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ABSTRACT

This publication details some of the history of the Academy Conference from 1926-1970. The Academy Conference was an organization of affiliated Academies of the American Association for the Advancement of Science (AAAS). The conference met each year during the AAAS convention. Included in the materials are: (1) Summary of Early Meetings; (2) Academy Conference Officers; (3) Programs of Academy Conferences; (4) Service Awards; (5) Junior Academies of Science; (6) Science Fairs; and (7) Funds for Academies. (RH)

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# ACADEMY CONFERENCE

1926 — 1970

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C. L. Baker

History

of

ACADEMY CONFERENCE

1926 - 1970

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CONTENTS

Preface----- 1  
Organization of Academy Conference----- 3  
Summary of Early Meetings: 1928-1952-----10  
Academy Conference Officers 1926-1952-----33  
Academy Conference Officers 1953-1970-----34  
Programs of Academy Conference 1928-1951-----35  
Academy Conference Programs 1952-1969-----39  
Affiliated Academies; Meeting Time; Publications-----46  
Affiliated Academies; Number of Members-----47  
Distinguished Service Awards-----48  
Finances of the Academy Conference-----49  
The Academy Conference and the AAAS-----50  
Academy Conference Publications-----54  
Junior Academies of Science-----55  
Junior and Collegiate Academy Hopperton Study-----59  
National Science Foundation Support of Junior Academies---61  
American Junior Academy of Science-----62  
Collegiate Academies-----64  
Junior Scientists Assembly-----65  
Science Fairs-----65  
National Science Exposition and Seminars-----66  
World Conference for Leaders of Extra- Curricular Science  
Activities-----66  
AAAS Research Funds to Academies-----67  
National Science Foundation Support of Academies-----68  
Archivist-----76  
This and That; Odds and Ends-----79

## PREFACE

A scientist attempting to write history is delving into fields foreign to his training and experience.

An effort is made here to recount events of the Academy Conference with attention to their importance, their mutual relations, causes and consequences; and to include a chronicle of officers and programs.

The Academy Conference is an organization of 45 affiliated Academies of the American Association for the Advancement of Science. Its purpose is to serve as a national group to promote mutual cooperation of the common aims and purposes of the several Academies and to provide appropriate means for consultation on and investigations of the problems and to give others the benefit of their successes and failures.

The Conference meets each year during the AAAS convention for a one-day conference. Each member of the Academy is expected to have a minimum of one representative and preferably two who should be: the official delegate to the Council of the AAAS and the other an officer of their Academy. Alternates may represent both.

A constitution was adopted in 1952 and the officers are elected annually from the academy representatives. The officers serve without pay and work throughout the year trying to be of service to the member academies. The Conference is financed entirely by donations from member academies to the extent of \$2.00 per year per 100 members.

The Conference sponsors a Junior Scientists Assembly and a Junior Academy Conference each year during the AAAS convention. In 1968 the Junior Scientists Assembly was terminated and was replaced by the AAAS Holiday Science Lectures.

Each Conference consists usually of: brief reports from each academy representative on the accomplishments of academy during the year, reports of officers, reports from committees that have been active during the year, roundtable discussions or symposia on academy problems and programs of interest to all academies. A few of the subjects discussed in recent years are:

- Securing Financial Aid for Publications
- Increasing Income of Academies
- Qualifications for Membership in Academies
- Increasing Membership in Academies
- Mutual Relationship between AAAS and AC
- Promotion of Science Within the State
- Promotion of Junior and Collegiate Academies
- Obtaining Publicity for the Academy'
- Improvement of Instruction in Public Schools
- Promoting Public Understanding of Science
- Administering Research Funds
- How to Secure Research Funds for Academies
- The Benefits of Incorporation

A summary of annual reports from affiliated academies is published in DIRECTORY AND PROCEEDINGS, along with minutes of Executive Committee meetings, and summary of the annual meeting. This is mailed to officers of the academies each year, with the hope that pertinent information is presented to each academy. Several academies publish summaries of the Academy Conference in their proceedings.

The success of the Academy Conference depends on cooperation from the officers and representatives of the member academies. First: immediately after each academy convention the names and addresses of all officers should be sent to the AAAS and to the secretary of the Academy Conference; Second: a Conference representative should be appointed one year in advance, preferably for several years so as to be of increasing value to the Conference and his academy.

#### Suggestions for Each Academy:

Member academies are urged to elect a Permanent Officer who will be one of the academy representatives.

Academy officers are urged to communicate with the Academy Conference officers who are anxious and eager to assist in academy problems. They may have contacts that will help you.

Recommend certain of your loyal and energetic members who are members of the AAAS to be Fellows in AAAS. The recommendation of three Fellows is all that is required.

Make Distinguished Service Awards each year to several in your state who have contributed to the advancement of science: a high school teacher, an active conservationist, or one of your own members who has made your academy successful.

See that two Juniors and two Collegiate academy members are recommended to AAAS for honorary membership in AAAS each year.

COMMUNICATE with the AAAS, the Academy Conference and with officers of other academies.

INCORPORATE and have your academy history compiled.

## THE ACADEMY CONFERENCE

State Academies of Science had a loose and informal association with the AAAS as "associates" prior to 1919. A revision of the AAAS constitution that year gave the academies the right of representation on the AAAS Council and they were then known as "Affiliated Academies". There were eight academies so affiliated in 1920 representing Illinois, Kansas, Wisconsin, Kentucky, Michigan, Oklahoma and New Orleans.

Dr. John T. McGill (Tenn.) conferred with the officers of AAAS, in 1925, regarding the matter of an organization of state academies, and at the Philadelphia meeting, in 1926, a committee of academy representatives composed of Dr. McGill, Dr. William H. Alexander (Ohio), Dr. E. C. L. Miller (Va.) and Dr. Bert Cunningham (N.C.) met with AAAS President L. H. Bailey and Permanent Secretary Burton E. Livingston to plan consolidation. The 1926 meeting of academy representatives had eleven of the nineteen affiliated academies represented. A motion was approved that it was the desire of the group that a federation be established and a committee of five was chosen to make plans for the next meeting in Nashville, Tennessee in 1927. This committee had Howard E. Enders (Ind.) as chairman, and Dr. McGill, W. A. Gardner (Ala.), G. F. Hull (N.H.), and Aute Richards (Okla.) as members.

Since this first annual meeting represented the organization of the future Academy Conference the minutes, as recorded at that time, are included here.

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 AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

Minutes of Assembly of Academy Representatives,  
Bennett Hall, University of Pennsylvania, Philadelphia, Pa.,  
10:00 a.m., December 30, 1926.

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The meeting of the Representatives of the Affiliated State Academies of Science on the Council of the American Association for the Advancement of Science at the Philadelphia Meeting, was called to order by Dr. John R. McGill of the Tennessee Academy of Science. William H. Alexander of the Ohio Academy was elected chairman, and Howard E. Enders, Secretary.

The following eleven Representatives, of the nineteen academies represented, were present at the meeting:

William H. Alexander, Ohio Academy, Columbus, Ohio.  
Bert Cunningham, North Carolina Academy, Durham, North Carolina.  
Howard E. Enders, Indiana Academy, West Lafayette, Indiana.  
Wright A. Gardner, Alabama Academy, Auburn, Alabama.  
G. F. Hull, New Hampshire Academy, Hanover, New Hampshire.  
Cnancey Juday, Wisconsin Academy, Madison, Wisconsin.  
John T. McGill, Tennessee Academy, Vanderbilt, Nashville, Tennessee.

T. H. McHatton (in place of Dr. Boggs), Georgia Academy, Atlanta, Georgia.  
 Austin R. Middleton, Kentucky Academy, Louisville, Kentucky.  
 D. W. Morehouse, Iowa Academy, Des Moines, Iowa.  
 Aute Richards, Oklahoma Academy, Norman, Oklahoma.

The purpose of the meeting, as stated by Dr. McGill (Tenn.), was to effect an organization of the Representatives of Affiliated Academies in the Council of AAAS at this time in order to arrange for a possible round-table discussion of the Representatives on the occasion of the next meeting of the American Association for the Advancement of Science at Nashville, Tennessee, in December, 1927.

An organization of the Representatives of the Affiliated Academies and the presentation of a program at Nashville was proposed. Richards (Okla.) and Juday (Wis.) discussed the matter, and pointed out the principal objections to such plan to be the complications which would arise if the Affiliated Societies should add anything, in the way of a meeting or a dinner, to the present lengthy and congested program.

Enders (Indiana) suggested the possibility of a brief, informal early meeting in which there might be an exchange of views that might be mutually helpful.

It was moved by Gardner (Alabama) to name a committee to consider the matter discussed here, for report at the Nashville meeting. No action.

Hull (New Hampshire) suggested that if the nineteen representatives of the Affiliated Academies organized, such body might be limited in the future, to one member on the Council instead of one from each Affiliated Academy. He suggested that such organized body of representatives in the Council could, if they chose, swing the ballots on important questions much to the disadvantage of the Council, and advised against any steps which might expose the Affiliated Academies to such criticism.

It was moved by McHatton (Georgia) and passed: That it is the sense of this body that a federation of the Representatives of the Affiliated Academies of Science is desirable.

It was then moved, amended and passed, that a committee of not more than five (changed from three by the amendment) be appointed by the Chair, to take under advisement the method of organization of the representatives of the Affiliated State Academies of Science; to communicate with the Affiliated Academies of the State, to arrange plans for a meeting and report to such meeting next December in Nashville, Tennessee.

A feasible time suggested for such meeting at Nashville was a supper meeting on the evening prior to the day of the first session of the Council.

Adjourned 10:55 a.m.

W. H. Alexander, Chairman.

Howard E. Enders, Secretary.

In preparation for the 1927 meeting the following affiliated academies were requested to have representation.

The Alabama Academy of Science.  
 The Georgia Academy of Science.  
 The Illinois State Academy of Science.  
 The Indiana Academy of Science.  
 The Iowa Academy of Science.  
 The Kansas Academy of Science.  
 The Kentucky Academy of Science.  
 The Maryland Academy of Science.  
 The Michigan Academy of Science, Arts and Letters.  
 The Nebraska Academy of Science.  
 The New Hampshire Academy of Science.  
 The New Orleans Academy of Sciences.  
 The North Carolina Academy of Science.  
 The North Dakota Academy Science.  
 The Ohio Academy of Science.  
 The Oklahoma Academy of Science.  
 The Pennsylvania Academy of Science.  
 The South Carolina Academy of Science.  
 The Tennessee Academy of Science.  
 The Virginia Academy of Science.  
 The West Virginia Academy of Science.  
 The Wisconsin Academy of Sciences, Arts and Letters.

During the summer of 1927 the following notice was mailed to officers of the affiliated academies.

- - - - -

To officers of State Academies of Science affiliated with the A.A.A.S.

Mr. Wm. Alexander, Chairman of a meeting of representatives of affiliated academies of science on the Council of the AAAS, held at Philadelphia Dec. 29, 1926, appointed a committee to carry out the purpose of the meeting relative to the organization of a federation of the academies.

The committee is composed of:

Howard E. Enders, Lafayette, Indiana, Chairman  
 John T. McGill, Nashville, Tennessee  
 Wright A Gardner, Auburn, Alabama  
 Gordon F. Hull, Hanover, New Hampshire  
 Aute Richards, Norman, Oklahoma

At the request of Dr. Enders, who will be away during July and August, I am mailing the minutes of the preliminary meeting at Philadelphia.

The executive Council has named a special committee to take up the general problem of academy relations and to study ways and means by which the academy movement may be aided. The committee consists of Henry B. Ward, Chairman; J. McK. Cattell, Chairman of Executive Committee, AAAS; Burton E. Livingston, permanent secretary, AAAS; and the academy representatives in the Council of the Association.

At some time before the Nashville Meeting of the AAAS, this Committee will, I presume, make known to you its plans.

Nashville, Tennessee  
 June 22, 1927

Jno. T. McGill, Sec.-Treas.,  
 Tennessee Academy of Science.

Dr. Livingston invited all academy representatives to a special dinner meeting to be held shortly after the Council meeting in Nashville. The following letter has several points of interest in relation to the future developments of the Academy Conference.

UNIVERSITY OF ILLINOIS

My dear Enders:

"I have your letter of December 17 and hasten to reply. The last paragraph seems to show that you were planning to provide a constitution for a separate organization. Surely this is not necessary. We are organized to death and everyone in scientific circles as well as in other groups is impressed with the necessity of eliminating organizations rather than multiplying them. There is in my opinion absolutely nothing that needs to be done that can not be arranged under our present machinery in the association. A federation of the academies of science as a separate organization was vigorously opposed by a number of people and in the discussion it was stated that this did not represent the real idea. What is desired might better be described as a bringing together of the academies under the guidance of the AAAS very much as any other committee or section of the organization might function.

The AAAS has headquarters, clerical help and money. Whatever seems necessary can be done through their support. The academies are hardly in a position to furnish similar support and many of them find mere existence a precarious matter.

Very cordially yours,

Henry B. Ward."

Doctor Howard E. Enders,  
Purdue University, Department of Biology  
Lafayette, Indiana.

Urbana, Illinois  
December 19, 1927

NOTE to- Messrs. McGill; Gardner; Hull; Richards.

In accordance with Dr. Ward's letter we shall meet with the general committee to consider matters and learn the outcome. I had a tentative constitution in preparation for consideration at our meeting, but there is very great likelihood that it will not be desirable to present.

Come to the meeting with a knowledge of the first article in the current number of Science, Dec. 16th, 1927.

Very truly yours, *H. E. Enders*

Secretary of the temporary organization  
of Affiliated Academies of Science.

249 Littleton Street  
West Lafayette, Indiana  
12-20-27

Minutes for the meeting that completed the formation of the Academy Conference are as follows.

- - - - -  
 Meeting of the Affiliates Academies of Science  
 Andrew Jackson Hotel, Nashville, Tenn.,  
 December 26, 1927.

The meeting was called to order by the chairman, Wm. H. Alexander (Ohio).

Representatives were present from the following Academies: Gardner (Alabama), McHatton (Georgia), Ward (Illinois), Enders and Lyon (Indiana), Harnley (Kansas), Middleton (Kentucky), O'Kane (New Hampshire), Totten and Cunningham (North Carolina), Patterson (Oklahoma), Ashley and Guyton (Pennsylvania), McGill (Tennessee), Miller (Virginia). Also J. McK. Cattell and Burton E. Livingston, representing (with Ward) the AAAS.

The minutes of the preliminary meeting at Philadelphia were read and approved after a correction substituting the name of Bert Cunningham (North Carolina) as author of the motion to form an organization of Representatives for annual Round-Table discussion.

The Committee on Constitution, Enders (Indiana), chairman, presented a tentative constitution for consideration.

Discussion followed in which O'Kane (N. H.), Ashley (Penna.), and Ward (Ill.) expressed doubt of the need of a formal organization, or of a new organization. McHatton (Ga.) and Lyon (Ind.) emphasized the mutual advantages of a round-table discussion on matters of general interest to all of the academies. McGill (Tenn.) favored a conference in which the several state academies may come together to cooperate with the American Association for the Advancement of Science, with one another and the State, in matters of publicity, publication, etc.

Dr. H. B. Ward then spoke for the Association's Committee on Relations of the Academies of Science. The idea of the AAAS has been that the organization of American men of science might be built up on the basis of union of the several states in co-operation with the larger national body. An undue number of organizations exist today. This involves a duplication in effort and costs that fall upon persons who now have more demands than there should be. The AAAS has machinery and funds to carry put the plans without laying any burden upon the several academies, some of which are barely able to do what they are undertaking. The Association now has several conferences, the most active of which is that of the Secretaries of Sections and Associated Societies. It is in position to foster and promote a conference of the character outlined by the speakers favoring the association of academies of science.

Ashley, O'Kane, Enders, and others favored Dr. Ward's suggestions.

The following motion was presented by J. McK. Cattell: Resolved that it would be desirable at the time and place of the annual meeting of the AAAS to hold annually a conference of Representatives of the State Academies of Science and that the Council of the Association be requested to authorize such conference.

The motion was seconded and passed unanimously.

