bound Students*. (6) Properly qualified scholars and teachers should investigate the question whether linguistics, the study of the structure of language, can achieve the same objective as the conventional study of grammar, and whether it can achieve it more effectively.

The Committee then turned to three issues which have been given prominence by the National Council of Teachers of English.

The first of these is the lack of a sequential program from one year to another and from one school division to another. In the opinion of the Committee, the solution of this problem will require more than the definition of objectives. The cooperative effort of many minds must be enlisted to fashion an orderly, integrated program out of clear objectives, suitable content, and minute means and methods. As for the second issue, our Committee agreed with the National Council that there are too many ill-prepared English teachers in our high schools.

The Council's third issue deserves a hard look, the sad state of the teaching of English composition. The Committee recalled that former JEA Institutes gave priority to composition in the English courses of Jesuit high schools, both in importance and in the allocation of time and emphasis. Yet it is noticeable that teachers, young teachers particularly, enjoy teaching literature but shun the drudgery of teaching writing. The study of literature in school should be more than an experience, something to be enjoyed, understood, and appreciated. It should also be regarded as exposure to models of good writing. Students should be made to write more, surely; writing is a habit learned by repeated practice. But it should be guided practice, so much of it should be done in the classroom. Further, meaningful composition will be linked to the literature, which will provide substance and style. If English teachers are to give adequate time and attention to training students in composition, our Committee recommended that their teaching loads should be reduced to 15 periods per week.

Another task of the English teacher is to create the lifelong habit of wide reading. Today it is a responsibility fraught with trouble. The CEEB Commission on English calls for responsible, inquisitive reading and urges that the materials be fitted to the interests and maturity of the students, so that they read progressively more difficult books and widen their range. (It is interesting that the Advanced Placement Syllabus recommends that except for short stories, most of the literature should consist of works written before World War I.) The Committee asserted that reading, in and out of the classroom, calls for some supervision by the principal or the mature head of the English department. It did not favor booklists, since no one book is good for every one of the students at any one time, whether for reasons of interest, faith, morals, or literary merit. Hence, the principal must rely on the prudence and good judgment of the teacher, but he must also give general directions

and exercise some supervision over the choice of books, especially in the case of young, inexperienced teachers.

Latin. In the 1958 Institute considerable dissatisfaction with the prevailing state of Latin teaching was expressed. Much attention was given to three approaches which were just emerging, Waldo Sweet's structural linguistics course, Most's "Natural, or Semi-Direct Method," and a "functional" approach being explored by some members of the New York Province. Six years later, Sweet's text has practically disappeared, little is heard of the Natural Method, and for lack of application in textbooks the Functional Method never got off the ground. In their stead three new systems are competing for attention, the O'Brien-Twombly Georgetown Series, the Distler Series, and the General Latin course. Clearly, the situation is unclear.

In our schools generally, Latin no longer holds its former privileged position. Of 30 schools replying to a questionnaire (61 percent of the schools in the States), only 10 require four years of Latin for all students, although all schools require some exposure to Latin. Twenty-one of the schools now assign only five periods a week to first-year Latin. The Committee pointed to a statement of the International (Jesuit) Conference on the Apostolate of Secondary Schools, May 1964, to show that Latin's loss of priority was not confined to the American Assistancy. Among the reasons offered by our Committee was the fact that even in our Jesuit liberal arts colleges students seldom continue their high-school Latin. It pointed to the radical changes in the language of liturgical worship. Another cause is the scientific orientation of our times. But in the opinion of the writer, one of the leading causes for the decline of Latin study is the common adherence to the extreme forms of the grammar-translation approach. The teaching of most other subjects has been transformed and made more stimulating. The dullness of Latin stands out sharply by contrast and today's students sorely tolerate it. Who shall blame them?

The situation in the schools is not only disappointing, it is also confused. The 30 schools represented in the survey use seven different textbooks in first year, eight in second year, eleven in third year, and eight in fourth year. Some schools use more than one textbook in the same year. Thus, the 30 schools listed 37 titles for the first-year course, three books that would be classified as "conventional" accounting for 75 percent of the usage.

The Committee offered three reasons for the confused state of

Latin teaching. One was the scarcity of teachers trained in the linguistic background required for teaching courses based on structural linguistics. Thirteen of the schools had no teacher so trained, while the other seventeen schools had a total of 38. A second reason given was the tendency of a school or a province to introduce "crash programs," imposing new programs upon all without adequate preparation. Thirdly, there is the uncertainty about the worth of the new programs resulting from lack of evidence based upon scientific evaluation.

The Committee analyzed three of the current Latin Systems, the traditional, the Georgetown, and the Distler. It found that the "traditional" system has spread out in a wide spectrum. One extreme puts translation as the immediate objective, relies heavily on analytic syntax, and expects the study of Latin to aid significantly in developing good English expression. Further along the spectrum the objective is to read Latin as Latin. Grammar is taught formally and drilled, but it is taught to facilitate reading and the main thrust is not upon building a system of grammar, but upon abundant reading. Students are introduced to reading early, with graded texts that move rather quickly into genuine literary passages. The amount of Caesar and Cicero is cut drastically. A survey of fifteen of the prestigious preparatory schools determined that all of them were using the "traditional" method. Samplings indicated that the method was the modified traditional method, with emphasis on reading Latin.

The Georgetown method developed by Fr. Richard O'Brien and Fr. Neil Twombly is based on the science of structural linguistics. The authors analyzed the content of Latin literature according to its own formal pattern of structures and built up a system of grammar according to scientific principles, a system based on the actual structure of the Latin language. Hence, contrary to some misinformed opinion, the Georgetown system relies heavily on both analysis and systematic grammar. However, the method is an abundance of oral drill on the structural patterns of the Latin language. Oral drill is used not because the objective is to learn to speak Latin—for it is not—but because oral drill is the most efficient way to learn the language. The objective is to learn to read Latin, but this is accomplished by developing the *habits* necessary for the *activity* of reading.

Expressed another way, the best way to learn a language is by imitation and analogy. The learner imitates an expert speaking the

basic language patterns. He repeats them until they become language habits. He learns new patterns by analogy with the familiar ones. Learning by imitation and analogy to the point of habitual control requires extensive practice. Along with analogical imitation, the system uses analysis extensively. Structural grammar formulates the Latin language in concise, consistent, and universal terms and principles. The students learn grammar in these terms and principles, not in those of the conventional Latin grammars. Vocabulary is limited in the beginning. There are no formal word lists, but new words are learned in the context of the pattern drills and the twelve narratives which are committed to memory. Continuous graded readings based upon the structural patterns are an integral part of the course. It should be emphasized that oral-aural activity is at the heart of the course. While the more remote aim is the ability to read Latin, the immediate aim is facility in the language. The Basic Course works for facility in recognizing and producing forms and basic syntactical arrangements; the Intermediate Course at complete facility, the handling of any construction with easy speed and accuracy.

Discussion brought out some of the difficulties. The main one is the need for special preparation of teachers. But this training can be acquired in one summer course. Many of our science, mathematics, and modern language teachers have subjected themselves to several summers of retraining for their new programs. Why should not Latin teachers devote one summer to it? Some object to the new terminology of grammar. That is introduced not for its own sake, but because it expresses the structure of the language more adequately. Teachers find more trouble with terminology than students, because of the interference of the conventional terminology. The very novelty of the system works against it in two ways: it is more difficult to understand and it needs further refinement. Time should alleviate the one and allow the other to be remedied. Finally, there is rather general agreement that a careful evaluation of the effectiveness of the system should be made.

The system developed by Fr. Paul Distler lies somewhere between the traditional and the structural linguistic and seeks to combine the best features of each. The immediate objective of the course is to read and comprehend Latin without the mediation of translation. The methodology is based upon the psychology of the acquisition of linguistic habits. Since the student already has acquired certain linguistic habits, the attack will be upon establishing lin-

guistic habits of Latin which differ from those of English. The function of forms and syntax is stressed, rather than the logical organization of grammar. Instruction is generally inductive, at least initially. The logical organization of paradigms and syntax is introduced later, when the student feels the need of it as an aid to reading. The understanding of the morphological and syntactical framework is neither the object of the linguistic habit nor is it the habit itself; rather it is an aid to acquiring the habit.