Livingston then spoke of the possibility of carrying on the work which the academies desire through the Washington office of the Association. He thought it possible by that means to do much of the work the Academies have in mind to do.

McHatton (Georgia) and others discussed the question of what constitutes an Academy of Science.

Other questions discussed were membership qualifications, classes of members, relative merits of limited membership in contrast with broader membership, publication of proceedings and methods of defraying the cost of such publication.

At the close of the discussion the meeting proceeded to elect officers who are to arrange a program for a Round-Table discussion at the New York meeting in December, 1928.

On motion, duly passed, Chairman Wm. H. Alexander and Secretary Howard E. Enders were elected to succeed themselves.

Adjourned 6:00 p.m., to a complimentary dinner arranged by the American Association.

Wm. H. Alexander, Chairman.

Howard E. Enders, Secretary.

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On December 28 following, the Council of the American Association at Nashville took the following action:-

"3. On recommendation of the Executive Committee, the Council adopted the following resolution:

"Resolved: That it is desirable to have at the annual meeting each year a conference of the representatives of the academies of science, the conference to be arranged by the Executive Committee of the Association.

"4. On recommendation of the Executive Committee, the Council recorded its approval of the officers of the academy conference named by the conference Monday afternoon, December 26: Chairman, Wm. H. Alexander; secretary, Howard E. Enders."

---

In accordance with the minutes of the Council and of the Academy Conference, the secretary urges you to refer to the article in Science for March 9, page 272, by Professor Thomas Large, and after reading it to send a list of subjects in which your Academy may be interested to discuss or have discussed at the Academy Conference at the New York meeting of the AAAS. Reference may also be made to Professor Segerblom's article on academies in Science for December 16, 1927, pages 571-579.

The minutes of the Conference suggest several subjects that may deserve discussion at the Round-Table next December. Should the Academy endeavor to encourage and enlist the interest of the bright students in the high schools and colleges? Should there be associate memberships?

Suggestions and aid of your Academy are needed in order to make the December Round-Table a success.

Very sincerely,

HOWARD E. ENDERS,  
Secretary.

249 Littleton Street  
West Lafayette, Indiana

Thus the Academy Conference came into being and the first officers were: Wm. H. Alexander (Ohio) Chairman, and H. E. Enders (Ind.) Secretary. These officers were requested to prepare a program for the New York, 1928, meeting. Upon adjournment the members of the Conference were invited to a complimentary dinner arranged by the AAAS, and this event has continued as an annual affair.

During several years the Secretary automatically became the Chairman after each meeting was called to order, thus "enabling the person responsible for the arrangement of the program to preside." The number in attendance at these early meetings were 11, 13, 11, 18, 12, and 15 representing the academies and always "three representatives of the AAAS."

In 1931 it became apparent that the same officers should hold office at least two years, and a plan was adopted to elect a Vice-Chairman who would automatically succeed the Chairman and elect a Secretary who would serve four years. Dr. Enders (Ind.) was chairman in 1932-33 and quite active in the Conference until 1940. Dr. S. W. Bilsing (Tex.) first represented his academy in 1930, was elected Secretary in 1931, and held this office until 1940. He was elected Vice-Chairman in 1940, served in this capacity until 1945 when he became Chairman. He initiated a newsletter among the affiliated academies and strongly advocated that each representative be re-elected by his academy each year.

Dr. Otis Caldwell, of AAAS, served for more than fifteen years in advising and guiding the Conference. In 1938 J. McK. Cattell, Henry B. Ward and Burton E. Livingston were still representing the AAAS. Dr. Wm. H. Alexander (Ohio), the first Chairman of the Conference, served until 1929, and was elected again for 1935-38. The Chairman in 1938 was Dr. E. C. L. Miller (Va.) who was active in the Conference for more than thirteen years. Alabama had a representative every year and Iowa was represented by Dr. J. C. Gilman since 1932 who was the Chairman in 1940. Dr. A. R. Middleton (Ky.) was a representative in 1926 and attended the meetings continuously until 1953. He served as secretary, 1947-52

and was Chairman in 1952. Ohio sent someone every year through 1946 and Tennessee had someone every year, with Dr. McGill from 1925 until 1936. Dr. L. E. Noland represented Wisconsin for many years, and every year since 1926 these academies sent representatives: Illinois, Kansas, Michigan, Pennsylvania, and New Orleans. Many other state academies sent representatives as they become affiliated, such as: Washington, American Institute of New York and Colorado-Wyoming.

#### SUMMARY OF EARLY MEETING 1928-1952

1928

In 1928 the third annual meeting was called to order at the Lincoln Hotel, New York City. The chairman, W. H. Alexander (Ohio), reported that the majority favored the secretary of the Conference automatically becoming chairman for the succeeding year. This method was put into effect. By a poll the preceding summer, topics of discussion had been solicited. Accordingly, papers were read on the two subjects considered to be the most important. Marcus Lyon (Ind.) read a paper on "Membership in State Academies", dealing with the relation of academies to the AAAS. Chairman Alexander lead a discussion urging that science teachers be encouraged to join academies. Also considered were ways and means of increasing membership to AAAS of State Academies.

1929

There were 24 academies listed as members of the Academy Conference with 13 representatives attending. The meeting followed the afternoon Council meeting and ended with a banquet. In 1929 the Academy Conference was held in Des Moines, Iowa. At this time a vote of thanks and appreciation was extended to Dr. Enders for the good works he had achieved in behalf of the Conference movement during the early days. Dr. Livingston then spoke on "Relation of AAAS to State Academies". At that time each academy received fifty cents for each member who was also an AAAS member per year. In further cooperation, the AAAS wished to name a representative to attend annual meeting of each academy, this representative being an eminent scientist, not resident in state of academy to which delegated. Academies were asked to consider this plan which would necessitate some financial aid on their part.

Guest speaker Louis Astell (Ill.) presented an excellent paper on "How State Academies May Encourage Scientific Endeavor Among High School Students". Mr. Astell, organizer of high school science clubs, presented a large number of profitable suggestions. L. J. Thomas (Ill.) and A. C. Walton presented a paper on the methods used by the Illinois Academy in its successful campaign among high schools. Various methods of arousing scientific interest in high school students were then discussed.

The next question on the agenda concerned methods whereby various academies could avail themselves of publications put out by other academies. McGill (Tenn.) proposed a resolution to the effect that exchange of these publications by affiliated state academies would promote closer relationship between academies. Academies were asked to send copies of current publications and back numbers to all other academies.

1930

In February, 1930, an article on "The Relation between the Affiliated Academies and the AAAS", by Livingston, was sent to all members of the Conference. In this paper he stated the goal of the AAAS: for all its members to belong to their local academies, and all academies to belong to the AAAS. Membership arrangements, financial arrangements, and representation in the AAAS Council were discussed, and the AAAS's definition of the Conference was given, namely, "The Conference is a standing committee of the AAAS, consisting of the council representatives of the affiliated academies and three representatives of the AAAS as a whole. By correspondence throughout the year and a session at the annual meeting this conference facilitates the exchange of ideas and suggestions among its members, especially with reference to cooperation among the academies and between them and the AAAS".

In December of 1930 the Conference met at the Cleveland, Ohio session of the AAAS. The program, arranged by Chancey Juday, (Wis.) consisted of a paper on "State Academy Libraries and the Interchange of Academy Publications" by E. C. L. Miller (Va.) followed by other academy members' presenting data on how their academies met the problem. Among these was G. E. Johnson, who described how the Kansas Academy had continued after state aid was withdrawn for their publications in 1922.

Another paper at this meeting was "How can the Work of the Various Science Clubs in the State be Correlated with that of the State Academy?", by McGill (Tenn.). He suggested that it would be desirable to have a standing committee to effect the organization of science clubs . . . a type of academy extension work.

A third paper was on "The Illinois Junior Academy of Science, Accomplishments and Prospects", presented by Miss Alota McEvoy. In this report she described the movement to develop the creative power of boys and girls and to interest them in scientific studies. Excellent scientists were engaged as lecturers, and it was the aim of the Illinois Academy to have a Junior Academy of Science in every high school in the state.

Otis Caldwell, AAAS, spoke on the organized relationship between the state academy and the school science clubs. Dr. Caldwell suggested that these members who joined in the discussion following his address should provide his office with a definite statement of the accomplishments of their academies in Junior Academy work. This report could then be sent to all interested parties.

George E. Johnson (Kan.) described the various sources of income of different academies for the publication of their papers. This information was obtained through a survey. A. S. Langsdorf spoke on the St. Louis Academy and its method of exchanging publications. A resolution by Dr. McGill was adopted, whereby each academy was requested to send to the other academies copies of current publications and of back numbers as far as feasible.

1931

In 1931 the method of selection of officers was changed, with the secretary serving four years and a vice chairman elected annually to automatically become chairman the following year. The meeting was held at the Roosevelt Hotel,

New Orleans, Louisiana. The program began with a report by Dr. Caldwell, entitled "Progress in Relation to Science Clubs", in which he outlined the history of Junior Academy work. Much credit for progress was given to L. A. Astell for his report at the 1929 meeting. This article later appeared in SCIENCE and created a great deal of interest. By 1930 ten states reported some sort of cooperation between State Academies and Junior Academies of Science. Dr. Caldwell cited the advantages in State Academies cooperating with science clubs. At this time a number of articles had been published presenting information in regard to the work of high school science clubs.

George Johnson (Kan.) read a paper on methods of "More Adequate Financing for Work of the Academy." Financing publications of academy meetings was described.

In response to the paper read by George Johnson at the New Orleans meeting in 1931, many academies sent information as to how they financed their publications. It was apparent that adequate financing involved state aid, and that membership dues should cover more than mere ordinary expense. (At this time eleven academies had dues of \$1.00, eight academies charged \$2.00, two academies \$2.50 and one academy \$3.50.) It was also brought out that financial aid from the AAAS would eventually be withdrawn. A possible solution would be for Academies to secure an endowment fund, whereby each could secure much needed income.

The Conference Secretary, S. W. Bilsing (Tex.) initiated a series of News Letters in 1932 describing interesting activities of various academies. This was designed to stimulate interchange of ideas between members of the Conference, and the information was collected by the secretary.

#### 1932

In 1932 the Conference met in Atlantic City. A. C. Walton (Ill.) delivered a paper on "A Survey of the Various Academies as to the Policy of their Publications". A report on the Junior Academy movement was made by Otis Caldwell. Following this report Howard Enders spoke of the design for a pin which was adopted by the Illinois and Indiana Junior Academies. This pin was in the shape of the state represented, and the conference voted to recommend that other states might well follow the same plan. The following gave reports on the Junior Academy work in their respective state: A. C. Walton, Illinois; H. Enders, Indiana; Joseph Gilman, Iowa; Mary T. Harman, Kansas; R. A. Budington, Ohio; P. E. Strausbaugh, West Virginia; Emmett Carmichael, Alabama; and E. C. L. Miller, Virginia. It was reported by Dr. Budington that the North Central Association was encouraging present high school clubs, but not attempting to organize any new clubs. Headway seemed to be best accomplished in small regions.

It was suggested that the representative of the Iowa Academy, Dr. Gilman, investigate the question of qualifications of Junior Academy leaders, and report at the Boston session the following year.

#### 1933

The Boston session convened at the Statler Hotel in 1933. A paper entitled "The Credit Value of Laboratory Teaching" was read by E. C. L. Miller.

This paper was later sent to all members of the Conference along with the responses made by eleven other members.

A suggestion was made by Emmett Carmichael (Ala.) that State Academies collect information concerning pioneers in scientific work in their respective states.

A booklet, entitled SCIENCE CLUBS IN RELATION TO STATE ACADEMIES OF SCIENCE, by S. W. Bilsing, was reprinted from SCIENCE EDUCATION, October, 1934, Vol. 18, No. 3. Growth of Science Clubs was traced and also aims and plans of Academies in regard to them.

## 1934

In 1934 the Conference met in Pittsburg. The first topic for discussion was the "Relations of Branch Organizations of the American Association to the Main Association of the AAAS and to the Affiliated Academies". The Secretary, S. W. Bilsing (Tex.) presented a detailed report and led a discussion on "Academy Finances and Future Policy of the Relationship to the AAAS".

In July of 1935 a letter from Burton Livingston informed the affiliated academies that the financial allowance would be discontinued and replaced with a research allotment.

## 1935

In December of 1935 the Conference met at St. Louis, Missouri. Dr. Enders read a "Brief History of the Accomplishments of the Academy Conference", tracing the growth of the Conference since 1926 and listing the many interesting topics which had been discussed. A discussion was led by Watson Davis (Science Service) on "Ways in Which the Science News Letter May Help Junior Academies". A committee appointed to coordinate the work of the Junior Academies submitted its report. This committee was headed by Dr. Caldwell, and included Louis Astell, H. E. Enders, J. C. Gilman, and S. W. Bilsing.

Dr. Caldwell made a report on the readjustment of research grants which were given by the AAAS to State Academies.

A preview of "Work Planned by the Academies" was presented by S. W. Bilsing.

## 1936

In the year 1936 the AAAS met at Atlantic City. The council at this time voted to continue for the year 1937 the plan of allotting research grants to the academies. Therefore, each academy was asked to make its request for its research grant as soon as possible, and any academy which had not yet asked for its 1936 grant was asked to make that request. It was desired that each academy which had received research grants should provide a written statement of the topics and individuals receiving the academy's assignment of those funds. Also, a later completed report was desired. The decision as to assignment of research grants rested entirely with the academy, but the AAAS desired to have a complete record of the research topics and the names of the individuals to whom the research grants had been assigned.

It was suggested that three-minute reports from each recipient of the grant be made. Therefore, the Academy representative of each state was to communicate with the secretary and have the person who received the grant work out a three-minute talk. This report, with comments on it, would be presented by the representative at annual conference meetings.

It was also suggested that the Academy Conference secretary should collect the forms sent out by each Academy inviting people to make application for the grant given each year by the AAAS. Then each academy could find out what requirements are made by other academies for disposal of the grant.

The committee of the Academy Conference which was appointed to coordinate interests of Junior Academies of Science had endeavored to find ways to provide printed source material for use by science clubs and Junior Academies. No satisfactory plan had been found. In a few cases individual assistance had been given toward broadening the usefulness of publications previously locally produced. The committee requested constructive suggestions regarding broadening the scope.

1937

In 1937 a summary of research grants was made and sent to Conference members. This summary covered the years 1935, 1936, and 1937. Recipients were listed, as well as subjects of their research.

1938

The Conference met December 27, 1938, at Richmond, Virginia. The program was sent out in advance to all members, and a great deal of preparation was made by the Virginia Academy to entertain the AAAS in their state. Publicity items were sent out in advance, and the Public Relations Committee of the Medical College of Virginia made a concerted effort to acquaint all those members of the AAAS with the excellent program to be offered. There were nine broadcasts over radio stations publicizing the convention.

The Conference meeting began with a discussion of the method of handling research grants. Next, a report from the American Institute of the City of New York was made on the NationWide Science Club movement which it was sponsoring. It was their desire to cooperate with Junior Academies.

The Conference was increasing its activities, and the subject of increasing allotted time for its program was referred to the officers for further development.

W. K. Schoowe (Kan.) read a paper on "A Comparison of the State Academies Affiliated with AAAS". Tables were presented to show a comparison of activities of the 27 academies of science.

Dr. Bert Cunningham (N. C.) read a paper on "The Objectives of the Academy Conference", showing the formation of the organization and the objectives and aims. He suggested half a day's time be used to discuss the many important subjects. In order to have a larger attendance at meetings he recommended that a

program be printed in SCIENCE at a pre-convention date, rather than the Proceedings which appear after the conference. Dr. Cunningham's paper concluded with thanks to the AAAS for the many favors it had bestowed on the Conference, and a question as to what could be done to repay the AAAS for its services.

A symposium on "Financing Academy Publications" was led by G. D. Fuller (Ill.); Howard Enders (Ind.); J. C. Gilman (Iowa); Harvey Zinszer (Kan.) Bert Cunningham (N. C.); and P. D. Strausbaugh (W. Va.). G. D. Fuller, reporting on Illinois, stated that his Academy had received an annual grant of \$1,000 for publication purposes. It was found necessary to limit the papers presented before the Sections to 1,000 words each, unless the author paid for excess space.

Indiana's appropriation had progressively grown, according to Howard Enders' report, from \$1,200 in 1923 to \$1,500 in 1937. The Indiana Academy found it expedient for some active member of the Academy living in the state capitol to follow the legislative activity from the inception of the appropriation bill until its final engrossment and passage. This was necessary to assure the continuity of the fund.

Iowa, as related by J. C. Gilman, retained a standing committee on legislation, one of whose duties was maintenance of state aid in printing Proceeding of State Academy. According to law the Academy could print 400 pages per annum as its Proceedings.

The Kansas Academy, according to H. A. Zinszer, had for six years received an annual appropriation of \$300 from the state legislature. The state printer used this to defray expenses of publishing and binding the annual Transactions, together with 200 reprints of each article published. Three state educational institutions are provided with copies of these Transactions which they exchange throughtout the world, receiving in return transactions or proceedings from similar institutions. The Academy received a dollars for each copy of Transactions for this exchange privilege.

W. H. Alexander, reporting on Ohio, explained that his Academy received substantial help from the University on the princple of exchange. The amount appropriated was determined by the value of the exchanges, and the size of the amount was between \$500 and \$1,000.

The Proceedings of the North Carolina Academy of Science are printed in the Journal of the Elisha Mitchell Scientific Society. This publication was partly subsidized by the university. The Academy appropriates a lump sum, usually approximating \$1.00 per member per year. Bert Cunningham submitted this report.

In West Virginia aid from the State University was received in varying amounts. A total fund of \$450 was provided on a 2:1 basis. The administration appropriated \$2.00 for each dollar contributed by the Academy, up to a total of \$300. This report was made by P. D. Strausbaugh.

1939

A check list of representation from affiliated academies for the period 1926-1938 showed that only Ohio and Indiana had a delegate every year. Tennessee missed only one year while two meetings were missed by Illinois, Iowa and Virginia.

In 1939 the Conference met in Columbus, Ohio. A new method of electing officers was decided upon. Instead of electing a vice-chairman at the beginning of the session, who would assume office in the middle of the session, it was voted to have the chairman preside throughout the entire session, with the vice chairman serving as chairman during the next session.

The program began with a report of the subcommittee appointed to confer with the American Institute on Problems of the Junior Academy. Dr. Enders made this report. This special committee had met in Indianapolis in February, 1939, and was composed of Otis W. Caldwell; Bert Cunningham; J. C. Gilman; E. C. L. Miller; H. H. Sheldon; Lyell J. Thomas; and H. Enders. Louis Astell was invited to meet with the committee. Miller was chosen chairman and Enders, secretary. The committee considered:

1. Aims, objectives, and organization of Junior Academies;
2. Aims of the American Institute;
3. Possible cooperative relations with the American Institute in development and promotion of Junior Academy Clubs; and
4. Unification of Science Club work through cooperation.

The following motions were passed by the committee:

1. In states which have a State Academy of Science and a Junior Academy of Science, any inquiring scientific club seeking admission to the "Associated Science Clubs" is to be referred to the Junior Academy of Science of the state in which the club is located, for assignment of its membership.
2. In states which have no State Academy of Science and no organized high school science clubs, any organization of its science clubs shall bear the name "Associated Science Clubs" rather than the name "Junior Academy of Science".
3. In states which have no State Academy of Science any inquiring high school science clubs shall be referred to the particular state of its location for membership and be known as the "Associated Science Club of \_\_\_\_\_". (State as geographic unit.)
4. In any state which has an organized State Academy of Science, but no Junior Academy of Science, it is advised that if or when ten or more high school science clubs are organized, the general secretary of the AAAS be directed to recommend to the existing State Academy of Science an initial establishment of a Junior Academy.

E. C. Faust, New Orleans, then presented a summary of a study of the Academy Research Grants of the AAAS in Retrospect and in Prospect". An analysis of types of projects and the manner in which money was spent was given by Mr. Faust in SCIENCE, July 26, 1940, page 83.

A paper was presented by P. D. Strausbaugh (W. Va.) on "Can the Academy Serve as a Unifying Agent for the Various Organizations of a State, and How May This be Done?" During the discussion at the conclusion of the paper it was decided

that it was very desirable to secure affiliation of other scientific organizations within each state. "The dominant idea must be the greater service through a closer cooperation of all the state organizations concerned with the advancement of scientific interest."

Next a paper was read by J. C. Gilman, "The Organization of an Academy". It was brought out that the secretary is the most important officer in the organization, and should hold his position for a period of years. Since the executive committee formulates the policies of the academy, its members should be active in academy work. Other methods of organization were described and methods of obtaining the goal which all academies have, namely, that of advancing science within their territory.

1940

In 1940 the Conference met in Philadelphia. The Junior Academy Committee was re-elected for the coming year. It was also voted that this committee submit a progress report at the next meeting in Dallas. It was suggested that at the Dallas meeting the establishment of a collegiate division in the academies should be one of the main subjects of discussion. Texas and Kansas had such sections functioning.

In a discussion on research grants it was agreed that an outline be presented as to what should constitute a proper type of problem on which recipients of grants should work.

A paper by W. F. Rudd on "Long Range Planning for State Academies of Science" was read by Dr. Caldwell. Originally, the main functions of academies were to hold meetings and to issue publications. About the time of World War I the Virginia Academy of Science desired to make scientific information available to local industries. The success of the plan led to enlargement and a new conception of long range planning.

Next a paper was presented by P. D. Strausbaugh on "Methods of Bringing Academies into Closer Relationships with Other Organizations". He emphasized that each state academy must itself solve the problem of bringing various scientific societies into an affiliation with the academy. In some states it may be feasible, whereas in others it would not be desirable. In any event the success of the venture would depend on the organizations' retaining their independence with all semblance of dominance eliminated.

1941

The 1941 Conference was held in Dallas, Texas. The formal program consisted of two papers; "A Resume of AAAS Research Grants", by E. C. Faust; and "The Organization of Collegiate Division of the Texas Academy of Science", by J. C. Godbey.

Dr. Faust's paper was a continuation report of a paper presented at the Columbus, Ohio, Conference in 1939. In this report the following facts were brought out. First, that very little money for research is added by the Academy to the grants allotted them by the AAAS. Second, there is very little evidence that research projects reach the publication stage, except as Academy abstracts in Transactions. Third, secretaries have great difficulties obtaining prepared reports from grants committees or from grantees. The following recommendations were presented:

1. AAAS Committee and Academy should give serious consideration to allotment of rewards with reference to responsibilities of grantees to provide annual progress reports to research grant committee or to the Academy secretary.
2. Closer cooperation is needed by the Research Grant Committee, and the secretary should have readily available up-to-date duplicate files of status of each grant, from 1935.
3. In the future Mr. Woodley's office of the AAAS should be the clearing office for all such reports to the Academy Conference.

At this time it was voted that the Chairman appoint a committee to make a study and report back the following year on an effective means of deciding to whom the grants should be made and how to handle the allotments. G. W. Prescott was appointed chairman of this committee, and he was authorized to get information and appoint assistants to help him canvass the situation and submit recommendations concerning the handling of research grants.

J. D. Godbey, in his discussion of "Organization of the Collegiate Division of the Texas Academy of Science", reported that this division was organized in 1936 and showed its largest growth during the past year. Any science club in any college or university of Texas having a membership of ten or more student members, at least five of whom are members of the Texas Academy of Science, is eligible to membership in the collegiate division and is called a chapter. Each organization is allowed one official delegate to the annual meeting for each ten members.

Meetings are held with the Texas Academy of Science, at which time sectional meetings for the reading of papers and reports and a business session are held.

A committee to study the Junior Academy of Science situation was formed and consisted of L. J. Thomas, Illinois; G. W. Prescott, Michigan; William Camp, Maryland; G. L. Cross, Oklahoma; R. C. Smith, Kansas; Mrs. E. B. Walker, Texas; H. E. Enders; E. C. L. Miller; D. B. Lawrence; and Anna Schneib.

1944

After missing the two years 1942 and 1943 because of conditions arising from World War II, the Conference held its 1944 meeting in Cleveland, Ohio.

The first paper was entitled "How May State Academies and Citizens Increase their Mutual Services?" and was presented by E. C. L. Miller. L. J. Thomas, A. W. Lindsey, Ohio, and O. W. Caldwell presented pertinent comments and suggestions. A committee for further study of this problem was appointed. "The Committee on Academy Acceleration" consisted of R. C. Smith; A. R. Middleton, Kentucky; F. K. Sparrow, Michigan; and A. W. Lindsey.

Next a paper by W. A. Dayton, Washington, D. C., entitled "Results of a Circularization of Academies of Science Affiliated with the AAAS Respecting their Sources of Revenue, Steps Taken to Increase Income, Publications and Advertising Rates" was presented.

An informal discussion was led by L. R. Tehon, Illinois, on "Methods in Administering AAAS Grants to State Academies." The committee headed by E. C. Faust was asked to continue investigation and present recommendations on how Academy grants should be administered.

Lyell J. Thomas, Illinois, gave a committee report on Junior Academy of Science, copies of which were sent to representatives.

Watson Davis made a report on Science Service and Science Clubs of America and explained the functioning and activities of this organization which he represented. A motion of appreciation was made to Watson Davis and Westinghouse for their Science Talent Search, and to Science Service, for service rendered to Science Clubs, Junior Academies of Science, and science in general.

A mimeographed report of the Committee on Publications of the Academy of Science in the United States and Canada was given to each representative. This report was prepared by Roger C. Smith.

The officers of 1944 were retained for the next year.

A suggestion was made by E. C. L. Miller that the Academy go on record as favoring taking up some large problem, and really getting behind it.

Following the Conference meeting and the complimentary dinner given to Conference members by the AAAS, A. J. Carlson, President, AAAS, spoke on the possibility of interesting Junior Academy members in the planting of seeds and trees in reforestation projects. These remarks were reminiscent of similar projects accomplished by Swedish school children on the Scandinavian Peninsula during Dr. Carlson's childhood, which are now bearing fruit as large reforested areas.

Harlow Shapely, Cambridge, Massachusetts, spoke for a short while on projects that might be undertaken by science clubs without much effort, such as archaeology, folk lore, folk songs, local history, and similar types of projects which he thought would be well worthwhile.

## 1946

The scheduled 1945 meeting was postponed to March, 1946, and was held in St. Louis. The short session began at 4:00 p.m. and was followed by a complimentary dinner given by the AAAS.

L. R. Tehon, Illinois, discussed the problem of "How Should Academy Grants Be Administered?" and reported on the handling of research grants by the Academies. He recommended that they be the responsibility of a grant's committee which would not only pass upon the qualifications of the grantee but would follow up the work and receive reports from the project at its conclusion. The type of problem to which grants were made and the methods of procedure were then discussed.

Following the discussion of Dr. Tehon a general discussion of the use the Academies were making of the Talent Search of the Science Clubs of America occurred. The question of rewarding the "also-rans" in that competition was commented upon by various representatives. The possibility of local scholarships was brought up. The Virginia Academy was rewarding state winners with

bond awards. The University of Wisconsin has a paid secretary for the Junior Academy of that state who is a member of the University staff.

Data on this meeting is meager, but three other reports were given: "Possibilities of Improving Senior Academies of Science", by A. W. Lindsey; "What Could and Should the State Academies and the AAAS Do?", by E. C. L. Miller; and "Rebuilding Science Personnel through High School, College, and Graduate Levels", by M. H. Trytton, National Research Council, Washington, D. C.

This resume of the Academy Conference activities has emphasized the subjects discussed each year rather than the details of the committee reports. The data of these reports is not always available; especially the 1944 committee reports on, "How May State Academies and Citizens Increase their Mutual Services" and "The Committee on Academy Acceleration". Note also that the Conference duration was usually approximately two hours. Fourteen academies were represented at the 1946 meeting and the number at previous meetings rarely exceeded this figure.

In December, 1946, the Conference met at the Statler Hotel, Boston, Massachusetts.

Dr. Caldwell spoke briefly on Federal Research subsidies, the great responsibility of the Academies for improvement of service to state educational and industrial enterprises, and sponsoring of Science Clubs and development of the Junior Academy as a valuable educational procedure.

The chairman, E. F. Degering, Indiana, then presented the following questions to be considered:

1. In what ways may a State Academy improve its services and relations with its own state educational and industrial enterprises?
2. What can be done by the State Academy toward developing valuable additional scientific personnel?
3. How may the services of the Junior Academy be increased?

Mr. G. O. Carter, representing the American Institute of the City of New York, suggested that the Academies could make substantial contributions to education and industry by sponsoring lecture programs on human relationships throughout the year. He indicated that industry has much to offer education and that closer cooperation should be secured between the Academies of Science and industrial organizations.

H. D. Carle described the mountain experiment station which was sponsored by the New Hampshire Academy.

Dr. Caldwell spoke of the many grants being made from the Federal Government, under the auspices of the Army and Navy, to relatively isolated groups. The grants were of such a number that they affected the assignment of research funds from the AAAS.

Dr. Degering suggested that the State Academies have the responsibility of sponsoring research in the smaller institutions, where the larger federal funds would likely not be available.

G. W. Prescott stated that he believed the State Academies should have committees who had the duties of contacting industrial concerns for research aid.

A. R. Middleton pointed out that the Kentucky Academy had made valuable industrial contacts, and that the incumbent president was head of research in one of Louisville's large industrial organizations.

J. C. Gilman suggested that AAAS grants be directed to smaller institutions. He indicated that there was difficulty in placing research funds because of excessive teaching and administrative burdens being carried by personnel of smaller schools.

C. L. Porter, Colorado-Wyoming, suggested that Academies should invite industrialists to take part in Academy meetings and in this way cultivate a better understanding between the Academies and industry.

Waldo Schmidt, Washington, D. C., said that small grants of the AAAS are of importance and may mean a great deal to many investigators.

E. C. L. Miller presented a paper on the responsibilities of the State Academies of Science.

H. A. Webb, Tennessee, spoke of the importance of continuing and developing the Science Talent Search. He suggested that this may be of great importance in guiding the most talented young people into the field of science.

L. E. Noland told of development of Junior Academy work in the State of Wisconsin. The Junior Academy had a program of meetings at several centers in the state. Papers were presented by junior scientists, and the best of these were selected and sent to the Senior Academy meeting. This appeared to be of much

importance in guiding talented young people into further science studies. The work of John Thompson was lauded, Thompson having the duty of traveling about the state aiding the science teaching in the secondary schools.

G. O. Carter, speaking for the American Institute of the City of New York, suggested that something for junior scientists be done by industry. Industry did not know about the needs of these junior scientists, which suggested a closer cooperation of Academies with industry.

Dr. Caldwell pointed out that there are 10,500 Science Clubs in the United States, with an average enrollment of 25 per club. A new feature of the AAAS meeting that year was the Junior Scientific Assembly, which was expected to be an annual feature of the AAAS meetings.

J. W. Moore stated that in Minnesota each member in the Academy acts as a committee of one to contact new members to the Junior Academy. Small grants are made the Junior Academy, and care is taken in selecting a sponsor for the junior group.

Representatives from 52 Science Clubs in Indiana met with the Senior Academy at their regular autumn meeting. H. H. Michaud spoke of the difficulties which arose because of teachers' being so over-burdened it was difficult for them to become interested in stimulating students to enter contests.

J. C. Gilman spoke of the difficulty in Iowa of interesting and stimulating high school teachers to organize and direct the activities of Science Clubs. This situation in his state was solved by appointing as a permanent secretary of the Junior Academy a high school teacher. This was regarded as an important feature of their success.

M. D. Young stated that there were 151 Science Clubs in South Carolina which were affiliated with the South Carolina Academy. A Junior Academy congress was planned and would be held in conjunction with the Senior Academy meeting. Several of the clubs had entered the Westinghouse Science Talent Search Examination.

A motion was made and accepted by the Conference which requested the officers and directors of the AAAS to consider possible measures of working through the Academies of Science for the encouragement of Junior Academies or Junior Science Activities, and to prepare a report for publication on the present status of Junior Academies of Science in the United States with recommendations.