There is an abundance of oral-aural drill on structural patterns to fix the linguistic habits. Latin is spoken as much as possible in the classroom by teachers and students. Carefully constructed readings are an essential part of the course. Reading is important because linguistic habits have to be acquired in genuine language situations. Repetition of patterns has to be contrived, as does practice in responding to functional clues, and the gradual acquisition of vocabulary functionally, in context. There must be an abundance of graded reading because the formation of linguistic habits is achieved through planned repetition. There is little room for Latin-to-English translation in the first two years; translation interferes with the acquisition of Latin habits and in any case it is a separate skill. Likewise, English-to-Latin translation is used sparingly in the upper years, always based on the reading and directed to strengthening the knowledge of reading. Thus the elements of the theory are blended into a consistent, coherent methodology.

The Latin Committee did not wish to endorse any particular approach, but it made two sound recommendations for any approach: it should cover the grammar as rapidly as possible and should include considerable amount of genuine Latin reading; also, particular students should follow a consistent program through their entire course of Latin study. Only competently trained teachers should be assigned to programs involving new theories and new methodologies.

The Committee did not take a partisan stand on Latin. While insisting that the linguistic component of the Jesuit humanistic formation was of paramount importance, it suggested putting in the hands of local officials the choice of language and the relative emphasis to be given to it. Perhaps its most striking recommendation, one that was received thoughtfully by the assembly, was that all students should start in first year with a modern foreign language. Then those students who show linguistic aptitude should be encouraged to undertake a Latin program for the upper three

years while the others completed a four-year program in the modern language. The prestige of Latin would be enhanced, many students would be saved from the demoralizing effects of a profitless struggle with Latin, and the Latin students, freed from the drag of the laggards, could accomplish as much in three years as they now accomplish in four. The Committee found it difficult to justify any two-year terminal program in foreign language.

Finally, the Committee urged that the newly constituted JEA Commission on Secondary Schools consider at once the establishment of a national center for the study and evaluation of the current Latin programs over a six-year period. The center would provide a clearing house for reports and a forum for discussion. The center would have associated with it a permanent advisory committee of professionally competent Jesuit scholars, linguistic scientists, and teachers who would help to order our knowledge of Latin methodology, evaluate the programs, and advise administrators.

Mathematics. The Committee began with the story of the recent changes in school mathematics. It is said that the mathematics program was the most antiquated of all high-school subjects, but it was also the first to be reformed. Max Beberman at the University of Illinois really began the changes, but the CEEB Commission on Mathematics gave the necessary impetus for the development of national programs. Established in 1955, it issued its influential report in 1958. The burden of the Commission's report was that while the old mathematics was sound, it was not up to date. It was out of touch with the methods and spirit of modern mathematics. Actually, the Commission did not recommend the scrapping of the conventional content, but the modernizing of its terminology, emphasis, organization around key concepts, and its approach. The Commission was conscious of the fact that it could not recommend programs so advanced that the majority of teachers could not be retrained to teach them.

This is not the place to treat the intricacies of the new mathematics. For a brief explanation the Committee referred the administrators to a publication of the U.S. Office of Education, *The Leadership Role of State Supervisors of Mathematics* (1962). Another enlightening article for the non-specialist is Edwin Moise's "The New Mathematics Programs," in *School Review*, Spring 1962. However, certain common characteristics of the new programs should be mentioned. First, there is emphasis on understanding the basic concepts of mathematics and its principles, rather than on

mere manipulation. Mathematical skills are not neglected now, but understanding, which used to be neglected, now is given priority, or at least equality. The deductive elements and operations of mathematics are stressed. The key concept is *structure*. From the first undefined terms and assumptions a consistent system is built up by a rigorous logical treatment. Key ideas like the concept of sets and of function are fitted into the structure. Secondly, units are rearranged for different emphasis and to provide a continuous sequence instead of a series of disparate subjects. For instance, solid geometry is reduced and fused into plane geometry. Trigonometry ceases to exist as a separate subject and moves away from its preoccupation with solving triangles.

Once the groundwork for the new programs had been laid in terms of concepts and sequence, the problem of textbooks arose. In the practical world of the schools, no theory is any better than the textbooks which embody it. The difficulty was that no publishers had the staff to undertake the writing or the resources to undergo the tremendous risks involved. A writing group was formed, supported by substantial funds from the National Science Foundation. This group, the School Mathematics Study Group (SMSG), began its work at Yale University in the summer of 1958, with E. G. Begle as Chairman. The writing team began with about 40 persons, half of them from the schools and half from the universities. The prime purpose of SMSG was to develop teaching materials which could be turned over to publishers. Far from competing with publishers, it was relieving them of the risk of experimentation and providing more competent writing teams than any publisher could assemble. It is ready now to leave today's textbooks to commercial publishers and to move into long-range study of school mathematics programs.

Two other mathematics programs have raised their heads above the seethe of competition, the University of Illinois Committee on School Mathematics (UICSM) about to be published by D. C. Heath, and the Ball State Teachers program, now distributed by Addison-Wesley. One thing more should be said before we leave the subject of textbooks and programs. None of the men responsible for the development of the new programs has ever claimed that his particular program is either final or faultless. All expect that mathematics programs will develop and improve through experience in the classroom and through the professional appraisal of mathematics and teachers. There is no perfect program now

and probably there never will be. But the programs are better than they were and they will be better than they are.

At the present time programs in Jesuit high schools are in a state of transition. A show of hands at the Institute disclosed that 24 schools intended to use SMSG materials in 1964-65. The other half of the schools distributed their choice over four or five programs. Eleven schools will require all students to take four years of mathematics, 24 schools will demand three years.

Problems of articulation will confront the high-school administrator. As SMSG and other mathematics programs reach down into the elementary school, what will happen in first-year high? On the other end, what will happen to our graduates when they enter college? There is room here only to say that the problems were not overlooked at the Institute and that solutions seemed promising. However, there are two general remarks that should be made. (1) Tests designed to measure achievement in the old conventional courses will be only partially valid for the new courses. They should measure the acquisition of mathematical skills under the new programs, but not the developed understanding of concepts and a certain mathematical intuition which should be outcomes of the modern mathematics curriculum. (2) There is so much substance and so much flexibility in the new courses that the Advanced Placement Program in mathematics will be irrelevant.

The Committee came out strongly for two recommendations. (1) Mathematics must become a key component of Jesuit secondary education. Apart from the urgency of modern conditions in our culture, the new mathematics has the formative potential that we seek for in humanistic training, the power to develop logical reasoning. (2) The potential is inherent in the subject, but only trained teachers can transfer it to the students. Hence the Committee made a strong plea for an intense program of teacher training. Specific training for the new courses is absolutely essential, for the older teachers through NSF in-service programs, for teachers in preparation, through graduate programs leading to the Master's degree at least. The potentialities of the new secondary programs are almost limitless—if the teachers are good enough to make the most of them.

Modern Foreign Languages and Language Laboratories. The Committee left no doubt in anyone's mind that it favored the modern approach to modern language teaching. In this they are following a well-trodden path. Within the last ten years all the profes-

sional associations concerned with the field have reached a degree of unanimity seldom found in the teaching profession.

The modern approach, now generally known as the "audio-lingual" method, owes much of its theory to the findings of the science of descriptive linguistics. Descriptive linguistics, with aid from cultural anthropology, observes each language in actual use. It has discovered that there is no universal structure of language, and that it is erroneous to analyze other languages in terms of Latin grammar. The culture of a people influences its basic concepts and the basic concepts influence the pattern of its language. Furthermore, the written system does not reveal all the grammatical data of a language. The intonations of the spoken language often are important. Therefore, to understand the structure of a language one should begin with its spoken form.