Dr. Caldwell, while speaking on research funds from the AAAS, pointed out that application for these funds must be made by each Academy. These funds could not be used for publication purposes. As to supplementing these grants from the AAAS, he suggested that a resolution be made to state some kind of principle of obtaining ways of setting up and underwriting funds for the sole use of the Academy of Science for research.

1947

In 1947 the Academy Conference met at the Hotel Sherman in Chicago, Illinois. A paper entitled "Are Full Subsistence Science Scholarships Available for Students of Promise within your State?" was read by James W. Cole. In this paper he defined the term "full subsistence" and made an analysis of the conditions for students in Virginia to obtain science scholarships. Although at that time "full subsistence scholarships" were not available, the machinery was being developed. This was done by recognizing talent through Science Clubs of America and encouraging seniors to enter the National Science Talent Contest, so that available scholarships would be given to those showing the most scientific promise.

John W. Thomson, Jr., read a paper entitled "What is the Obligation of the State Academy to the Junior Academy?", and he emphasized personal interest of individual scientists in stimulating Junior Academies through attending meetings, judging at fairs, and speaking at meetings. For proper development the Junior Academies should be given adequate financing by State Academies. At that time this was not the case.

A questionnaire was submitted to State Academy secretaries, "Questions Relating to Possible Ways by which State Academies may Render Greater Service". Answers to twelve questions were compiled and mimeographed by G. W. Prescott. In this six page report are the answers to what are the academy relationships with the industrial concerns in the state, do the academies make public the knowledge resulting from scientific work, and how can we maintain relationship with law-making agencies to support legislature of interest to the academy. The report also discusses planned advertising, public activities, attempts to enlarge membership, the giving of exhibits and demonstrations, maintenance of libraries, the giving of annual lectures, the sending of representatives to other state meetings, and cooperation with other academies in conservation programs or biological surveys.

Sixteen of the reporting secretaries indicated that a committee to cooperate with industries would be desirable and that such a plan should be fostered.

None of the reporting societies had committees that could make public the knowledge resulting from scientific work printed in scientific journals. Most were in favor of the idea.

Three academies maintained a standing committee or an officer who kept in contact with law-making agencies, thereby obtaining support on proposed legislation of interest to the academy. All were in favor of this idea.

As for advertising the annual meeting of the academy, most societies admitted haphazard and disorganized advertising. Only two organizations used both the press and radio. Nearly all voted that it would be more desirable to improve advertising.

No academy maintained public relation activities other than open meeting during the convention. Junior Academies served this purpose to a certain extent.

Only four organizations had standing committees on membership, and all agreed that such a committee would be advantageous.

At the annual meeting to which the public was invited only one organization had a regularly scheduled exhibit. It was generally agreed that such an exhibit or demonstration, or display of the work of scientists, would be desirable.

Only two organizations maintained libraries or collections of literary contributions of its members. Most were in favor of this idea.

Only two societies had regular lecture series for public education, but all agreed it would be desirable if properly organized.

Most societies agreed that it would be desirable to have an exchange of visiting representatives at annual meetings. The expense was the most serious objection.

Most societies indicated that their organization should enter into cooperation with other state academies to foster enterprises of a sectional nature; e.g., conservation programs, biological surveys, and art exhibits; and listed time, energy, and money as objections.

1948

In 1948 the Conference met at Washington, D. C., in the Statler Hotel. Distinguished guests present included Dr. Harlow Shapley, retiring President of the AAAS; Dr. Karl Lark-Horowitz, General Secretary of the AAAS; Dr. Watson Davis, Science Service Director; Miss Margaret Patterson, Secretary, Science Clubs of America; Dr. R. H. Carleton, Executive Secretary of the National Science Teachers Association; Dr. Douglas E. Scates, American Council on Education; and Dr. Phillip G. Johnson, Science Specialist, U. S. Office of Education.

The meeting was a round-table discussion on the "Methods of Encouraging Young Scientists". There were a disproportionately large number of winners from certain schools, according to Miss Patterson, and it was pointed out that this was due to an inspiring teacher.

Dr. Johnson stated that he thought the inspiration for interest in science came from the home.

Dr. Maurice Ricker stated that in his opinion the inspiration of the student comes from the teacher and not from the home.

Dr. Arthur Compton described the Science Fairs in St. Louis. The newspapers acted as sponsors and the university offered 14 one-year scholarships and a two-year scholarship. There were 1500 contestants. Local industry and scientists took an active interest in the project.

Dr. L. Whitcomb stated that until we have well-trained teachers in subject matter, little can be accomplished.

Dr. F. C. Vilbrant stated that Virginia had organized a speakers' bureau to arouse interest in science in the small schools.

Dr. Lark-Horowitz stated that a recent survey showed that only about seven per cent of our high school population took science, and he believed a revamping of certification requirements through the cooperation of scientists and educators should be accomplished. For example, it would be a boon if equipment could be secured inexpensively.

Dr. F. E. Smith pointed out the existence of a "chain reaction" from the science talent search, in that the Virginia Chemical Society was offering an award for the outstanding teacher of science.

1949

In 1949 the Conference met at Hotel New Yorker, New York City.

The first speaker on the program was Dr. H. A. Meyerhoff, AAAS Secretary. His subject was "Congress and the National Science Foundation". He told of the present status of the National Science Foundation and reported that its prospects of adoption by Congress were good. This prediction was soon realized. There was a lively discussion of this paper and copies of it were distributed.

Next a paper was presented by Dr. W. A. Macfarlane, Director of the United Kingdom Scientific Mission in North America. His subject was "The Organization of Government Science in the United Kingdom". The discussion of this paper brought out the question of securing competent personnel and the importance of the announcement of vacancies.

The afternoon session of the Conference began with a paper by Watson Davis on "A National Program for the Science Talent Search". This paper presented the accomplishments and the prospects of the Science Talent Search. The discussion of this paper brought out the point that the opportunity for home work is frequently the stimulus to becoming a scientist.

The second paper was presented by P. N. Powers on "The Changing Manpower Picture".

Mrs. Madeline Fink Coutant read a paper on "The Science Congress Movement in New York State". She was director of the Oneonta Science Congress. High school members of that congress presented demonstrations of their work, and a colored motion picture of the last congress was shown. Members of the Conference were made very conscious of the challenging opportunity envisioned by this program.

The speaker at the Conference Dinner was Dr. W. G. Pollard, Executive Director of the Oak Ridge Institute of Nuclear Studies. He spoke on "The Oak Ridge Institute of Nuclear Studies and the Atomic Energy Program in the Associated Universities". Copies of this paper were distributed.

1950

In 1950 the Conference met in Cleveland, Ohio, at the Statler Hotel. The first paper was by Dr. E. A. Walker,

Executive Secretary, Research and Development Board, and was read by R. F. Rinehart. This paper was entitled "Effects of Government Support on Scientific Research". Military research and development accounted for nearly two-thirds of the national expenditure for research and development. About two-thirds of the nation's scientists and engineers were engaged in the services of the Department of Defense. The \$550,000,000 budget of 1945 to 1950 was raised after the Korean War to something over one billion. At this rate of spending on research and development there would be a shortage of scientists. Several solutions to this crisis were suggested by Mr. Walker.

The second paper on the program was by L. R. Hafstad, Director, Reactor Development, Atomic Energy Commission, and Chairman, Interdepartmental Committee on Scientific Research and Development.

Next was a paper by D. W. Bronk, President, Johns Hopkins University. His paper was entitled "The Effect of Government Support of Science on the Intellectual and Spiritual Powers".

He emphasized that teaching in schools is suppressed in contrast to research because of higher salaries in research. Research was too easily influenced by the pressure of funds rather than by scientific curiosity. Government support influenced the spirit and quality of work done. This was illustrated in the forty-hour versus the forty-eight hour work week, emphasis being put on number of hours worked and not on quality of the work.

When there is too much money for research it may smother research. It becomes more difficult to change one's line of research, and with a large staff the director has less time for new research.

The Brookhaven type of institution which makes available its discoveries to all scientists is a great advantage. Also, another fortunate outcome of the Brookhaven type of accomplishment was the increase in knowledge, giving a broader base for future development.

Other points brought out by Dr. Bronk were the danger of there being a shortage of science teachers due to higher salaries paid in government employ and in industry, the danger of an unbalanced social and natural sciences due to government subsidy of natural sciences, and the danger of too many people working under the direction of a few in directed research. The necessity for the National Science Foundation to foster science in all parts of the country was brought out and the importance of the Research Council in supplying a voice of the people to the government was emphasized.

At the evening meeting Dr. Harshbarger called for the report of the committee on the constitution. The tentative constitution presented by Dr. L. H. Taylor was approved by the Conference.

It was asked that all members of the Conference report the activities of the convention to their academies. Dr. Goul advocated that the election of the academy representatives to the Conference be for a period of three years. Dr. Young suggested that the Academy Conference be made up of elected representatives and also the presidents and presidents-elect of the academies. Dr. Taylor (W. Va.) felt that flexibility was necessary and that there probably could not be any uniform manner of representation in the Conference.

Dr. Caylor (Miss.) felt that the function of the academy was to improve the teaching of science in high schools as well as its usually recognized functions. He told of an organized laboratory for this purpose in his state of Mississippi.

At this point in the minutes Dr. Middleton reviewed the regulations governing academy representatives. Each academy was entitled to one representative on the Council of the AAAS. This Council representative was a Fellow of the AAAS. This councilor might serve as the representative of his academy. However, if the academy so desired it might elect another individual, in addition to its councilor, as its representative. Thus, it would have one Councilor and one Conference representative. This representative need not be a Fellow of the AAAS, but had to be a member of his academy and preferably of the AAAS also.

The afternoon meeting of 1950 opened with an address by Dr. Bevan, Illinois Geological Survey, on "The Growth of Academies of Science". Dr. Fuller then commented on the lack of integration among academies, particularly as to their financing, and suggested that the AAAS study this matter of securing more uniform aid for the academies. Need for state aid was brought out by Dr. Robertson. Dr. Thomas stated the need for opportunity for talented young students to publish their work. He told of his efforts to secure scholarships for these young persons in Illinois institutions.

Dr. Meister called attention to the Junior Scientists Assembly and the possibility that it might serve as a means of bringing young people to the AAAS meetings. He stated that the Executive Committee of the AAAS is anxious for the Conference of State Academies of Science to assume sponsorship of this Assembly. Presumably the AAAS would continue to appropriate the necessary \$100 for its financing and also it was assumed that the persons who had conducted it in the past would continue to do so.

A paper was presented by Dr. Harshbarger (Va.) presenting a plan for the reorganization of the Conference and calling attention to the successful exhibit of academy publications and to the reports submitted to him by the various academies.

Dr. Bevan endorsed Dr. Harshbarger's idea of a "work shop" type of meeting for the Conference and recommended the appointment of a committee of three members each for each type of academy activity.

The question of reorganization was considered, and C. L. Baker (Tenn.) moved that the President appoint a committee to draft a tentative constitution of the Conference and to report at the dinner meeting. This committee consisted of Dr. L. H. Taylor (W. Va.), Dr. Baker, Dr. Meister, Dr. Robertson, and Dr. Harshbarger.

The distinction between Junior Science Assembly and Junior Academies of Science was brought up by Dr. Miller. According to Miss Patterson the Assembly consisted mainly of young people living in the vicinity of the AAAS meeting. She advocated having representatives of the Junior Academies attend the Assembly. Dr. Harshbarger stated that he thought the sponsorship of the Assembly should be assumed by the National Science Teachers Association. Miss Patterson said that she favored Conference sponsorship. Dr. Taylor emphasized the need for an investigation of this proposal and stated that he favored sponsorship by the Science Teachers Association. Dr. Meister replied that Dr. Meyerhoff, Administrative Secretary, AAAS, felt that the Conference should assume this sponsorship.

The opening session of the Conference was held with a speaker, H. J. Fuller, holding forth on the subject of modern educationists. His discourse was a keen, penetrating analysis, greatly enjoyed by all, entitled "The Emperor's New or Prius Dementat". This paper was appended to the secretary's minutes, and is available to all who have not read it.

Dr. Harshbarger, in his talk to the Conference, suggested that the Conference look after some of its own work obligations. The growth of the Conference made it expedient that the AAAS be relieved of some of the responsibility. His suggestions were to get officers of all academies to attend the meeting (this meeting would be a so-called work shop meeting) and to have a constitution and a set of by-laws. The constitution would serve as a working guide for the incoming president and would outline the duties of the other officers. It would provide for elections, financing, committees, and meetings.

1951

The first meeting of 1951 was held in conjunction with the Pennsylvania Academy on December 28 at Philadelphia. More than 100 people were present to hear four interesting technical papers. Dr. C. L. Baker (Tenn.), president of the Conference, made some remarks appropriate to the session.

The secretary, in the minutes which were sent out to all members, stated that the practice of sending copies of the addresses which had been presented at the Conference to all members was no longer possible. If these reports were desired by the members, a new system would be considered. Lacking time, money, and clerical assistance, the continuation of appending papers was no longer possible.

On December 29 the meeting was called to order, and the proposed constitution was the first item of business. The AAAS had approved the draft as submitted, but this did not prevent the Conference from now making revisions. Efforts had been made to keep the constitution simple and flexible in conformance with the informality of the Conference.

By a unanimous vote the constitution was adopted. Dr. Baker then spoke of the attendance record and also of the AAAS interest in the Conference. He had written to all the academies for suggestions in regard to interesting subjects for discussion and had obtained good results. The President then appointed a committee to sponsor Junior Science Assembly as provided by the constitution.

Dr. Percival Robertson (Ill.) read a paper on "Financing Publications of the State Academies of Science". He described steps taken to legalize state appropriations for Academy proceedings in Illinois. It was suggested that a copy of the Illinois law be enclosed in the report. Suggestions about raising money were given in the ensuing discussion.

Members of Academies were urged to join AAAS and appoint Fellows who would thereby become eligible for membership in the Council of the AAAS.

The afternoon session opened with a paper by Frank R. Kern on "Promotion of Research in the State Academy". He suggested that State Academies are not research institutions, but that all have the purpose, among others, of promoting research. Dr. Kern also mentioned the sponsorship of Junior Academy as one of the most important methods of encouraging research.

A paper by Wayne Taylor (Tex.) on "Promotion of the Junior Academy of Science" was presented. At this time twenty-one out of thirty-five academies had junior activity.

The next paper was presented by W. H. Venable on "The Development of Institutions and Industrial Cooperation". His talk was based on results of a questionnaire which he sent to all individual laboratories in Pennsylvania. He received twenty-seven replies. From the nature of the replies it was apparent that this sampling of industrial laboratories was apathetic to academies. Many suggestions were made in the following discussion.

The Administrative Secretary of the AAAS, Howard Meyerhoff, reported on "What the AAAS Expects of the State Academies". Dr. Meyerhoff said the AAAS regards the Academies as extensions of the AAAS in their areas. Academies can help the AAAS by appointing delegates to the Conference who will be sure to attend, by carrying results and problems of the Conference back to the Academy for discussion, by having delegates participate in the AAAS Council meetings and relay actions of this Council to the Academy, by making better use of the AAAS grants-in-aid, and by increasing these grants by getting more members of the Academies into the AAAS.

The evening banquet, given by the AAAS, had as the speaker Dr. Frank Freeman of Cornell who gave an address on "A Reply to 'Self-Appointed Saviors' of Education". This was a reply to Dr. Fuller's "The Emperor's New Clothes, or Prius Dementat", which was presented at the 1950 session. There was considerable discussion, and the subject will continue to be an issue for many years to come.

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The Academy Conference, organized in 1926 by representatives from eight academies, has grown to 41 affiliated academies. Annual conferences have increased from a two-hour conference to an all day meeting. Academy problems are discussed at annual meetings and a mutual interchange of ideas on academy activities results. Some of the subjects that have had repeated discussions are:

1. Mutual increase in membership in academies and the AAAS.
2. How to finance academy publications.
3. Junior and Collegiate Academy Promotion.
4. Administration of AAAS research grants to academies.
5. Industrial and institutional Cooperation with academies.
6. How to interest high-school and college students in science.