Thus, to teach the spoken language becomes the immediate objective. To achieve this objective, language teachers follow the chronological sequence pointed to by both psychologists and linguists: listening—speaking—reading—writing. Listening and speaking come first because they are more natural. Also, by listening and repeating without looking at a text avoids interference from English. The linguists have isolated the basic language patterns. Teachers drill these language patterns, first by having the students hear them repeatedly, then by having them speak the patterns over and over, with variations, overlearning to the point of automatic recall. Much of the grammar is learned inductively, through the drills, with only incidental analysis and occasional synthesis guided by the teacher. This process is the reason why it takes more than two years of schooling to master a language and it points to the utility of tape recording for drill work.

As for materials, the most recent refinement of the audio-lingual approach is the use of "integrated materials," that is, recordings and films matched to the textbooks. The films add the environmental factor: the students learn the language in the foreign country without living there. The great variety of textbooks in use at present is highlighted by the fact that in 31 Jesuit high schools 20 different French grammars are used; in 19 schools, 9 German grammars; in 17 schools, 11 Spanish grammars; in 3 schools, 3 Russian grammars. The count just given shows the present hierarchy of the four languages in Jesuit high schools.

The Committee decidedly favored the use of the language laboratory, or, more properly, the electronic classroom. (Strictly speak-

ing, a language laboratory is a separate room equipped with playing and recording devices to which students come for language practice. A regular language classroom in which electronic equipment is installed is a more satisfactory arrangement.) The Committee explained that basically the language laboratory (in the general sense) is an extension of the tape recorder. Earphones, microphones, recorders for students all are further refinements. Incidentally, the Committee recommended that equipment be installed gradually in that sequence, as the teachers gain experience with its use and want to expand the facilities. The tape recorder is a tireless drill master which relieves the teacher of the deadening work of drilling and allows him to observe, correct, explain, and teach. All students are active all the time, and have their attention and interest focused. They hear authentic language, speak, repeat, substitute, answer, are corrected immediately by the voice on the tape. They comprehend through repeated drills; they read from the text what they have heard repeatedly on the tapes; they write dictation from the repeated oral lesson. Obviously, the teacher cannot accomplish so much in class without the equipment. Obviously, too, such teaching will require teachers who have had special training in the use of the new materials and techniques.

Religion. The Committee report began with an historical survey, based on the writings of Fr. R. F. Harvanek, S.J., in *Studium*, and of Fr. M. J. Link, S.J., in *Faith and Commitment*. This survey showed how the development of Catholic theology and worship has affected religious instruction. Before the Protestant Revolt theology had been devoted largely to the exposition and development of the *depositum fidei*. The liturgy of the Mass and the sacraments served both to instruct Christians in their faith and to bring them together in communal worship of God. The Protestant Revolt put the Church on the defensive and led to a new formulation of theology which was polemical in spirit, rationalistic in approach, and systematic in its presentation of the truths of the faith. The moral theologians took the same approach, systematically setting forth the minimum essentials of salvation and Christian perfection. The Church had withdrawn behind the walls, guarding her children and warning them: "This is the least you must believe and do in order to be saved." This defensiveness and the breaking up of Christian life tended to weaken the communal and liturgical aspects of devotion and to make it more individualistic and personal. The individual went on the defensive too, as it were, when the emphasis

was fixed on saving one's own soul.

Religious instruction of the faithful was based upon the prim theses and the organized treatises of the theologians. The Catechism of the Council of Trent was produced as a means whereby the bishops could protect the faithful against the inroads of heresy. Right down to our own times the catechism was the usual form of instruction: Canisius, the Baltimore Catechism, de Harbe, Wilmers, Cassilly. In the United States in the 1940s the catechism was gradually supplanted by expository treatments in textbooks like the Loyola, Sadlier, Quest for Happiness, Fides, and Priory series. Although the format was different, all of them still aimed at setting forth the reasonableness of our faith and the demands of our moral code—still systematic theology. By this time, general dissatisfaction over the high-school and college religion courses had set in. Neither teachers nor students found much stimulus in the courses and students were hardly transformed into eager apostles of Christ. Many were convinced that the religion program in the schools should be very different from the theology program in the seminaries. It was time for a lay theology specifically directed to the present needs of lay Catholic life. Now there was less need for the exactly informed Catholic, more urgency for the dedicated and committed Catholic.

European theologians met the need for a dynamic and revitalizing religious instruction by developing both a new theology and a new spirituality. In theology, they moved away from the systematic philosophical stance toward an historical and scriptural orientation. Christianity was seen as a history of the salvation of God's people. Hence, the teaching of religion was to be not merely a systematic presentation of truths but an announcement of the Good News, which was seen in a fuller and more intellectual way, but which was designed to affect the whole human being, intellect, emotions, and will.

The new spirituality matches this developed theology. It is centered in the liturgy and in its inner spirit it expresses a desire for both group devotion and objective spirituality. It has moved away from the private, personal devotion toward the active participation of the group in common acts of worship.

Out of the scriptural treatment of theology and the liturgical concept of devotion and worship came the new orientation to the teaching of religion, developed by Fr. Jungmann, Fr. Hofinger, Fr. Delcuve, and others, the "kerygmatic" approach. The kerygmatic approach takes the teaching of religion as a participation in the

apostolic mission of preaching the Good News of Salvation as it is contained in Sacred Scripture and the liturgy. The objective is to cultivate in the Catholic student a living faith and a commitment. Two ideas are essential to the kerygmatic approach: (1) God communicates to man a knowledge of God (revelation) and a share in His life (creation, grace, the sacraments); (2) man responds to God by a living faith and commitment. There are four great media or "signs" through which God makes His Self-revelation and Self-communication to man. The *Bible* tells God's revelation and records His Self-communication; it is the primary source and guide of Christian doctrine. The *liturgy* continues God's revelation and contains His Self-Communication, especially in the Mass and the sacraments. *Doctrine* penetrates the various cultural forms in which God's revelation is expressed in the Bible, exposes its eternal meaning and formulates it in present-day language and relevancy. *Witness* extends God's Self-revelation and Self-communication by word and authenticates them by personal example. The best proof that Christ is alive today is a witness who is another Christ. Man's response to God's Self-revelation and communication is a living and growing faith that has a threefold dimension: (1) confidence in God as living Father and source of all truth; (2) intellectual assent to God's message; (3) complete giving of self to the living, personal God.

In keeping with this whole spirit, the kerygmatic method as it is taught in the schools assumes that the learner already believes the truths of faith; it seeks neither to convince him nor to equip him with arguments, but rather to bring him to a full Christian maturity. It presupposes the divine inspiration of the Scriptures and expands and applies the life of grace rather than laying down proofs.

Textbooks following the kerygmatic lead are being developed rapidly and are meeting quick approval. The leaders in the field seem to be two series written by Jesuit authors, all of whom had special training at Lumen Vitae in Brussels. One series is being written by Frs. Vincent and Joseph Novak and Fr. John Nelson of the New York Province, and the other by Fr. Mark Link of the Chicago Province. A survey for the Institute revealed that well over 90 percent of the freshmen in Jesuit high schools this year will study kerygmatic textbooks. While the textbooks have not been tested thoroughly as yet, the reaction has been enthusiastic. Teachers and administrators in the schools which have used them longest

feel sure that the new program will achieve its purpose of leading students to a stronger personal commitment to Christ and witness of His teaching. They say that the students are attracted to the course and challenged by it and that they have responded by assisting at Mass and receiving the Holy Eucharist more often.

Not that there are no problems. Some wonder whether the shift of emphasis from argument and apologetics to commitment and witness will produce fervent Catholics who cannot explain the rationale of their faith to the modern unbelievers whom they meet in daily life. One answer might be that those whose only training was the former high-school method did not argue very convincingly. But it is a misunderstanding to think that there is no rational basis nor explanation of doctrine in the new religion course. It is the method of presenting them, the emphasis, and the spirit that differ.

There will be scheduling difficulties in the schools, as it is obvious that the new approach will require more weekly periods. Many Jesuit schools formerly assigned two periods a week to religion classes; few fitted in as many as four. At the Institute the consensus of administrators was that three periods were an absolute minimum and that five could be filled effectively.