## ACADEMY CONFERENCE OFFICERS

1926 - 1952

	1926		* 1938
Chmn:	W. H. Alexander (ohio)	Chmn:	E. C. L. Miller (Va.)
Sec:	H. E. Enders (Ind.)	Vice Ch:	B. Cunningham (Va.)
		Sec:	S. W. Bilsing (Tex.)
	1927		1939
Chmn:	W. H. Alexander (Ohio)	Chmn:	B. Cunningham (Va.)
Sec:	H. E. Enders (Ind.)	Vice Ch:	J. C. Gilman (Iowa)
		Sec:	S. W. Bilsing (Tex.)
	1928		1940
Chmn:	W. H. Alexander (Ohio)	Chmn:	J. C. Gilman (Iowa)
Sec:	H. E. Enders (Ind.)	Vice Ch:	S. W. Bilsing (Tex.)
		Sec:	V. E. Light (Penn.)
	1929		1941-45
Chmn:	H. E. Enders (Ind.)	Chmn:	P. D. Strausbaugh (W.Va.)
Sec:	D. W. Morehouse (Iowa)	Vice Ch:	S. W. Bilsing (Tex.)
		Sec:	V. E. Light (Penn.)
	1930		1946
Chmn:	D. W. Morehouse (Iowa)	Chmn:	E. P. Degering (Ind.)
Sec:	A. C. Walton (Ill.)	Sec:	G. W. Blaydes (Ohio)
			1947
	1931		1948
Chmn:	Chancey Juday (Wisc.)	Chmn:	A. O. Weese (Okla.)
Sec:	S. W. Bilsing (Tex.)	Sec:	A. R. Middleton (Ky.)
			1949
	1932		1950
Chmn:	A. C. Walton (Ill.)	Chmn:	B. Harshbarger (Va.)
Vice Ch:	H. E. Enders (Ind.)	Sec:	A. R. Middleton (Ky.)
Sec:	S. W. Bilsing (Tex.)		
			1951
	1933		1952
Chmn:	H. E. Enders (Ind.)	Chmn:	A. R. Middleton (Ky.)
Vice Ch:	W. C. O'Kane (N. H.)	Sec:	L. H. Taylor (W. Va.)
Sec:	S. W. Bilsing (Tex.)		
	1934		
Chmn:	E. B. Carmichael (Ala.)		
Vice Ch:	W. H. Alexander (Ohio)		
Sec:	S. W. Bilsing (Tex.)		
	1935		
Chmn:	W. H. Alexander (Ohio)		
Vice Ch:	E. C. Faust (N. O.)		
Sec:	S. W. Bilsing (Tex.)		
	1936		
Chmn:	W. H. Alexander (Ohio)		
Sec:	S. W. Bilsing (Tex.)		
	1937		
Chmn:	W. H. Alexander (Ohio)		
Sec:	S. W. Bilsing (Tex.)		

## ACADEMY CONFERENCE OFFICERS

1953 - 1970

1953

Pres. Percival Robertson (Ill.)  
 P. El. Wayne Taylor (Tex.)  
 Sc-Tr. Leland H. Taylor (W. Va.)

1954

Pres. Wayne Taylor (Tex.)  
 P. El. Leland H. Taylor (W. Va.)  
 Sc-Tr. Shirley P. Miller (Minn.)

1955

Pres. Leland H. Taylor (W. Va.)  
 P. El. P. H. Yancey (Ala.)  
 Sc-Tr. Thelma C. Heatwole (Va.)

1956

Pres. P. H. Yancey (Ala.)  
 P. El. Thelma C. Heatwole (Va.)  
 Sc-Tr. John G. Arnold (N.O.)

1957

Pres. Thelma C. Heatwole (Va.)  
 P. El. John A. Yarbrough (N. C.)  
 Sc-Tr. John G. Arnold (N.O.)

1958

Pres. John A. Yarbrough (N. C.)  
 P. El. A. M. Winchester (Fla.)  
 Sc-Tr. John G. Arnold (N. O.)

1959

Pres. A. M. Winchester (Fla.)  
 P. El. John G. Arnold (N. O.)  
 Sc-Tr. E. Ruffin Jones (Fla.)

1960

Pres. John G. Arnold (N. O.)  
 P. El. Robert C. Miller (Cal.)  
 Sc-Tr. E. Ruffin Jones (Fla.)

1961

Pres. Robert C. Miller (Cal.)  
 P. El. E. Ruffin Jones (Fla.)  
 Sc-Tr. J. Teague Self (Okla.)

1962

Pres. E. Ruffin Jones (Fla.)  
 P. El. Gerald G. Acker (Ohio)  
 Sc-Tr. J. Teague Self (Okla.)

1963

Pres. Gerald G. Acker (Ohio)  
 P. El. J. Teague Self (Okla.)  
 Sc-Tr. Harry J. Bennett (La.)

1964

Pres. J. Teague Self (Okla.)  
 P. El. Karlem Riess (N. O.)  
 Sc-Tr. Harry J. Bennett (La.)

1965

Pres. Karlem Riess (N. O.)  
 P. El. James A. Rutledge (Nebr.)  
 Sc-Tr. Harry J. Bennett (La.)

1966

Pres. James A. Rutledge (Nebr.)  
 P. El. V. Elving Anderson (Minn.)  
 Sc-Tr. Wilmer W. Tanner (Utah)

1967

Pres. V. Elving Anderson (Minn.)  
 P. El. John H. Melvin (Ohio)  
 Sc-Tr. Wilmer W. Tanner (Utah)

1968

Pres. John H. Melvin (Ohio)  
 P. El. Harry J. Bennett (La.)  
 Sc-Tr. Wilmer W. Tanner (Utah)

1969

Pres. Harry J. Bennett (La.)  
 P. El. Wilmer W. Tanner (Utah)  
 Sc-Tr. Charles E. DePoe (La.)

1970

Pres. Wilmer W. Tanner (Utah)  
 P. El. Glenn W. Stewart (N. H.)  
 Sc-Tr. Charles E. DePoe (La.)

## PROGRAMS OF ACADEMY CONFERENCE

1928 - 1951

1928

"Membership in State Academies", Marcus Lyon (Ind.)

1929

"Relation of AAAS to State Academies", Burton Livingston.  
 "How State Academies May Encourage Scientific Endeavor in High School Students", Louis Astell. (Ill.)

1930

"State Academy Libraries and Interchange of Academy Publications", E. C. L. Miller (Va.)  
 "How Can Work of the Various Science Clubs in the State be Correlated with that of the State Academy", John McGill (Tenn.)  
 "Accomplishments of the Illinois Junior Academy of Science", Aleta McEvoy. (Ill.)  
 "Various Sources of Income of Academies for Publication of Papers", George E. Johnson (Kans.)

1931

"Progress in Relation with Science Clubs", Otis Caldwell (AAAS)  
 "Agenda for the Academy Conference", Burton Livingston (AAAS)  
 "Methods of More Adequate Financing for Work of the Academy", George Johnson (Kans.)

1932

"Survey of the Various Academies as to Policy of their Publications", A. C. Walton (Ill.)  
 "The Junior Academy Movement in Various States", Otis Caldwell (AAAS).

1933

"The Credit Value of Laboratory Teaching", E. C. L. Miller (Va.)

1934

"A report on the credit value of laboratory teaching", Otis Caldwell (AAAS)  
 "Encouragement of the Publication of some materials for Junior Academy Science Clubs", H. E. Enders (Ind.)  
 "Academy finances and future policy of the relationships to the AAAS", S. W. Bilsing (Tex.)

## 1935

- "A Brief History of Accomplishments of the Academy Conference",  
H. E. Enders (Ind.)  
"Ways in Which the Science News Letter May Help Junior Academies",  
Watson Davis (Science Service)  
"The General Secretary's Report on Research Grants to the State  
Academies", Otis Caldwell (AAAS)  
"Work Planned by the Academies", S. W. Bilsing (Tex.)

## 1936

- Discussion of AAAS Research Grants.  
Discussion of Coordination of Junior Academies of Science.

## 1937

- Discussion of a summary of Academy Research Grants.

## 1938

- "A Survey of State Academies Affiliated with the AAAS", W. H. Scheewe  
(Kans.)  
"Objectives of the Academy Conference", Bert Cunningham (N. C.)  
"Financing Academy Publications", general discussion.

## 1939

- "Report of Subcommittee Appointed to Conference with American  
Institute on Problems of Junior Academies", H. E. Enders (Ind.)  
"Report on Usefulness of Academy Research Grants of AAAS",  
E. C. Faust (N. O.)  
"On What Basis Should Junior AAAS Membership Awards be Made?"  
E. C. L. Miller (Va.)  
"Can Academies Serve as Unifying Agents for Various Science  
Organizations of the State?" P. D. Strausbaugh (W. Va.)  
"Organization of State Academies of Science", J. C. Gilman (Iowa)

## 1940

- "Long Range Planning for State Academies of Science", W. F. Rudd  
(Va.)  
"Methods of Bringing Academies into Closer Relationships with  
Other Organizations", P. D. Strausbaugh (W. Va.)

## 1941

- "Resume of AAAS Research Grants", E. C. Faust (N. O.)  
"Organization of a Collegiate Division of Texas Academy of Science",  
J. C. Godbey (Tex.)

1942-43

No meetings.

1944

"How May State Academies and Citizens Increase their Mutual Services", E. C. L. Miller (Va.)

"Methods in Administering AAAS Grants to State Academies", L. R. Tehon (Ill.)

"Report of Committee on Junior Academies of Science", L. J. Thomas (Ill.)

"Distribution and Discussion of Report of Committee on Publications of Academies of Science in the U. S. and Canada", Roger C. Smith (Kans.)

"Results of Circularization of Academies of Science Affiliated with AAAS Respecting their Sources of Revenue, Steps taken to Increase Income, Publications, and Advertising Rate", W. A. Dayton (Wash. D. C.)

1945

(May) "How Should Academy Grants Be Administered?", L. R. Tehon (Ill.)

"Possibilities of Improving Senior Academies of Science", A. W. Lindsey

"What Could and Should the State Academies and the AAAS Do?", E. C. L. Miller (Va.)

"Rebuilding Science Personnel through High School, College, and Graduate Levels", M. H. Trytton (Wash. D. C. )

1946

"Responsibilities of State Academies", E. C. L. Miller (Va.)

"Responsibilities of State Academies for Improving Service and Relations to State Educational and Industrial Enterprises", Otis Caldwell (AAAS).

A discussion of:

1. How can Academies improve services and relations with own state and educational and industrial enterprises?
2. How can state Academies develop valuable additional scientific personnel?
3. How can state Academies increase their services to Junior Academies of Science?
4. Should state Academies supplement research funds?

1947

- "Are Full Subsistence Scientific Scholarship Available for Students of Promise in your State?", J. W. Cole (Va.).
- "What is the Obligation of State Academies to Junior Academies?", John Thomson, Jr. (Wisc.)
- "Questions Relating to Possible Ways by Which State Academies may Render Greater Service", G. W. Prescott (Mich.)

1948

- "What an Academy Can do to Promote Conservation of Natural Resources", J. M. Aikman (Iowa).
- "Federal Aid to Science", Frank Thone (Science Service).
- "Cooperation with and Affiliation of Academies with other Scientific Societies and with Industrial Research Organizations of the State", Frank Gates (Kans.)
- "The Collegiate Academy of Science", J. L. Liverman (Tex.)

1949

- "Congress and the National Science Foundation", H. A. Meyerhoff (AAAS).
- "The Organization of Government Science in the United Kingdom", W. A. MacFarlane (United Kingdom).
- "A National Program for the Science Talent Search", Watson Davis (Science Service).
- "The Changing Manpower Picture", P. N. Powers (AEC).
- "The Scientific Congress Movement in New York State", Madelino F. Coutant (New York).
- "The Oak Ridge Institute of Nuclear Studies and the Atomic Energy Program in the Associated Universities", W. G. Pollard (ORINS).

1950

- "The Effect of Government Support of Science on the Intellectual and Spiritual Powers", Detlev W. Bronk (Nat'l Academy of Sciences).
- "Effect of Government Support on Scientific Research", R. F. Rinehart (Ohio).
- "The Emperor's New Clothes", H. J. Fuller (Ill.)

1951

- "Financing Publications of State Academies of Science", Percival Robertson (Ill.)
- "Promotion of Junior Academies of Science", Wayne Taylor (Tenn.)
- "Development of Institutional and Industrial Cooperation", W. H. Venable (Va.)
- "What AAAS Expects of State Academies", H. A. Meyerhoff (AAAS)
- "A Reply to Self-Appointed Saviors of Education", F. S. Freeman (Cornell).

## ACADEMY CONFERENCE PROGRAMS

1952 ST. LOUIS

- Austin R. Middleton (Ky.) Presiding.  
 Report of Committee to Study Cooperation Among Academies of Science.  
 Committee to Study Cooperation of the Academies of Science with the Academy Conference.  
 Committee to Study the Junior Scientists Assembly.  
 History of Academy Conference. Clinton L. Baker (Tenn.)  
Round Table Discussion on Responsibilities of the Academies of Science in Promoting Improvement in the Teaching of Science in the Public Schools. Leader Greta Oppe (Tex.)  
 The Relation of Academies of Science to College Students. Harold R. Wanless (Ill.)  
 The Relation of Academies of Science to The Public. Harold E. Wilcox (Ala.)  
 The Relations of Academies of Science to the Press. Watson Davis (Director, Science Service)
- Dinner Address: The Making of Awards and Grants by the National Science Foundation. Paul E. Klopsteg (NSF)

1953 BOSTON

- Percival Robertson (Ill.) Presiding.  
 Committee to Study Cooperation among Academies of Science. Austin R. Middleton (Ky.)  
 Committee to Study Cooperation of the Academies of Science with the Academy Conference. E. E. Germann (Colo.)  
 Committee to Study and Sponsor the Junior Scientists Assembly. Elbert C. Weaver (Mass.)  
 Revision of Academy Conference Constitution. C. L. Baker (Tenn.)
- Round Panel Discussion of Academy Problems. Three minutes from each delegate on "Significant Recent Activity."  
 Opportunities of Secretaries to Serve Their Respective Academies. Leland H. Taylor (W. Va.) Presiding.  
 F. G. Brooks (Ia.)  
 E. E. Myers (W. Va.)  
 F. H. Test (Mich.)  
 A. M. Guhl (Kans.)
- Opportunities of Academies to Serve the High School Teacher. Wayne Taylor (Tex.) Presiding.  
 Joan Hunter (Ill.)  
 Thelma C. Heatwole (Va.)  
 Frank H. Reed (Ill.)
- Opportunities of Academies of Science to Serve the Interest of the General Public.  
 Percival Robertson (Ill.) Presiding.  
 Thompson King (Md.)  
 Noel P. Laird (Va.)  
 Norman Harris (Mass.)  
 Wallace W. Atwood, Jr. (NAS)

Dinner Address.

## 1954 BERKELEY

Business Meeting: Wayne Taylor (Tex.) Presiding.  
 The National Science Talent Search: Its History and  
 Accomplishments. Margaret Patterson (Science Service)  
 Individual Reports from Academy Representatives.

Dinner Address: Ex Partibus Integer--Some Observations.  
 Wayne Taylor (Tex.)

## 1955 ATLANTA

Panel Discussion. Patrick H. Yancey (Ala.) Presiding.  
 The Role of Academies of Science in the AAAS Science  
 Teaching Improvement Program.

John R. Mayor (AAAS)

Wayne Taylor (Tex.)

Ralph W. Lefler (Ind.)

Science Fairs as an Academy Activity. C. L. Baker (Tenn.)

Dinner Address.

## 1956 NEW YORK CITY

Business Meeting and Reports. Patrick H. Yancey (Ala.)  
 Reports by Delegates on Academy Activities; emphasis of  
 STIP and on implementation of the new policy on AAAS  
 grants to academies. (3 min. each)

Panel Discussion. Ralph W. Lefler (Ind.) Presiding.

Progress Report on AAAS STIP. John R. Mayor (AAAS)

I. E. Wallen (AAAS)

Panel Discussion: What Could the Federal Government Do  
 for the Academies of Science?

J. A. Campbell (NSF)

Lyell J. Thomas (Ill.)

Thelma Heatwole (Va.)

Dinner Address: Patrick H. Yancey (Ala.)

## 1957 INDIANAPOLIS

Business Meeting: Reports of Committees and Delegates  
 on Academy Activities.

Panel Discussion: Implementation of Recommendations  
 of Chicago Conference on Junior Academies.

John A. Yarbrough (N. C.) Presiding

Communications Among Junior Academies of Science.

T. F. Andrews (Kans.)

Policy (Relationships, Program Execution). Dean C. Stroud (Ia.)

Organizing Junior Academies. Clyde T. Reed (Fla.)

Interrelationships with Other Junior Science

Organizations. Wayne Taylor (Tex.)

Uniformity of Junior Academy Programs. Elnore Stoldt (Ill.)

Proposals for a National Junior Academy of Science. C. L. Baker  
 (Tenn.)

Dinner Address: Tomorrow Begins Today. Thelma C. Heatwole (Va.)

1958 WASHINGTON, D. C.

Business Meeting: Reports of Committees and Delegates  
on Academy Activities.

Panel Discussion: The Academy Movement-Yesterday, Today  
and Tomorrow. A. M. Winchester (Fla.) Presiding

The Academy Movement: An Historical Summary. C. L. Baker (Tenn.)

The Programming of Academy Activities, with Suggestions  
for the Future. J. Teague Self (Okla.)

Academy Financial Problems. Ralph W. Dexter (Ohio)

The Future Role of Academies. Paul B. Sears (Conn.)

Participating Panel:

Foley F. Smith (Va.)  
W. B. Baker (Ga.)  
E. Ruffin Jones, Jr. (Fla.)  
Walter B. Welch (Ill.)

Dinner Address: A New Day for Science. John A. Yarbrough (N. C.)

1959 CHICAGO

Business Meeting: Reports of Committees and Delegates  
on Academy Activities.

The "Do's" and "Dont's" of Applying for NSF and Other  
Grants. John A. Yarbrough (N. C.)

Academy Utilization of AAAS Grants over the Past Ten Years.  
C. L. Baker (Tenn.)

Panel Discussion on Current Academy Problems. John G.  
Arnold, Jr. (N. O.) Presiding

Membership-How to Increase It. Kenneth B. Hobbs (Ohio)

Attendance-How to Stimulate It. W. C. Oelke (Iowa)

Debate on Topic: Academies of Science Should Establish  
Permanent Headquarters and Obtain Full Time Executive  
Leadership.

Affirmative: Robert C. Miller (Calif.)  
Harold W. Hansen (Minn.)

Negative: P. H. Yancey (Ala.)  
Wayne Taylor (Mich.)

Dinner Address: Tribulations of the Science Textbook Author.  
A. M. Winchester (Fla.)

1960 NEW YORK CITY

Business Meeting: Reports of Committees and Delegates  
on Academy Activities.

Panel Discussion: The Utilization of National Science  
Foundation Grants by the Academies of Science.  
Robert C. Miller, Presiding

The Nebraska Visiting Scientist Program. James A. Rutledge.

The Collegiate Science Research Conferences Program in  
Texas. Charles La Motte (Tex.)

Utilization of NSF Funds by the North Carolina Academy  
of Science. John A. Yarbrough (N. C.)

The Inservice Training Program in Tennessee. Arlo I. Smith (Tenn.)

Dinner Address: The Fate of Our Junior Scientists. John G.  
Arnold, Jr. (N. O.)

## 1961 DENVER

Business Meeting: Reports of Committees and Delegates  
on Academy Activities.

Debate Discussion: Why Collegiate Academies?

Debators: Norman D. Levine (Ill.)  
Clinton L. Baker (Tenn.)

Discussants: Charles M. Allen (N. C.)  
Amy LeVesconte (Tex.)  
L. R. Edmunds (NSF)  
R. S. Kiser (Fla.)

Dinner Address: Academies of Science as Catalytic Agents.  
Robert C. Miller (Calif.)

## 1962 PHILADELPHIA

Business Meeting: Reports of Officers, Committees and  
Discussion of Academy Problems and Programs.

Formal Report on the AAAS Academy Conference Survey of  
Junior and Collegiate Academies Supported by the  
National Science Foundation. John D. Hopperton (N. Mex.)

Financing the Academies. Gerald G. Acker, Presiding.

Problems of the Incorporation of Academies of Science.  
J. Teague Self. (Okla.)

Problems Relating to the Tax Exemption of Nonprofit  
Organizations. John R. Barber (IRS)

Activities and Sources of Support of Academies of Science.

A. The Virginia Institute for Scientific Research, an  
Outgrowth of the Virginia Academy of Science. Foley  
F. Smith (Va.)

B. Support of An Academy Having a Museum Program. H.  
Radclyffe Roberts (Pa.)

C. State, Federal and Local Support of Academies of Science.  
Charles D. Vaughn (S. D.)

Dinner Address: The Academy Movement-A Renaissance.  
E. Ruffin Jones (Fla.)

## 1963 CLEVELAND

Business Meeting: Reports of Officers, Committees and  
Discussion of Academy Programs and Problems.

Symposium: The Activities of the Academies of Science  
and the Role of the National Science Foundation.

Gerald G. Acker, Presiding

Participants: John Breukelman (Kans.)  
J. Teague Self (Okla.)  
John A. Yarbrough (N. C.)

Discussion of Report on National Science Seminars.

Participants: J. Teague Self (Okla.)  
Harry J. Bennett (La.)  
Charles L. Bickle (Pa.)  
Irving Auerbach (N. Mex.)  
John D. Hopperton (Okla.)

Dinner Address: The Day of Reckoning. Gerald G. Acker (Ohio)

## 1964 MONTREAL

Business Meeting: Reports of Officers, Committees and Discussion of Academy Programs and Problems.  
 Special Program: The Academy Executive Duties and Functions.  
 John H. Melvin (Ohio)  
 The Non-salaried, Part-time Executive. Richard G. Beidleman (Colo. Wyo.)  
 Academies of Science Between Meetings, I: Teacher Certification. Karlem Riess (N. O.) Presiding  
 1. The Problems of Teacher Certification on a Nationwide Basis.  
 2. The Role of An Academy of Science in Teacher Certification. Ted F. Andrews (Kans.)  
 Dinner Address: New Horizons. J. Teague Self (Okla.)

## 1965 BERKELEY

Business Meeting: Reports of Officers, Committees and Discussion of Academy Programs and Problems.  
 Academies of Science between Meetings, II: Improvement of Science Teaching. Karlem Riess (N. O.) Presiding  
 Subject: How Academies of Science Can Improve Science Teaching in Their Own States.  
 John R. Mayor (AAAS)  
 Discussants: Ted F. Andrews (CUEBS)  
 Paul Klinge (Ind.)  
 Open Discussion: The Undergraduate College Curriculum.  
 James A. Rutledge (Nebr.) Presiding  
 Speaker: Martin W. Schein (CUEBS)  
 Discussion Leader: George E. Lindsay (Calif.)  
 Dinner Address: Academy Highlights-Historic and Otherwise.  
 Karlem Riess (N. O.)

## 1966 WASHINGTON, D. C.

Business Meeting: Reports of Officers, Committees and Discussion of Academy Programs and Problems.  
 Academies of Science Between Meetings, III: Public Understanding of Science. James A. Rutledge (Nebr.) Presiding  
 Subject: The Role of State and Local Academies of Science in the Public Understanding of Science.  
 E. G. Sherburne, Jr. (Science Service)  
 Discussants: Henry Eyring (Utah)  
 John H. Melvin (Ohio)  
 J. Teague Self (Okla.)  
 Publications and Academies of Science.  
 V. Elving Anderson (Minn.) Presiding  
 Subject: The Role of Academies of Science in the Field of Scientific Publications. Robert E. Gordon (Ind.)  
 Discussants: Gordon H. Bixler, American Chemical Society  
 R. Hobart Ellis, Jr. (American Institute of Physics)  
 Sylvia W. Rosen (Minn.)  
 Dinner Address: The Requisites of a Strong Academy. James A. Rutledge (Nebr.)

## 1967 NEW YORK CITY

Business Meeting: Report of Officers, Committees and  
Discussion of Academy Programs and Problems.

Panel Discussion: Relationships between the AAAS and the  
State and Local Academies of Science.

James A. Rutledge (Nebr.) Presiding

Harry J. Bennett (La.)

George W. Malinson (Mich.)

John R. Mayor (AAAS)

(Following the panel discussion, participants in the  
session will divide into three groups with one panel  
memberleading discussion in each group.)

Youth Activities of the Academies.

John H. Melvin (Ohio) Presiding

1. Youth Science Activities.

Wallace R. Brode (D. C.)

2. Discussion.

Charles M. Schenberg (N. Y.)

Charles M. Vaughn (Ohio)

E. L. Wisman (Va.)

Dinner Address: Academies by Other Names. V. Elving Anderson  
(Minn.)

## 1968 DALLAS

Business Meeting.

Budgetary Problems of Academies. G. Gerald Acker (Ohio)

Collegiate Academies of Science.

Speakers: John R. Mayor (AAAS) Chairman

Charles M. Vaughn (Ohio)

Discussants: Sister Joseph Marie Armer (Tex.)

J. Teague Self (Okla.)

Out-of-class scienceyouth activities are extensively  
developed and supported at the high school level. The  
variety and extent of such activities at the college  
undergraduate level are much less clear. The present  
status and future potential of collegiate academies of  
science (sponsored by State academies) will be reviewed.

Dinner Address: Consisting of One Word: "Communicate".

John H. Melvin (Ohio)

1969 BOSTON

Chairman: Wilmer W. Tanner (Utah).  
The Role of State Academies in Providing Scientific Assistance to State Government. M. Frank Hersman (NSF)

Science advice to state and local governments is urgently needed and is increasingly being sought. In their desire to serve local science needs, opportunities exist for academies to assist in meeting this demand.

Chairman: Harry J. Bennett (La.)  
General Meeting and Discussion.

Chairman: John Mayor (AAAS)  
Academies and Technical Education. Howard F. Foncannon (AAAS).

The training of technicians is assuming an important place in our educational system. The implementation of program offerings for technical educators presents some critical problems, however, Academies of science can perhaps assist in the solution of such problems.

Chairman: Harry J. Bennett (La.)  
General Meeting and Discussion.

Dinner Address: The Academy Conference and Our Future Environment. Wilmer W. Tanner (Utah).

## AFFILIATED ACADEMIES; MEETING TIME; PUBLICATIONS

Alabama	Spring	Annual Journal; Newsletters.
Arizona	Spring	Journal; Newsletter.
Arkansas	April	Annual Proceedings.
California	October	Proceedings; Papers; Newsletters.
Chicago	Spring	Bulletin; Special Publications.
Colorado-Wyoming	May	Journal
Florida	December	Journal Quarterly.
Georgia	April	Bulletin Quarterly.
Hawaii	Spring	Annual Proceedings.
Illinois	May	Quarterly Transactions.
Indiana	Fall; Spring	Annual Proceedings.
Idaho	April	Journal.
Iowa	April	Annual Proceedings.
Kansas	April	Quarterly Transactions.
Kentucky	October	Transactions.
Louisiana	Spring	Annual Proceedings.
Maryland	December	Monthly Programs.
Michigan	Spring	Papers; Annual Report
Minnesota	Spring	Journal.
Mississippi	April	Journal.
Missouri	Spring	Transactions.
Montana	Spring	Proceedings.
Nebraska	Spring	Annual Proceedings; Newsletter.
North N. England	Spring	Bulletins.
New Jersey	Spring	Bulletin.
New Mexico	Fall; Spring	Bulletin.
New Orleans	December	None.
North Carolina	May	Annual Proceedings.
North Dakota	May	Annual Proceedings.
Ohio	April	Bi-monthly Journal.
Oklahoma	Winter	Proceedings, Annually.
Oregon	Winter	Proceedings.
Pennsylvania	April	Annual Proceedings; Newsletter.
St. Louis	December	Transactions.
Rochester	January	Proceedings; Bulletin.
South Carolina	April	Bulletin.
South Dakota	Spring	Proceedings.
S. California	May	Bulletin; Memoirs.
Tennessee	Fall	Quarterly Journal.
Texas	Spring	Journal.
Utah	Fall; Spring	Proceedings.
Virginia	May	Journal.
Washington, D.C.	Spring	Monthly Journal.
West Virginia	April	Proceedings; Newsletter.
Wisconsin	April	Transactions; Annual Review.

## AFFILIATED ACADEMIES AND NUMBER OF MEMBERS

1937	25	12,577
1951	38	21,971
1952	41	21,213
1953	41	24,081
1954	41	24,088
1955	41	23,707
1956	41	24,000*
1957	41	25,159
1958	44	26,051
1959	44	28,000*
1960	47	29,075
1961	46	30,245
1962	45	31,063
1963	45	31,342
1964	44	32,370
1965	45	33,638
1966	45	35,712
1967	45	37,116
1968	45	40,158

\*Estimate

1953

Alabama; American Institute of New York; Arkansas;  
 British Columbia; California; Colorado-Wyoming;  
 Florida; Georgia; Hawaii; Illinois; Indiana; Iowa;  
 Kansas; Kentucky; Louisiana; Maryland; Michigan;  
 Minnesota; Mississippi; Nebraska; New Hampshire;  
 New Mexico; New Orleans; North Carolina; North  
 Dakota; Northwest Scientific Association; Ohio;  
 Oklahoma; Oregon; Pennsylvania; Academy of St.  
 Louis; South Carolina; South Dakota; Southern  
 California; Tennessee; Texas; Utah; Virginia;  
 Washington, D. C.; West Virginia; Wisconsin.

1958

Chicago; Rochester; Montana.

1960

New Jersey; Arizona; Idaho.

1961

New Hampshire changed to Northern New England;  
 Northwest Scientific Association lost.

1962

British Columbia lost.

1964

American Institute of New York lost.

1965

Missouri

## DISTINGUISHED SERVICE AWARD

In 1959 the Academy Conference approved the awarding of the Distinguished Service Award to outstanding members. In 1961 an Awards Committee was first appointed.

"FOR MANY YEARS OF FAITHFUL AND DISTINGUISHED SERVICE TO THE ACADEMY CONFERENCE, THE PARENT ORGANIZATION AND THE STATE ACADEMY; AND FOR UNSWERVING INTEREST IN THE ADVANCEMENT OF SCIENCE ON WHICH HAS OFTEN BEEN PLACED MORE IMPORTANCE THAN ON THEIR OWN PROFESSIONAL CAREER."

1962

Leland H. Taylor (W. Va.)  
Patrick H. Yancey (Ala.)

1963

C. L. Baker (Tenn.)  
Wayne Taylor (Mich.)

1964

E. Ruffin Jones (Fla.)  
John A. Yarbrough (N.C.)

1965

J. Teague Self (Okla.)  
G. Gerald Acker (Ohio)

1966

Karlem Riess (N. O.)

1967

James A. Rutledge (Nebr.)  
Raymond L. Taylor (AAAS)

1968

John G. Arnold, Jr. (N. O.)  
V. Elving Anderson (Minn.)  
John H. Melvin (Ohio)

1969

Harry J. Bennett (La.)

## FINANCES OF THE ACADEMY CONFERENCE

In 1952 each affiliated academy was assessed \$5.00 for dues to the Academy Conference. In 1953 this was changed to \$1.00 per hundred members and in 1957 this was increased to \$2.00 per hundred members. Payments by the member academies are quite prompt as a rule.

The major expense for the Academy Conference has been the publication of an annual Directory and Proceedings.

	<u>Receipts</u>	<u>Expenditures</u>	<u>Balance</u>
1952	\$105.00	\$42.79	\$62.21
1953	85.50	55.34	92.37
1954	--	--	62.97
1955	330.71	195.32	135.19
1956	--	--	--
1957-1958	732.98	368.98	364.00
1959	--	--	--
1960	--	--	685.49**
1961	550.88	158.59	1077.80
1962	544.10	341.09	1280.81
1963	577.40	306.15	1552.06
1964	589.71	607.14	1534.63
1965	460.78	426.11	1569.30
1966	374.90	294.84	1649.36
1967	843.93	705.76	1787.53
1968	610.02	1013.02	1811.03
1969	309.39	125.23	1995.19

\*\* The amounts given above are incomplete and will not agree with the published statements, nor will they balance. The usual financial report which is given at the annual Academy Conference meeting covers income and expenses from January 1 to the December meeting only.