What about articulation between the grade-school courses at one end of the line and college programs at the other? There is little danger that an adaptation of the kerygmatic approach in the elementary schools will cover the content with sufficient depth or maturity to make the high-school course seem a mere repetition. The college problem actually may be eased, for with the widespread adoption of the kerygmatic approach in Catholic high schools it will be possible to fashion a college program which will be a genuine advance. One publisher now is holding discussions with potential authors of a college series which will be projected upon the common basis of the high-school kerygma.

Undoubtedly the most troublesome problem is the scarcity of teachers trained for the new approach. It is quite clear that some special training is necessary, in view of the scriptural and liturgical orientation of the program. Even more necessary is an understanding of and sympathy with the whole spirit of the new program. No teacher lacking that understanding and sympathy should be assigned to the new religion courses. Those who have caught the spirit will find many excellent summer courses and institutes where they can learn the fundamentals and get a start on a sound reading and self-study program. Every religion department should have at least

one well-trained teacher who can assist and guide the other teachers. Happily, the younger men are becoming well acquainted with the essentials through their training in our theologates.

Science. The Committee traced a change in attitude toward the teaching of science in Jesuit schools by comparing attitudes reflected in three official statements of high-school principals made in 1946, 1952, and 1958. It is clear that science and mathematics are recognized as important components of a liberal education today and will be given a larger share of the total curriculum. Although practice has not caught up as yet and although there are some serious difficulties to be overcome, administrators generally agree that two years of science and three years of mathematics should be required of all students and superior students oriented toward science should have three years of science and four years of mathematics. Undoubtedly, part of the reason for the increase in the science segment is the growing importance of science in our modern culture. But another reason surely is the evolution of new secondary science courses which emphasize understanding of basic principles rather than memorization of information and stress the experimental approach to science. Courses of this type have a place in our humanistic program.

Responses to a questionnaire submitted by about half of the Jesuit high schools in May 1963 indicated that present offerings in science varied considerably, as did plans for changes. The standard pattern is two courses, chemistry and physics. Few offer biology or general science. However, an increasing number are adding courses in fundamentals of science, physical science, or biology. The chief obstacles to increasing the science content are lack of room in the curriculum, lack of qualified teachers, inadequate science facilities, shortage of funds. The situation is changing rapidly and there are some optimistic signs. Thus, a show of hands at the Institute revealed that 25 schools are teaching the PSSC course. A survey of selected science teachers in Jesuit schools definitely favored the revolutionary science programs, BSCS biology, CBA or CHEMS chemistry, PSSC physics. The general characteristics of all of these programs were outlined in the introduction of this paper. Brief descriptions of each of them will be included in the full report of the Committee to be published in the *Proceedings*.

Among the recommendations of our Science Committee were these: (1) There should be more science offerings in the curriculum. All students should have the opportunity to take biology,

chemistry, and physics. (2) The science courses offered should be based on the experimental approach. (3) Specific steps should be taken to update and upgrade the competence of many present teachers of science and to assure adequate preparation of future teachers. (4) Effort should be made to supply teachers and arrange schedules so that a science teacher will teach only three sections with a single preparation and that laboratory classes will be limited to 24 students. (5) A science honors program parallel to the traditional classical honors program should be established. (6) The science budget should be based upon the needs of the courses as these needs exist in the particular schools.

The Related Functions of Rector and Principal. The vast increase in the complexity of operation of our present-day American high schools over the relatively simple structure envisioned in the *Ratio Studiorum*—or even over the practices of earlier days in the United States—has confused somewhat the roles of rector and principal in the Jesuit school. While there never has been any doubt about the essential differences, the rector's complete authority and responsibility and the principal's derived and delegated authority, the actual working out of the difference in a particular present-day Jesuit school has sometimes caused difficulty. The fact that both rectors and principals were to participate in this Institute opened up an opportunity for full and frank discussion of this problem. Fr. Michael I. English paved the way with a background paper based on the Society's documents, which was distributed to all participants in advance. A joint panel of rectors and principals presented various viewpoints and their papers were discussed by the delegates. Then a committee of rectors and principals drew up a position statement, which was revised in the light of further discussion by the assembly.

The position statement pointed out that according to the Society's official documents, complete authority and total responsibility within the school reside in the rector. The fundamental relationship between the two officials is that the principal is the instrument of the rector in the administration of the school. The principal is made the rector's instrument through the delegation of authority and responsibility necessary for the operation of the school. Delegation is necessary because of the complex nature of the administration of the present-day Jesuit school, which requires specialized training and experience as well as the full and undivided attention of the administrator. The extent of delegation should be sufficient to enable the principal to be an instrument operating effectively as

the head of the school. The limits of delegation should be clearly understood by both persons and carefully respected in practice.

The harmonious relationship between rector and principal will be fostered by continuous communication, not only in frequent conferences but also by working together and through each other. Thus the authority of the rector will be maintained and the academic image of the principal as the administrator of the school will be enhanced. This good working relationship will be supported by sympathetic understanding of the onerous duties and heavy responsibilities of each office. Such understanding will grow out of mutual respect and charity and out of identical dedication to the apostolate of education which will combine the talents and abilities that superiors saw in both rector and principal when they appointed them. Finally, the Committee proposed that the good working relationship would be enhanced if rectors participated in national, provincial, and local educational meetings.

Instructional Television. The Committee confined its report to closed-circuit instructional television. Declaring that closed-circuit television was hardly an experiment any longer, the Committee urged Jesuit administrators to consider not whether to use it, but how to use it most effectively.

A program of instructional television is based on the concept of team teaching and flexible scheduling. The several members of a department who are teaching the same subject decide in advance which topics in the complete syllabus could best be taught through this medium to all students at once by whichever instructor is best qualified to teach this topic. Televised lessons may be spaced out or bunched together in the schedule depending upon the nature of the topics or the aptitudes and inventiveness of the several teachers. Some subjects lend themselves more readily to TV instruction than do others.

The TV lesson is carefully planned. The instructor who is to present the lesson is freed from teaching on the previous day. Team teaching makes this possible and it is one of the advantages of TV teaching that lessons are prepared much more carefully. The teacher needs time to think through his presentation, for every minute of TV time has to be used to best advantage. Hardly ever will the lesson be a straight lecture. All forms of visual aids are available to the teacher. Maps, slides, photographs, sections of film can be shown without interrupting the presentation. All kinds of motion or still projectors can be integrated with the closed-circuit TV system.

Every student has a clear close-up view of a science demonstration or any kind of illustration. Once the lesson has been prepared, the TV instructor gives an outline to the classroom instructor and a list of cues to the technical crew.

At the beginning of the lesson the classroom instructor outlines the lesson to the students, preparing them for the TV presentation. The TV lesson itself lasts about 25 minutes. The classroom instructor is a member of the "team." He follows the lesson with the students, noting the points that need emphasis or amplification. When the TV monitor is shut off, he reviews the lesson, asks questions, or leads discussion. Besides the "homemade" lessons many professional kinescopes and videotapes are now available, including whole courses in subjects like art appreciation, music theory and other courses which could be used to supplement the standard curriculum.

Provision of a technical crew to operate the TV equipment presents no problem, as several teams of students can be trained for the task.

The Committee listed all the components of a complete operable closed-circuit system with two cameras and twenty receivers. This basic equipment, capable of producing programming of professional quality, can be installed for about \$16,000.

The Committee lined up the many advantages of teaching by closed-circuit TV, wisely taking as its criterion the effectiveness in aiding a student to learn. The advantages were drawn from experimentation and observation in which it was found that the average and below-average student profited most from televised instruction, while the superior student who neglected to exert himself learned less than by conventional methods. These are the leading advantages: (1) The key advantage is that the TV system produces a better lesson. Challenged by the thought of facing the camera and all the students on the other end of it, the teacher is conscious of the need for detailed planning. He has the time for planning. The imaginative use of a wide variety of teaching aids builds a dramatic presentation and the cameras focus attention on the point of emphasis. Useless repetition of classes is eliminated. Instead of teaching the same lesson four or five times with decreasing effectiveness, the teacher gives his best performance once. (2) TV teaching provides a constant opportunity for more mature treatment of students. They have to develop more personal responsibility for learning. They have to attend fully, since the lesson is more concentrated. They

learn to take notes and to organize the lesson for themselves, a long step toward independent study and a valuable preparation for college. (3) The best teachers of a subject are made available to all the students, not only to a few. (4) TV teaching accelerates the instructor's professional growth. Frequently freed from the drudgery, the rush and wear of repeated lessons, he has more time for study, reading, and preparation. All teachers profit from observing the best teachers in action, but especially younger teachers. The "team" aspect of the system brings teachers together to study the course, to plan the lessons and to share ideas, all professionally stimulating.