## THE ACADEMY CONFERENCE AND THE AAAS

The support of the Academy Conference by the AAAS has been a prerequisite for its success. In 1927 President Livingston, of the AAAS, stated: "our dream is that the Academies may come to play the part of local sections of the AAAS and may be federated with common aims". The Academy Conference in turn would advance academy interests and be an alliance of academies under the AAAS. The Council of the AAAS authorized the Academy Conference and it came into being.

In 1951 the Executive Secretary of the AAAS outlined to the Academy Conference how they and the academies could aid the AAAS: (1) by appointing delegates to the Academy Conference who will attend, (2) to carry results back to the academies, (3) have the delegates participate in the AAAS Council and relay the action back to the academies, (4) see that better use is made of the AAAS grants-in-aid, and (5) get more members into the AAAS. One could add to these: take advantage of the offer by the AAAS of two annual free subscriptions to Science to two Junior Academy members and to two Collegiate Academy members.

In 1967, John R. Mayor, of the AAAS, discussed the relationships between the AAAS and the state and local academies of science. The existing relationships were reviewed and then the possibilities for making the relationships more beneficial to science and society were indicated.

While the AAAS considers itself a parallel organization of the affiliated academies, the academies have promoted faithfully over the years membership in and loyalty to the AAAS; and AAAS has been strengthened as a result. The junior and collegiate academy programs and the Junior Scientists Assembly have constituted some of the major youth activities with which AAAS has had any association. Certainly many young scientists have been introduced to AAAS through the academies, and many scientists continue to learn what they know about AAAS from academy meetings and publications.

On occasion the academies have been the sources of nominees from the states for participation in AAAS-sponsored activities. Two recent examples from AAAS educational activities have been the secondary school teacher fellowship panels and the leadership training conference for Sciences-A Process Approach in the summer of 1966.

A listing of specific contributions of AAAS to the academies are:

1. Research Grants. Annual grants on an average of \$12,000. AAAS has served in a number of instances as middleman for

receiving and accounting for grants to be used by selected academies designated by the donor.

2. Honorary membership in AAAS to one boy and one girl from the junior academy and the collegiate academy. Science Service supplements this award to junior and collegiate members with a one-year subscription to Science News.
3. AAAS assists the Academy Conference, and thus at least indirectly the affiliated academies, by paying expenses for one meeting a year of the executive committee of the Academy Conference, expenses to two meetings a year of the representative of the Academy Conference to the Cooperative Committee on the Teaching of Science and Mathematics, and by providing a dinner for representatives of the affiliated academies at the annual meeting. In 1967, these expenses amounted to approximately \$2000. In addition, the AAAS contributes to the cost of lunches for participants in the Junior Scientists Assembly.
4. The Academy Conference enjoys the privileges of all affiliated associations in program planning and arrangement of facilities for the programs sponsored by the Academy Conference at the annual meeting. The Academy Conference has had the responsibility for three days of sessions at the annual meeting: The Academy Conference Program, the program of the American Junior Academy of Science and the Junior Scientists Assembly. AAAS makes room arrangements and prints the program for these sessions.
5. AAAS publications are available for display at academy meetings. Sometimes a AAAS staff member attends and participates in the annual meeting of an affiliated academy meeting. AAAS headquarters has been a source of information for academy officers and committees.

In 1963, at a meeting of ten past presidents of AAAS with the Board of Directors to "discuss present AAAS activities and to propose directions in the Association's activities which would be most usefully extended", Dr. Dael Wolfle reported (August 1963 AAAS Bulletin) that often during the discussion there was "emphasis on the importance of action by groups more localized than is the AAAS as a national organization". Among points discussed in the Wolfle report were:

- (a) teacher qualifications on a state-by-state basis
- (b) public understanding of science
- (c) local committees to provide lecturers to educational and lay groups
- (d) emphasis on the importance of high ethical standards in science.

One of the "recurring themes of the discussion was the importance of helping the academies with such money and outside help as they need, and of supporting the ideas and the leadership that the academies offer."

In 1958, Dr. John R. Mayor reported to the Academy Conference that the current policy of the AAAS is to help the Conference in its work. Its help is material and should not become missionly in the field of expanding the Academy Conference. Dr. Dael Wolfle, of AAAS, indicated that the original purposes of both the local academy and the AAAS have changed. Originally both served a specific purpose in the presentation of papers and bringing together scientists of all fields. Now some groups emphasize Junior Science Activities, while others have shouldered some of the load originally carried by the AAAS with reference to the presentation of specific scientific programs.

It was the general concensus that at the present time the Academy Conference was not ready for a full or part-time staff representative. Dr. Wolfle felt that the Academy Conference should setup and define its owns plans, and policies. When such are developed the AAAS will be interested in the consideration of a permanent staff member appointment for the Academy Conference affairs.

In 1959, it was again suggested at the Academy Conference meeting that a central headquarters for all academies might be established under the sponsorship of the Academy Conference. Such a central headquarters would be a fiscal and organizational agent for all academies but would not attempt to interfere in the internal policies of the various academies. It was felt that this would be particularly valuable for small academies which do not have the funds to maintain any sort of central headquarters.

A motion was made that the Academy Conference consider the establishment of a central office to promote liaison among the academies, to provide them with information and to generally assist them in any way possible. After considerable discussion the motion was defeated.

The Executive Committee of the Academy Conference, at a meeting February, 1967, approved a proposal that someone from AAAS be appointed to contact the local academies. The Executive Committee approved a motion that a professional AAAS staff member be allocated for a substantial portion of his time to work with academies of science. The Committee pledged its support and active participation in this endeavor and urged that immediate positive action be taken.

## Editorial Comment

It would be difficult to determine whether the Academy Conference contributions to the AAAS equals the financial aid, direction, advice and general assistance given to the Conference by the AAAS. With the adoption of a constitution in 1952 officers of the Conference felt they could operate independently of the AAAS so there was no longer "three representatives of the AAAS" that met with the Conference.

In 1955 John A. Behnke, Associate Administrative Secretary, met with the Executive Committee of the Academy Conference to assist with programs and plans.

In 1956 and thereafter until his retirement in 1967, Raymond L. Taylor, Associate Administrative Secretary of AAAS, met annually with the Executive Committee, and was close at hand during each annual convention despite his numerous duties associated with the convention. His advice and suggestions were available and always ready when called for. He suggested speakers for programs when asked and helped obtain prominent scientists for our programs. In 1959 he reported on "Status of Collegiate Academies" at the Conference. Those of the Academy Conference associated with him will long remember him for his patience and helpful suggestions.

Dr. John R. Mayor, Director of Education, AAAS, has met with the Academy Conference Executive Committee each year since 1968, has participated in a Panel Discussion on: "Relationships between the AAAS and the State and Local Academies of Science" and was Chairman of a session on Collegiate Academies of Science. The Academy Conference continues to receive excellent supervision from Dr. Mayor.

## ACADEMY CONFERENCE PUBLICATIONS

An Academy Conference information booth was again established at the annual AAAS convention in 1967. All academies were urged to submit their publications so members of other academies may examine them.

The possibility of the Academy Conference preparing or sponsoring additional types of publications as handbooks, information booklets, etc. has been discussed but no decisions have been made.

Duke University agreed, in 1958, to sponsor and publish a handbook on Junior Academies of Science but to date no material has been furnished.

The Academy Conference Executive Committee, in 1967, suggested we propose to the NSF that a Workshop for Editors be held at the Ohio Academy to bring together qualified individuals to talk about how editors can make available, more effectively, the many research papers submitted to state and local academy journals for publication.

Supported by a grant of \$13,110 from the NSF to the Ohio Academy of Science, with the cooperation of the Columbus Laboratories of Batelle Memorial Institute, Chemical Abstracts, the Ohio State University and other interested organizations, an "Editor's Workshop" was held in the fall of 1969.

The Publications Committee of the Academy Conference implementing this Workshop was: Mrs. Sylvia W. Rosen, Editor of the Minnesota Academy of Science; Robert E. Gordon, Associate Dean of the College of Science at the University of Notre Dame; Milton D. Thompson, Director of the Illinois State Museum; and John H. Melvin, Executive Officer of the Ohio Academy of Science and Coordinator of the Workshop.

In 1951 the Academy Conference began sending to each Academy a request for annual report that included names and addresses of officers, Junior and Collegiate Chairman, pertinent activities for the year, etc. This was published in mimeographed form in a brochure entitled "Directory and Report on Activities" through 1961. In addition another brochure was mimeographed each year by the Academy Conference secretary entitled "Proceedings of the Academy Conference" containing a summary of all minutes, committee reports and a digest of the entire transcript of reports and discussions at the annual meeting. These "Proceedings" began in 1957 and continued until 1961.

In 1962 a mimeographed brochure entitled "Directory and Proceedings" was published by the secretary of the Academy Conference and has been continued to date.

## JUNIOR ACADEMY OF SCIENCE

The Junior Academy of Science has been and continues to be a very essential part of Academy Conference activity, and a summary report on their activities by the various member academies has been given regularly at each annual Academy Conference. As early as 1931 Junior Academies received considerable discussion at the annual meetings, with ten affiliated academies having such an organization. In 1951 there were twenty-one and by 1962 they had increased to thirty-six.

In 1954 a committee of the Academy Conference reported that of twenty-eight academies nineteen included in their Junior Academy activities a State Science Talent Search and fifteen participated in Science Fairs. In twenty academies the Executive Committee for the Junior Academy was appointed by the Senior Academy, and in twenty the Director was on the Senior Academy Council. In eighteen academies the juniors meet with the seniors in annual meetings.

A Chicago Conference on Junior Academies of Science in 1957 was initiated by the Executive Committee of the Academy Conference at a meeting held in Oak Ridge, Tennessee, in September 1955, with Dr. Charles G. Wilder and Dewey E. Large of ORINS. Academy Conference members present were Wayne Taylor (Tex.), Thelma Heatwole (Va.) and C. L. Baker (Tenn.). It was proposed that a program similar to the Science Fair Work Conferences be initiated for Junior Academies of Science. A second meeting, in November 1956, at the American Museum of Atomic Energy, Oak Ridge, resulted in ORINS and the Academy Conference agreeing to cooperate with the AAAS and to assist in the Junior Academy program. A proposal was presented for a National Conference of one representative from each Academy, particularly those persons responsible for the Junior Academy activities. It was reported at this meeting that NSF had requested that State Academies send in requests for financial aid for Junior Academies. ORINS invited the group to hold this conference in Oak Ridge but it was felt that Chicago was a more central location so Dr. Gregorieff, of ORINS, suggested that the Navy Pier in Chicago be used. This large planning conference would be sponsored jointly by the AAAS and ORINS and financed by funds from NSF.

The Chicago Conference was held in March 1957 and eighty-one representatives of State Academies, ORINS, AAAS, NSF and public school administrators attended. A number of rather interesting and ambitious proposals resulted from numerous recommendations and at the next AAAS meeting, at Indianapolis 1957, the Academy Conference delegates debated and discussed proposals at length with an adoption in the following form:

(1) The encouragement of young people in scientific investigation is the major interest of Junior Academies of Science. This may be accomplished through the presentation of their work in science meetings, exhibits, or fairs, and such other activities as are consonant with the aims of the Junior Academies.

(2) That the Academy Conference of the AAAS be requested to establish a National Clearing House of Information for Junior and Senior Science Academies with adequate editorial and clerical staff and necessary services, including publications and/or the use of appropriate existing publications.

(3) That there be an annual meeting of adult representatives of the Junior Academies. Such meeting will be held in conjunction with the Academy Conference at the AAAS meeting.

The Academy Conference approved a motion here that a separate Junior Academy Conference be set up and made a part of the Academy Conference.

(4) That each Junior Academy of Science be encouraged to develop a constitution and by-laws acceptable to its Senior Academy.

(5) That Junior Academies should basically represent organizations of science clubs under the sponsorship of Senior Academies. Further, that the Junior Academy program should be a year-round activity.

(6) That the Junior Academy Regional Work Conferences be held and that representatives of states not currently represented by Junior Academies be visited.

(7) That a Junior Academy Handbook be prepared and made available to science teachers. Such Handbook should include ideas for projects and for organizing and administering Junior Academy programs.

(8) That the National Science Teachers Association, the National Association of Biology Teachers, the American Chemical Society and similar organizations be requested to include in their annual convention program a section concerned with the activities of the Junior Academies of Science.

(9) That the Academy Conference of the AAAS be urged to explore ways and means of implementing the employment of a full-time science consultant for science activities in each state.

President Heatwole (Va.) of the Academy Conference reported on several visits to NSF relative to the implementation of these proposals. Number 2 (above) was not compatible

with the program of NSF, nor were they interested in proposals 6, 7 and 8. The NSF was quite interested in the Academy Conference and its program and wanted to aid. NSF suggested that certain academies might work out a program or plan to implement proposal No. 1 and this might include funds for travel, exchange of visits for counseling and aid. NSF also requested the Academy Conference to screen proposals from Academies and submit back to Academies. The Academies would then determine whether to send proposals to NSF. (See section on NSF grants).

At this 1957 Indianapolis convention the Junior Academies received considerable attention from several speakers. Among the suggestions and recommendations made are the following:

(1) A Junior Academy newsletter is needed on a state or national level for all science teachers. Grant funds will be needed. A national central office should compile information.

(2) A Junior Academy Handbook should be made available to all science teachers, to include projects, organization and operation.

(3) Regional Work Conferences should be arranged.

(4) Counselors from colleges are needed to go out as full time consultants to work with high school teachers.

It is interesting to note that none of these recommendations were followed up. One specific proposal resulted in the formation of a national session on Junior Academies. This proposal was made by Elnore Stoldt (Ill.) as part of a panel discussion: Opportunity for a national meeting, probably held annually, would seem welcome for discussion of problems that are similar in various Junior Academy groups.

Miss Stoldts proposal resulted in the first Junior Academy Conference, in 1958, over which she presided and which was enthusiastically attended and was a concurrent session of the Academy Conference. The programs that were held are:

1958

Business Session.

Nobody Knows Much About Junior Academies. Hardy (Ind.)

Methods Used in Russia to Interest Young People in Science.

Pettit (Mich.)

Organization of the Kansas Junior Academy of Science.

Andrews (Kans.)

Services that Might be Provided to Junior Academies and Science Clubs. Bennett (La).

Securing More Active Participation of Science Teachers in the Junior Academy. Rutledge (Nebr.)

Service for the School. Boyer (Ky.)  
 Junior Academy of Oklahoma. Fite (Okla.)  
 Should the Junior Academy of the Academy Conference Attempt  
 to Correlate its Work with that of Other Organizations? Lindahl  
 (Ia.)  
 Publications for Junior Academies. Reed (Fla.)  
 How Can Junior Academies Make Use of Industrial and Political  
 Aid? Riess (N. O.)

1959

This second session on Junior Academies was scheduled at a time other than that of the Academy Conference sessions so that senior academy might attend.

Elnore Stoldt (Ill.) Presiding  
 Brief Review of Former Junior Academy Sessions. Hardy (Ind.)  
 The Louisiana Junior Academy Project Supported by NSF.  
 Bennett (La.)  
 The Tennessee Junior Academy Program Supported by NSF.  
 McCay (Tenn.)  
 Soviet Counterpart of Junior Academy of Science. Kanatzar. (Ill.)

At the Academy Conference dinner, 1959, the following resolution was presented:

The increasing interest exhibited by many organizations in science club work, and in the activities of junior academies of science, and the many problems involved in working with junior scientists resulting from the spread of club activities, science fairs, junior academy assemblies and other programs often result in conflict of interest among the organizations sponsoring those programs. Already overworked science and mathematics teachers will soon be faced with further choice of loyalties to sponsoring organizations, local and national in scope.