Having presented a positively favorable case for TV instruction in Jesuit schools, the Committee recommended three first steps to be taken. (1) Let a school begin with team teaching in several subjects. The members of the team will learn how to plan and teach together and leaders will emerge. Then they will be ready for TV instruction. (2) Let the school install TV receivers in several classrooms and pick up some choice open-circuit programs for the enrichment of regular courses. Teachers and students will become familiar with TV as an educational facility. (3) Let each province begin a pilot project in TV instruction in one school. The experience of that school can be transferred to the others as they begin. In the discussion Fr. Reed suggested that just as provinces have common syllabi, now they should have their own videotape courses prepared by their best teachers.

Programed Instruction. Fr. John Reinke explained the essentials of programed instruction. Three basic characteristics are: (1) continuous *active* student response to the materials presented; (2) immediate feedback or *reinforcement* for each response, informing the student whether his response is correct; (3) *self-pacing*, so that the student moves at his own rate in responding to the materials. These requirements imply that the material should be presented in small steps, in logical sequence, with cumulative effect.

There are two types of programs. (1) The *linear* program developed by B. F. Skinner, is one in which there is a single predetermined set of steps. The program is designed to eliminate wrong responses so that errors need not be corrected and the program moves in a continuous sequence. (2) *Branching* programs, developed by N. A. Crowder, are those in which the selection of the following item depends upon the response which the learner makes to each item. If the response is erroneous, he is directed to follow

the particular "branch" which will correct him and lead him back to the correct sequence.

There are two general media for programs: text booklets or "teaching machines." Both types are available in a great range of cost and complexity.

Presently neither linear nor branching programs nor text or machine programs have emerged from experimentation as clearly superior. Text programs have the considerable virtue of being much cheaper.

What evidence there is seems to show convincingly enough that programmed instruction does teach effectively. Much remains to be learned about the conditions of its effectiveness, the kinds of learning and the types of students for which it is best adapted. Its objectives appeal to us: to give every individual, at his own pace, in terms of his own capacity, in a way which responds to his own interests, without neglecting anyone else, the latest and best information on many subjects. In the Jesuit system it is very likely that the best use of programs will come to supplementing the regular courses with short units and providing for individualized instruction, both remedial and advanced. We must not overlook a promising adjunct to education.

Team Teaching and Flexible Scheduling. Team teaching and flexible scheduling are not the same thing, but they go together. The classical example is the Trump Plan, developed by J. Lloyd Trump of the Commission on the Experimental Study of the Utilization of the Staff in the Secondary Schools. The parent body of this Commission is the National Association of Secondary School Principals. The importance of the new theory can be gauged by the fact that new schools are being constructed entirely on the basis of the Trump Plan.

The two phases of the plan interlock. Instead of having fixed groups of about 30 students meeting a single teacher for a minimum of four weekly periods of 40 minutes for 36 weeks a year (the basis of the inexorable Carnegie Unit), groupings of both teachers and students are diversified. Students spend about 40 percent of their time in large-group instruction, about 20 percent in small-group discussion and about 40 percent in independent study. Daily schedules are divided into modules of 15 or 20 minutes each and can be combined in various blocks to suit various purposes and groupings.

Teachers are formed into teams which are responsible for teach-

ing a subject or a combination of related subjects to a group of students who would conventionally be divided into several fixed sections. Some members of the team are responsible for the large-group instruction, some for leading the small-group discussions, some for supervising independent study. Teachers' aides and clerks may be added to the team. The members of the team work together as a unit in mapping out the course, planning lessons, evaluating achievement.

The Committee's report was divided in half by the lecture of Dr. Robert N. Bush, who presented a film showing the operation of a team-teaching system in an actual school. Some members of the Committee had visited the same school and had found the working of the system less ideal than the picture. However, the Committee and the delegates found some applications of team teaching and flexible scheduling advantageous for Jesuit schools. Actually, some Jesuit schools have made a beginning.

It was agreed that the new procedures were more applicable in the upper years, when the students were more mature and had acquired a degree of self-discipline and where the treatment of subject matter permitted more independent study. Also, it was recognized that some subjects lend themselves more readily to the flexible treatment than other subjects do. It is not a question of all conventional scheduling or all flexible scheduling. There can be a workable mixture of both.

Certain advantages were acknowledged. Flexible scheduling relieves pressure on teachers and allows more time for study, for immediate preparation of lessons, and for correcting papers. Variety in the presentation of subject matter is desirable and flexible scheduling encourages it by breaking the lock-step routine. Also, different types of learning and different disciplines require different time allotments (drill in foreign language, laboratory work in science, lectures in history, discussion in religion). Team teaching makes the best use of the aptitudes and interests of individual teachers. It provides realistic opportunities for the in-service training of new teachers. It stimulates professional growth of teachers through common planning and through observation of superior teachers. It puts upon the maturing student more responsibility for his own progress. It fosters increased use of the various resources of the library. So many of these advantages are consonant with our educational principles that we should be ready to put some adaptations of team teaching and flexible scheduling into our programs.

Educational Facilities. One committee was assigned the impossible task of briefing the administrators on new ideas in school construction or remodeling to accommodate the advances in instructional technology, especially team teaching, flexible scheduling, and instructional television. True to the progressive spirit which pervaded the Institute, the Committee made its first presentation by showing a film prepared by Educational Facilities Laboratories, "To Build a School." The film embodies in visible form many of the modifications in the plant dictated by the new technology.

The Committee's report included some general suggestions to administrators engaged in planning new school buildings. The most important advice is to build in some flexibility of room spaces to provide for large-group instruction and small-group discussions connected with the team-teaching concept, in addition to conventional classrooms. It will be important also to provide at least the conduits for TV coaxial cables and ample lines and outlets for electronic classrooms; overhead projectors, possibly teaching machines. Provision should be made for a studio for originating closed-circuit TV programs. Akin to flexibility is the concept of multiple use of spaces. Occasional use of expensive spaces like auditorium and cafeteria, for instance, can hardly be justified in these times. Design for multiple use might make it possible to include provisions which the school could not afford otherwise. New types of flexible walls and room dividers can achieve maximum flexibility with minimum sound interference. The publications of Educational Facilities Laboratories show many applications of the principles of flexibility and multiple use.

Other ideas offered by the Committee for the consideration of school planners were air-conditioning of the plant and carpeting of floors to produce a better learning environment throughout the building: quiet, uniform temperature, cleanliness, more efficient use of space, as well as savings in maintenance costs. The Committee considered in detail improved designs for library, science facilities, cafeteria, auditorium, and gymnasium. The complete report will appear in the *Proceedings*.

Resolutions. Not only the accomplishments but the spirit of the Institute are memorialized in the following statement of the Committee on Resolutions:

Whereas it is fitting that at the end of an Institute certain conclusions be made to summarize the material and spirit of the deliberations, be it resolved:

1. That communication between rector and principal be recognized as absolutely essential to the efficient management of the school, and furthermore, that this management can best be achieved by daily or frequent conferences.

2. That priority be given to the pressing need of advancing the professional standing of our teachers by encouraging membership in appropriate professional organizations and by attendance at summer schools, special institutes, workshops, regional and national meetings, and any other groups beneficial to furthering competency in their respective fields.

3. That the pilot projects of classroom instruction, as proposed in the position papers of the several committees, e.g., new developments in language, science, programmed instruction, closed-circuit television, team teaching, flexible scheduling, etc., be kept under observation for their effectiveness and practicability, and that evaluative reports be communicated to the member schools of the JEA through the Central Office.

4. That those planning new buildings, or the conversion of old ones, keep in mind new trends in flexibility for multi-purpose use.

5. That our schools be in the forefront in investigating and utilizing new techniques and equipment in so far as these advance the effectiveness of our instruction in the pursuit of that excellence to which we are committed by our Jesuit standards and ideals.

6. That our attitude be that of open-minded inquiry in our total study of ways to improve our educational programs, and that we never forsake the all-important spirit of adaptability so necessary to integrate the traditional with the new and experimental.

7. That the prolonged and analytical work of the many committees of the Institute be appreciatively accepted, thoroughly digested, and thoughtfully considered for possible adoption, according to each school's variable programs and needs.

8. That the presence of the several deans of colleges added significantly to the success of the Institute by their contribution to the better understanding of the problems of articulation.

Conclusion. As the Institute came to a close, it was clear that it was a success. Fr. Reed declared that the program made the Institute and the personnel made the program. He thanked all who had participated, committees, panelists, speakers, and those who had joined the discussions from the floor, for the uniformly high quality of their contributions. And yet he admonished all that the Institute would not really be a success until its effects were felt in the

schools. We began the Institute with the urge for excellence. At the end, we had a clear notion whither the quest for excellence would lead us. In summing up, he echoed the spirit of the Resolutions and urged all administrators to take back to the schools certain attitudes which had been cultivated at the Institute.

There is the spirit of *inquiry*. The presentations and discussions made it clear that this was no time for complacency. We are ready to search out weaknesses in our individual schools and study thoroughly the new developments in curriculum and technology which offer promise.

Closely matching the spirit of inquiry is the spirit of *openmindedness*, a readiness to put aside preconceptions and possibly prejudices and to consider the new developments on their merits. We must not be daunted by difficulties; at least, we must not reject new ideas outright simply because it would be difficult to adopt them. No number of difficulties add up to an impossibility.

There is the spirit of *adaptability*. We seldom take an innovation and put it into our schools in its original package. We take the basic idea and modify it to fit our needs and conditions, fusing it into our system. It need not be, and seldom is, an either-or proposition. We shall not want to convert our entire schedule to team teaching or to put all courses on closed-circuit television, but we may very well want to combine these features with our regular procedures.

Finally, there is the spirit of *caution*. Usually change has to come slowly in our schools. We have a sense of responsibility for our traditions and for the excellence which exists. We have to prepare for change carefully, and especially to prepare our faculties for them. This will be the work of the coming year.

Our Jesuit way of education has maintained its strength and vigor because the principles of flexibility and adaptability have been built into it. The Jesuit Educational Association with its organization, its experience, and its rich reserves of talent has promoted excellence and progress in our schools. Indeed, the JEA has made possible institutes like this. Each of the five high-school institutes has left a high water mark. The advancement of the schools after each institute has been recognizable and measurable. I am confident that this Institute will carry us forward on a new surge of excellence.

Plant Organization and Management

BROTHER JAMES KENNY, S.J.

Effective organization and management of an educational plant is a formidable enough job in itself; it is made somewhat more difficult than need be though, because nearly everyone involved in the work of education considers himself an expert at physical plant organization and management.

Everyone engaged in educational work, whether he be a teacher or an administrator, expects and, in fact, demands effective plant management. All assume that the buildings will be heated for their arrival in the morning, and that the snow will be plowed from the parking lot during the night so that they can drive their cars onto the school grounds. And, of course, they expect their offices, classrooms and assigned work areas to be neat and immaculate at all times. It is expected, in fact, that environment and resources will be as nearly ideal as possible so that productive efforts will not be hampered.

However, ideal situations do not just happen. They are the result of self-study, good organization and careful long-range planning. And this planning if it is to be really meaningful must incorporate all available data relative to current practices, procedures and cost analyses. Furthermore, to insure that the best possible use be made of all data, experts and consultants should be called upon to evaluate, appraise and suggest a future course of action.

Our purpose here is to sketch out the basic factors that must be attended to by the prudent manager of an educational plant. We shall do this in terms of three necessary considerations:

1. the necessity of an accurate knowledge of current operating costs; (2) the necessity of careful projection of the probable increase in these operating costs and (3) the necessity of carefully planning for plant expansion in the light of present and probable future operating costs.

LET'S LOOK AT THE FACTS

The costs of operating and of maintaining buildings and grounds, and of feeding students, must be met by almost all institutions regardless of their location. However dreary these costs may appear to the educational leadership of these institutions, and however uninspiring the challenge of administering them may seem, the

character and scope of the educational program are to no small extent dictated by the financial resources remaining after these routine costs have been allotted. For better, or for worse, many of the costs of plant maintenance, insurance, staff benefits and the like, are the most fully "fixed" charges with which an institution is burdened.

Each institution should know the annual operation and maintenance costs for each individual building. If these costs for a typical building are 50¢ per sq. ft. in 1964 and labor and material costs increase 6% each year, it will cost 90¢ to maintain and operate the same building in 1974. Likewise a building which presently costs \$1.00 per sq. ft. to maintain and operate, will cost \$1.80 in 1974. (Exhibit 1). It is expected, therefore, that with renovations and new buildings your costs for operation and maintenance will almost double in the next ten years.

An analysis of plant costs will usually indicate the following ratio: 1/3 janitorial, 1/3 repairs and alterations, 1/3 utilities and insurance. It is anticipated that labor will absorb most of the increase while insurance and utilities will increase proportionately less. Without proper planning, the operation and maintenance costs may very well skyrocket. Accordingly, the buildings and grounds department, and the business office must form a team which will examine the phases of an operation as they are today with a view to determining how these operating procedures will effect costs in the future. Without elaborating in great detail, the business office should keep all informed regarding proposed expansion.

PROJECTING RISES IN COST

Many administrators and staff members have no idea what the physical plant operation and maintenance program will cost ten years from now. They have neither been informed by the physical plant administrator, nor do they invite cooperation in the planning program. Nowadays every institution, however, is planning busily for the future expansion that increased enrollments are expected to force upon it. The plant manager can make sound contributions to this planning only if he has first estimated the probable increases in the cost of plant operations. He can provide a flexible procedure for future planning simply by using the background information normally available to him even without much research.

Nevertheless, certain additional basic information is often needed by all departments prior to the development of short or long range

plans. This can be illustrated by reference to the physical plant areas. Before a plan for the future can be made, an analysis should produce information on present manpower, space, equipment, etc. It should show how effectively these elements meet the institution's operational demands. It will become apparent that some ratios, percentages, costs per square foot, or costs per student will be needed. Most schools know the janitorial costs per 1000 sq. ft., and some know the cost of repairs and maintenance of a building per year, which can be converted into a cost per 1000 sq. ft.

Costs for the operation and maintenance of the present plant for the next ten years should be projected. Then these costs should be combined with the costs of expansion of buildings, additions, and land acquisitions, so that all will be aware of the expected total operating and maintenance cost ten years hence. Looking at exhibit 2, it can be seen that a building of 10,000 sq. ft., which presently costs 70¢ per sq. ft. per year to operate and maintain will require \$257,200 to operate for 20 years if costs continually rise 6% on an annual average. Exhibit 3 indicates that the minimum cost for the building with no annual increase would be \$140,000 for 20 years.

How many know the cost of supervision, maintenance of grounds, utilities, patrol, auto, truck and service expense, insurance, etc. as it applies to an individual building, a given area or operation? Have costs been converted into a standard which could be used to predict future costs on the present buildings and grounds? The plant administrator should provide such a standard for prediction. Moreover, if plant costs seem to be rising steeply, the manager can control their ascent, at least somewhat, by following a few simple, common sense rules. These rules are often misunderstood or ignored or applied ineptly but if they are observed, an efficient operation results. These are the rules:

1. Operations must be carefully organized beforehand. This is necessary if work is to be done dynamically and wisely.
2. Specifications must be carefully prepared. Then wrought iron pipe will not be used when steel pipe will suffice. Nor will an expensive wood panelling be installed when a fabric wall covering would produce satisfactory results.
3. Prices. Are prices of materials, equipment, and contracts the best obtainable?
4. Materials. Determine the most economical quantities to be ordered.

5. Storage of materials. Establish facilities and controls to prevent physical losses of equipment and supplies.

6. Annual physical inventory of supplies. This is mandatory regardless of integrity of employees.

7. Research. Continuous research on the best use of available facilities is essential. Either assign a member of your current personnel to this project, or get someone who is openminded and not hostile to change.

When these seven principles are applied and combined in the business operation, it is surprising to note the size of the savings.

PLANNING AHEAD

How does an institution go about wise planning for expansion? In the first place it involves in this operation all those administrators who have a legitimate concern either with the planning or its results. Planning for the years ahead should not be restricted to any one executive of an organization. Planning which is done by top administrators only, without consultation with the operating departments often fails because too little attention is given to the details which are so important in a successful program. Any program resulting from this type of planning is bound to be ineffective. Dause L. Bibby, former president of Remington Rand, stated his case for team play this way. "The day of the one-man command intuitive rule is dead. No one person, whatever his talent or dedication, can be expected to know all the facets and facts about his organization."

Let us presume, then, that it is agreed that administrators must consult widely when examining their policies and operating procedures before laying out a master plan for the future. They will bring in the non-academic departments such as accounting, purchasing, personnel who will have to make suggestions for removing red tape and paper work, or for improving conditions by inventory reduction, product standardization, etc. so that when the master plan for maintenance operation is finally resolved, it will be based upon sound thinking.

It is recommended that foremen and supervisors assist in the planning. You will find that they will have many ideas about what they would like to do in the future. I am sure they will be pleased to participate if they are encouraged. Because they are included in the total program, they will be able to make recommendations for better tools and equipment, better operating techniques, repair and

maintenance improvement, etc. Some of their recommendations will result in lower costs. Further, they can make an analysis of their own area which may improve the quality of maintenance and operation. I think the most significant aspect of having supervisors participate is that they will be astounded to learn that the cost of operating their plant will almost double in a ten year period.

Wise planning for the future will reflect upon organization, the factors influencing the future needs, and the tactics that must be adopted in light of these facts. In the present article we limit ourselves to the tactics that must be adopted for wise plant administration although obviously that is only one part of the over-all institutional problem.

Let us turn first, then, to a few remarks about organizational patterns, particularly in the area of our concern here. A look at the set up in many Jesuit educational institutions suggests that organizations are built upon the personalities and abilities of the staff employed and not on arbitrary line diagrams. The scope of assigned or assumed duties varies with the size of the institution. The plant organization and management at Fordham, let us say, may be typical and highly effective, but it may not be the precise blue print for another institution. Just because Fordham operates and manages one way does not mean that another school with different problems and different material and personal resources should do it in the same way. Effective plant management and operation can be obtained through many different organizational patterns and operational techniques.

When administrators and staff members are acquainted with the various factors which will play an important part in over-all long-range programs it will be seen that certain changes must be made. What are these factors? They include:

1. The influx of students
2. The change in the institution's income and financial resources
3. The growing competition among institutions, particularly private
4. The changes in personnel controlling the educational institution's future
5. The changes in teaching and research techniques

These factors combine to increase the load on the non-academic staff whether in Accounting, Purchasing, Buildings & Grounds or other non-academic departments.

The institution, we shall presume, has decided upon its basic

organizational patterns and has canvassed the factors shaping its future. The plant manager now wishes to help his associates in that phase of their planning which has to do with new space requirements, new buildings, new equipment and staff. How will he go about it? He will recognize, of course, that major emphasis will be on the needs of the academic world. Accordingly, budgets of the future will have increased emphasis placed on the academic requirements rather than on non-academic needs. If operations and maintenance plans for all non-academic departments are not prepared, an even smaller percentage of available funds will be budgeted for the non-academic operational program.

Today some Jesuit schools still work on a day to day operational basis and with a "breakdown" maintenance program. This system calls for making repairs to machinery and equipment when actual failure occurs; and at a time when it may interfere with the program of the institution. This form of maintenance is expensive, inefficient and precludes obtaining even minimal productivity. It usually calls for emergency repairs only sufficient to get the equipment in operation and is often a "makeshift."

The program associated with advance planning is called "preventive maintenance." This is a sound, logical tested system of scheduled maintenance to obtain maximum efficiency from existing equipment. It prevents breakdowns and shutdowns through systematic inspection and adjustment of equipment, and scheduling of repairs and overhauls before failures occur. This system prevents interruption of the academic teaching schedule.

Preventive maintenance is to operating equipment what preventive medicine is to human beings. Such medical terms as disinfection, sterilization, vaccination and pasteurization all spell out prevention. We are familiar with the great strides made by medical science, increasing the life span of a human being from one of 38 years in 1826 to 68 years in 1964; an increase of 30 years in little more than a century, largely through preventive measures. Similarly, it is reasonable to assume that a program of preventive maintenance would increase longevity and usefulness of our buildings and operating equipment. While preventive maintenance must be well planned, it is only a stepping stone towards a good long-range planning program.

Analyzing planning data may reveal that demolishing a building can contribute substantially to the cost of a new building through the savings made by the lower operation and maintenance costs

of the latter. If the usable square foot cost to operate and maintain a building is \$1.50, and the new building can be operated and maintained at \$1.00 per sq. ft., the 50¢ saved could be used to underwrite some of the cost of the new building.

In order to have effective plant management, it is necessary for those who have been delegated with the responsibility for the future of the institution to plan ahead for the next year, for the next three years, five years and possibly ten years. While planning for effective plant management remains as one of the responsibilities of the buildings and grounds department, it is also the responsibility of the business office.

Administrators sometimes complain that there is no time to plan. The answer is—take time. Your work will be easier in the future if you begin long-range plans now.

Business Manager-Service Enterprises

EXHIBIT NO. 1

Maintenance & Operation Cost / Sq. Ft.

(based on 6% increase in labor & materials cost per year)

		50¢ Sq. Ft. Cost	60¢ Sq. Ft. Cost	70¢ Sq. Ft. Cost	80¢ Sq. Ft. Cost	90¢ Sq. Ft. Cost	\$1.00 Sq. Ft. Cost
1.	1964	.50	.60	.70	.80	.90	1.000
2.	1965	.53	.636	.742	.848	.954	1.060
3.	1966	.562	.674	.786	.899	1.011	1.124
4.	1967	.596	.714	.834	.953	1.072	1.190
5.	1968	.632	.757	.884	1.01	1.136	1.261
6.	1969	.670	.802	.937	1.07	1.204	1.337
7.	1970	.710	.85	.993	1.14	1.276	1.417
8.	1971	.753	.901	1.05	1.20	1.353	1.502
9.	1972	.798	.955	1.12	1.28	1.434	1.592
10.	1973	.846	1.012	1.18	1.35	1.520	1.688
11.	1974	.897	1.073	1.25	1.43	1.611	1.789
12.	1975	.951	1.14	1.33	1.52	1.708	1.896
13.	1976	1.01	1.21	1.41	1.61	1.810	2.010
14.	1977	1.07	1.28	1.49	1.71	1.919	2.131
15.	1978	1.13	1.35	1.58	1.81	2.034	2.259
16.	1979	1.20	1.43	1.68	1.92	2.156	2.395
17.	1980	1.27	1.52	1.78	2.03	2.285	2.539
18.	1981	1.35	1.61	1.88	2.15	2.422	2.691
19.	1982	1.43	1.71	1.99	2.28	2.567	2.852
20.	1983	1.52	1.81	2.11	2.42	2.721	3.024

EXHIBIT No. 2

Maintenance & Operation Cost / Sq. Ft.
 (based on 6% increase in labor & materials cost per year)

A C C U M U L A T E D

		50¢	60¢	70¢	80¢	90¢	\$1.00
1.	1964	.50	.60	.70	.80	.90	1.00
2.	1965	1.03	1.24	1.44	1.63	1.85	2.06
3.	1966	1.59	1.91	2.23	2.55	2.86	3.18
4.	1967	2.19	2.62	3.06	3.50	3.93	4.37
5.	1968	2.82	3.38	3.94	4.51	5.07	5.64
6.	1969	3.49	4.18	4.88	5.58	6.27	6.97
7.	1970	4.20	5.03	5.87	6.72	7.55	8.39
8.	1971	4.95	5.93	6.92	7.92	8.90	9.89
9.	1972	5.75	6.89	8.04	9.20	10.33	11.48
10.	1973	6.60	7.90	9.22	10.55	11.85	13.17
11.	1974	7.50	8.97	10.47	11.98	13.46	14.96
12.	1975	8.45	10.11	11.80	13.50	15.17	16.86
13.	1976	9.46	11.32	13.21	15.11	16.98	18.87
14.	1977	10.53	12.60	14.70	16.82	18.90	20.99
15.	1978	11.64	13.95	16.28	18.63	20.93	23.25
16.	1979	12.88	15.38	17.96	20.55	23.09	25.65
17.	1980	14.13	16.90	19.74	22.58	25.38	28.19
18.	1981	15.48	18.51	21.62	24.73	27.80	30.88
19.	1982	16.91	20.22	23.61	27.01	30.37	33.73
20.	1983	18.43	22.03	25.72	29.43	33.09	36.76

EXHIBIT No. 3

Accumulated Maintenance and Operation Costs Per Sq. Ft.
 (no annual increase)

		50¢	60¢	70¢	\$1.00
1.	1964	.50	.60	.70	1.00
2.	1965	1.00	1.20	1.40	2.00
3.	1966	1.50	1.80	2.10	3.00
4.	1967	2.00	2.40	2.80	4.00
5.	1968	2.50	3.00	3.50	5.00
6.	1969	3.00	3.60	4.20	6.00
7.	1970	3.50	4.20	4.90	7.00
8.	1971	4.00	4.80	5.60	8.00
9.	1972	4.50	5.40	6.30	9.00
10.	1973	5.00	6.00	7.00	10.00
11.	1974	5.50	6.60	7.70	11.00
12.	1975	6.00	7.20	8.40	12.00
13.	1976	6.50	7.80	9.10	13.00
14.	1977	7.00	8.40	9.80	14.00
15.	1978	7.50	9.00	10.50	15.00
16.	1979	8.00	9.60	11.20	16.00
17.	1980	8.50	10.20	11.90	17.00
18.	1981	9.00	10.80	12.60	18.00
19.	1982	9.50	11.40	13.30	19.00
20.	1983	10.00	12.00	14.00	20.00

News from the Field

JEA COMMISSION ON HOUSES OF STUDIES: The following information on new officers of the JEA Commission on Houses of Studies arrived at the JEA Central Office too late to be included in the new issue of the JEA DIRECTORY. The following information should be inserted on page 5 of the 1964-1965 DIRECTORY: Representing Commission on Houses of Studies . . . Rev. Terrence J. Toland (1965), Rev. George P. Klubertanz, S.J. (1966), Rev. Frederic W. Schlatter, S.J. (1967). On page 8 of the DIRECTORY, the names of Rev. George P. Klubertanz, S.J. and Rev. William P. Le Saint, S.J. should be inserted as Chairman and Secretary respectively of the JEA Commission on Houses of Studies.

ST. MARY'S TO MOVE: St. Mary's College, the House of Theology of the Missouri Province has decided to pull up stakes in the State of Kansas and return to its original site in Missouri, St. Mary's has always been an integral unit of St. Louis University but since 1931 has been rather isolated from its parent unit at least on a geographical basis. The Missouri Province has announced the purchase of the Coronado Hotel and also announced that the Missouri Province theologate would be located therein. The 40 year old hotel is right in the midst of the St. Louis University main campus. Space will be provided for some 200 students and 25 faculty members as well as the usual facilities. Present plans call for the transfer of faculty and students to St. Louis for the Fall 1965 semester. No plans have been announced for the future use of St. Mary's College facilities.

LOYOLA LOS ANGELES WORKSHOP PUBLICATION: Sheed and Ward has published the volume containing the selected essays and comments of the Loyola Workshop on Philosophy and Theology. The volume is entitled **CHRISTIAN WISDOM AND CHRISTIAN FORMATION**. The sub-title of the book is *Theology, Philosophy and the Catholic College Student*. Edited by J. Barry McGannon, S.J., Bernard J. Cooke, S.J., and George P. Klubertanz, S.J., and with a Foreword by Edward B. Rooney, S.J., the 300 page book sells for \$6.00. It is available either at your book store or from the publishers. The book is very well done and has received many favorable reviews. It is well worth both purchasing and reading.

LOYOLA UNIVERSITY OF CHICAGO has received a federal matching grant of \$1,970,000 to help them in the construction of health research facilities in the new medical center planned by Loyola at Maywood, Illinois. Final plans are now being drawn for the center which will contain an university teaching hospital containing 300 beds, an outpatient center, the Stritch School of Medicine, library for 100,000 volumes, basic science research facilities, and clinical research facilities. Later on, a dental school, nursing school and other university units will be added to the center. Funds for the new dental school to be transferred from the West Side Cook County Hospital area are already well under way.

COMPUTERS AND ST. THOMAS: At a recent convention held at the IBM Research Center at Yorktown Heights, N.Y., the Rev. Roberto Busa, S.J. was given credit for instigating the present scholarly attack on the use and meaning of words through the use of the computer. Father Busa who is the head of the Linguistic Computation Center at Gallarate, Italy is just about ready to see the end of his task of putting all the words of St. Thomas on to individual IBM cards. Fifteen years and fifteen million words later, Father Busa says he can see the end of this particular task in sight. Out of this counting and assembling of millions of words, Father Busa hopes, will come a deeper understanding of St. Thomas' philosophy, a thorough comprehension of the language he used, and both on a scale never before achieved by human scholarship.

GEORGETOWN announces, with pride, that a chapter of PHI BETA KAPPA will be established at Georgetown this fall. In announcing the news, Father Bonn, President of Georgetown, said the establishment of this chapter had been earnestly desired and sought for many years.

FAIRFIELD UNIVERSITY is building its fourth dormitory for men students. The new dormitory, a four story building will accommodate 272 students. With the completion of this dormitory, Fairfield will have a completed quadrangle of men's dormitories. The construction is expected to be completed for the Fall of 1965.

HOLY CROSS COLLEGE is exulting over an anonymous gift of one million dollars. The gift comes in very handy since the Cross has a \$3.2 million college infirmary-faculty residence under construction and a \$300,000 maintenance building is just about ready

for use. Plans have also been announced for a new \$3.2 million student dormitory. It is interesting to note that nearly 75 percent of the student population is housed on the Holy Cross campus.

LOYOLA UNIVERSITY OF NEW ORLEANS is celebrating the grant of \$3,060,043 to the Loyola Dental School.

The grant, a result of two year's preparatory work and organization, was allocated by the U.S. Public Health Service. This type of grant was created for the improvement or expansion of medical agencies.

LOYOLA, one of the seven approved schools applying under this law, is the first Jesuit institution to receive this type of grant.

The entire dental school will move downtown from Bobet hall into a new seven-story building. This will afford the science departments additional space for classrooms and labs in Bobet.

Student enrollment will increase from 56 to 80 freshmen two years after the building is completed, resulting in the addition of new faculty members.

Basic dental science, clinical and laboratory facilities, as well as the administration and faculty will be located in the new building. Ten per cent of the total area will be devoted to research.

Previously, the dental school has been handicapped in accomplishing its full program of courses by lack of space and equipment.

Loyola has been receiving approximately \$80,000 in federal grants annually, which primarily is used to pay for teachers' salaries and dental equipment.

GONZAGA IN FLORENCE opened a new seven story residence and classroom building in their Florence, Italy center. The building was rushed to completion in time for the opening of the Fall of 1964 semester. Four floors of the building will be used as residence for some 200 students. A cultural center will be included in the building.

CREIGHTON UNIVERSITY broke ground for a \$3 million building which will be part of a new School of Medicine. The five story building will house administration, classrooms, laboratories for first and second year medical students. It is a part of a complex and will adjoin the Medical Research building opened last year. Enclosed bridges will join the two units. Unit three, still to be built, will contain new facilities for Junior and Senior medical students, the School of Pharmacy, medical and pharmacy out patient clinics.