Be it resolved therefore:

1. That the Academy Conference of the AAAS, through its Junior Academy Committee, undertake a national program to coordinate the science club programs of all interested groups by calling together representatives of these groups to meet with Presidents of Junior Academies and Senior Academy sponsors for the purpose of resolving the conflicts and presenting a more uniform and workable program for all.

2. That the Academy Conference Executive Committee appoint a representative committee to plan such a conference and to submit such plans for approval.
3. That a proposal be drafted, asking the NSF for a grant in the name of the Academy Conference to support costs of travel and expenses of organizing such a conference.

This resolution was approved and referred to the 1960 Academy Conference Executive Committee for action.

#### THE JUNIOR AND COLLEGIATE ACADEMY HOPPERTON STUDY

Information on the general condition and progress of all Junior and Collegiate academies was urgently needed by the Academy Conference and the AAAS and in 1961 the representatives of NSF met with the Executive Committee of the Academy Conference in February. A proposal was accepted by the NSF and in December it was announced that \$10,407 had been received from the NSF and would be administered through AAAS. In March 1962 John D. Hopperton (N. Mex.) was selected as a survey director and a basic operating policy was adopted by a special survey committee of the Academy Conference.

A thorough survey was made of the activities of all the thirty-six known Junior and Collegiate Academies of Science. A summary of the observations and conclusions relevant to all the Junior Academies indicated their great diversity. The basic concept of the purpose for a Junior Academy, however, was unanimous; namely, to provide an opportunity for high school students to present results of their scientific endeavors in an atmosphere closely resembling that available to senior scientists. That this purpose was needed was adequately demonstrated by the continuous and accelerating growth both in numbers of Junior Academies and in membership in Junior Academies.

A typical organizational structure for a Junior Academy would be as follows:<sup>1</sup>

1. The Junior Academy would be sponsored and loosely controlled by a state or city Senior Academy of Science. The Junior Academy would have its own constitution but also be specifically authorized in the Senior Academy constitution and/or executive committee minutes.

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<sup>1</sup>Observations and Conclusions from "Academy Conference Survey of Junior and Collegiate Academies" by John D. Hopperton, December 1963. Copies are available from C. L. Baker.

2. The membership in the Senior Academy would consist of senior high school science clubs (probably in grades 9, 10, 11 and 12) throughout the area covered. Provision would be made for individual memberships from students in schools not having organized science clubs.
3. The Junior Academy would have one annual meeting at the same time and place as its sponsoring Senior Academy. At the annual meeting, the business of the Junior Academy would be transacted and the officers, president, vice-president and secretary, would be elected from and by the student membership.
4. The Senior Academy would appoint a Junior Academy counselor or director to act as liaison between the two academies. The officers of the Junior Academy might be consulted concerning the appointment of this person. The director, or some other appointed Senior Academy member, would act as treasurer of the Junior Academy.
5. The major activity at the annual meeting would be the presentation of papers by members and the judging and criticizing of these papers by Senior scientists.
6. Financing of the Junior Academy would be through dues collected, club affiliation fees, grants from the Senior Academy and outside gifts. Typically, these sources might produce \$100 to \$250 a year.
7. Through a Senior Academy committee, members of the Junior Academy would have access to small "grants-in-aid" from matching funds supplied by the AAAS.

The above seven points delineate what might be termed an average Junior Academy. The variations are legend. What operates best in one section of the country appears not to operate well in another area. Several states, notably Pennsylvania, Louisiana and Tennessee, have developed highly structured regional sections of the State Junior Academy. Other states, such as California, have concentrated their Junior Academy emphasis in major centers of population. Some Senior Academies combine Junior Academy and science fair activities, but the majority tend to keep these two activities separate and distinct. There is no single success formula for starting or for operating a Junior Academy.

There is one necessary ingredient for a successful Junior Academy: a desire among the membership of the Senior Academy to assist high school youth and at least one dedicated person to continually persevere with the problems of a Junior Academy.

#### THE NATIONAL SCIENCE FOUNDATION SUPPORT OF JUNIOR ACADEMIES

For the past several years, under the state Academies of Science program, the National Science Foundation has been assisting the Junior Academy movement throughout the country. This assistance generally has taken the form of grants to the Senior Academy for the promotion and subsidy of Junior Academy meetings. Through these grants it has been possible to greatly increase the participation of students throughout an area in already organized Junior Academy activities.

Generally, it has been these grants which have enabled Junior Academies to develop regional structure and to reach the smaller communities within a state or area. The majority of these grants have not been used to supply money for individual research but only to supply funds for the travel and subsistence of students and teachers to attend Junior Academy meetings, to print Junior Academy proceedings containing edited versions of the papers presented at annual meetings, provide funds for personnel to travel throughout the area bringing the Junior Academy message to the teachers and students of an area and to subsidize the promotion and secretarial expenses of keeping teachers of an area adequately informed about the activities of a Junior Academy.

Recently, some of the Junior Academies have sent proposals to the National Science Foundation for an expansion of their activities; generally in the direction of seminar-type programs. To date these proposals have received some limited support and may well herald the next phase in the growth of Junior Academy activities throughout the country.

A group of dedicated members of Senior Academies continued to meet annually for a discussion of Junior Academy problems on a day before the regular meeting of the Academy Conference. Their programs were:

1960

E. M. Gurr (Ariz.) Presiding  
 Status of the Junior Academy Movement. Harry J. Bennett (La.)  
 Problems of Junior Academy Organization and Operation.  
 Wayne Taylor (Mich.)

Panel Discussion: Organization, Problems, and Projected Programs of Junior Academies; followed by open discussion.

Panel: Gerald Acker (Ohio)  
 Harry J. Bennett (La.)  
 Elnore Stoldt (Ill.)  
 Wayne Taylor (Mich.)  
 Floyd R. West (Ohio)

1961

Gerald G. Acker (Ohio) Presiding  
 Report of Standing Committee on Junior Academies.  
 Regional High School Science Conference. Myron S. McCay (Tenn.)  
 Scientific Papers by High School Students. Lincoln Pettit (Mich.)  
 A National Junior Academy, Pro and Con. Elnore Stoldt (Ill.)

1962

Myron S. McCay (Tenn.) Presiding  
 Report of the Standing Committee on Junior Academies.  
 Myron S. McCay (Tenn.)  
 Brief Report on the National Survey of Junior Academies.  
 John D. Hopperton (N. Mex.)  
 The Program of the Pennsylvania Junior Academy of Science.  
 Charles L. Bickle (Pa.)  
 The NSF Programs for Junior Academies of Science.  
 Howard J. Hausman (NSF).

Section A. Elnore Stoldt (Ill.) Presiding.  
 Section B. Robert C. Fite (Okla.) Presiding.

#### AMERICAN JUNIOR ACADEMY OF SCIENCE

In 1961 the Standing Committee on Junior Academies recommended to the Academy Conference that Junior Academy of Science for high school students, separate from the Junior Academy Conference of Junior Academy directors, which had sessions for the past four years, be initiated.

In 1962 the first annual meeting had twenty-two papers presented by high school students from eleven academies. In 1963 the name was changed to the "American Junior Academy of Science" and certain rules were recommended for all academies when sending juniors to the national convention, namely: all AAAS participants should be past 16 years of age, senior academies should take out insurance for the Junior Academy participants, and a signed release from responsibility should be secured from the parents.

The AJAS thus became an annual affair as a responsibility of the Academy Conference.

In 1966 a report to the Academy Conference suggested: that efforts be made to secure NSF funds to assist in defraying the expenses of the Junior Academy participants; that we make a determined effort to induce civic and service clubs in the local areas to participate in sponsoring the local Junior Academy winners in order that they might participate in the national meeting; and that we consider a summer meeting for these successful participants. This report was accepted but no action was taken.

The AJAS for several years has had two sessions of papers and an evening dinner for the sponsors and program members.

In order to strengthen the future AJAS programs the following actions were recommended by the Junior Academy Committee in 1966:

1. A director or chairman be appointed to serve for more than one year term so as to provide more continuity in leadership and administration.
2. As means of establishing better communication, the Academy Conference Directory should list the name and address of the Director of each Junior Academy.
3. Provisions should be made to publish the participants papers in abstract form and have them distributed to all academies following the meeting.
4. The AAAS should waive the \$5.00 registration fee but still allow participation in all AAAS activities. The fee waiver would also evidence further AAAS support and encouragement in developing scientific aptitude among secondary school students.

At the sixth annual AJAS Conference in 1967 twenty-four selected science students from fourteen academies reported results of their original researches. This was a 40% increase over the meeting of the previous year. The Directory and Proceedings of the Academy Conference adopted the innovation of including the complete AJAS program, with abstracts, and the names and addresses of directors of Junior Academies of Science.

Nineteen students from eleven states presented research papers at the seventh (1968) annual AJAS Conference. The small number of participants apparently was due to the lack of financial sponsorship and the travel distance involved. Thirty-eight state academies sponsor a Junior Academy and each state is allowed a maximum of two top high school students. The 1968

Committee of AJAS recommended that there be less restriction on the quotas from each state and that the format of the meeting be changed.

The states represented at the AJAS meetings depends on the locality of the meeting. Maximum participation since its inception in 1962 has come from Louisiana, Virginia and Oklahoma.

At the risk of omitting an important person, those academy workers who stand out for their accomplishments in working with the junior members and for promoting the formation and continuance of the AJAS should be named. These are: Gerald G. Acker (Ohio), Harry J. Bennett (La.), Robert C. Fite (Okla.), Thelma C. Heatwole (Va.), John D. Hopperton (Okla.), Myron S. McCay (Tenn.), James A. Rutledge (Nebr.), J. Teague Self (Okla.), Frank Starr (Ia.), Elnore Stoldt (Ill.), and E. L. Wisman (Va.).

#### COLLEGIATE ACADEMIES

The Academy Conference Survey of Junior and Collegiate Academies, of 1963, was quite brief on Collegiate Academies. These vary from fully organized academies with a separate constitution, one or more meetings a year, and a separate publication, to simple provision for membership in the Senior Academy.

In 1948 there were four Collegiate Academies, but by 1954 the number had increased to fourteen. In different years thirty-eight states have had Collegiate Academies, but in 1963 only seven states reported such an activity. In 1966 twelve were reported in the Proceedings while in 1967 the Collegiate Academy Standing Committee reported only six or seven active, while a special progress report indicated eighteen.

Several academies that have no organized Collegiate Academy encourage and support college student research, have collegiate research participants attend the Senior Academy meetings and even make travel expenses available. Thus one must add Florida, Alabama, Kansas and Mississippi as supporting collegiate activity.

Those states that reported actual Collegiate Academies in 1968 are: Arkansas, Louisiana, Oklahoma, Minnesota, Missouri, Nebraska, Ohio, North Carolina, South Dakota, Tennessee and Texas. Ten Academies did not respond with request information.

If a state has an active Collegiate Academy there is an active group of Senior Academy members guiding and directing its continual growth and health.

## JUNIOR SCIENTISTS ASSEMBLY

In 1946 the AAAS sponsored the first Junior Scientists Assembly which consists mainly of young people living in the vicinity of the AAAS meeting who are interested in science or scientific careers. The Executive Committee of the AAAS was anxious for the Academy Conference to assume sponsorship of this Assembly and the Academy Conference constitution, adopted in 1951, included a Standing Committee to sponsor this JSA annually.

Each year an impressive program is given by competent specialists. The Berkeley, California meetings had 850 in attendance in 1954 and 800 in 1965. In 1963 this annual Assembly was co-sponsored by the Cleveland Regional Council for Science Teachers. Although usually of two sessions and a luncheon in one day, in 1958 the Assembly had two days with three concurrent sessions for one afternoon and two evening lectures.

The Junior Scientists Assembly has not been held since 1968 because of a conflict with the Holiday Science Lectures.

## SCIENCE FAIRS

Science Fairs, as one of the educational projects of Science Clubs of America, developed into the National Science Fair in 1950. The number of affiliates increased from thirty to 136 by 1955. In 1953 the Oak Ridge Institute of Nuclear Studies, working with the state academies of science, undertook the challenge of advancing science through the medium of more and improved Science Fairs. Within two years Science Fair Workshop Conferences were held in thirteen southern states and Porto Rico designed to stimulate interest in Science Fairs and to give inspiration and instruction in organizing, administering, and coordinating Science Fairs as an educational tool in the advancement of science and mathematics.

These Workshop Conferences, sponsored by colleges and universities, state departments of education and state academies, resulted in more than 400 new local and regional fairs in the southern area. Initiative was taken by state academies to see that both local and regional Science Fairs became permanent academy activities.

During 1954-55 twenty academies signed agreements to participate in the National Science Fair Program and in 27 states 71 State Science Fairs were affiliated with the National Science Fair.

Indiana had eight regional fairs and these were sponsored by the Indiana Academy of Science. The Texas Academy coordinated eighteen fairs. In an effort to promote Science Fairs the Minnesota Academy of Science published a brochure: "Minnesota Regional Science Fairs".

Colorado-Wyoming Academy sponsored a bi-state science fair. Hawaii Academy has an annual fair as does North Carolina, Ohio, Utah, Michigan, Illinois and Alabama. In Mississippi the Director for the eight state science fairs was appointed by the state academy.

In many states science fairs were promoted by academy members without supervision or coordination by the state academy.

#### NATIONAL SCIENCE EXPOSITION AND SEMINARS

The Academy Conference Executive Committee, February 1963, appointed a committee to determine whether the Academy Conference should give its support to such meetings in the future. Three members attended these meetings, held in Albuquerque, New Mexico May 1963, in conjunction with Science Fair International.

The committee reported to the Academy Conference that the seminars were very successful and recommended that the Academy Conference request the AAAS Board of Directors to consider supporting similar programs in the future. A motion was passed expressing interest of the Academy Conference in the seminars with the suggestion that the American Junior Academy of Science, the National Science Seminars and the Science Fair International all meet together in the late spring. This should remove showmanship, individual flares for publicity and gadgetry. This would tend to focus the attention of the high school students on the more scholarly developments in science and the relationship of these to laboratory planning and experimentation.

The Academy Conference approved the idea of requesting the Board of Directors of the AAAS to join with the Conference in taking such steps as may be necessary to sponsor and promote seminars on an annual basis; that AAAS appoint a Director to work out plans for such annual seminars on a continuing basis, provide funds to pay the Director and appoint an Advisory Committee.

This special Committee for the Evaluation of National Science Seminars was composed of: J. Teague Self (Okla.), Harry J. Bennett (La.) and Charles L. Bickle (Pa.).

There is no record of any further action being taken on these proposals.

#### WORLD CONFERENCE FOR LEADERS OF EXTRA-CURRICULAR SCIENTIFIC ACTIVITIES

The Academy Conference sent a representative to Montreal, Canada, in August 1967, to this conference which is an affiliate of UNESCO. Twenty-eight countries were represented at the

conference whose chief objective was the exchange of information and stimulation of activities to encourage extra-curricular science activities. A report was made to the Academy Conference and no action was taken regarding affiliation.

#### AAAS RESEARCH FUNDS TO ACADEMIES

The AAAS has awarded to each affiliated academy annually funds for small research grants. Until 1959 each academy received 50¢ for each member who was also a member of AAAS with a minimum of \$50.00 to each academy. Then the amount was doubled and has remained at \$1.00 per member or a minimum of \$100.00. Thus in 1959 Illinois, with 45% of its academy members also members of AAAS, received \$864.00. Indiana with a smaller academy had 61% AAAS members. One academy had only 16% AAAS members.

From 1920 through 1934 the Association remitted \$12,000 to the academies. In recent years these grants have varied from \$100 to \$1,000 with the total annual grants being approximately \$12,000.

This program was reviewed by the AAAS Board of Directors and their special committee on AAAS Research Grants, in 1961, and by the Academy Conference. The net result was a decision that affiliated academies have complete discretion on whom they nominate for these grants, although the AAAS Board of Directors felt that high school students and Junior Academy members should have preference where feasible.

Each academy is offered the privilege of nominating one boy and one girl from its Junior Academy for a one-year honorary junior membership in AAAS. Included are a suitable certificate and a subscription to Science. Science Service supplements this award to junior members with a one-year subscription to Science News. These same privileges are extended to two nominees from an academy's collegiate academy. It is regretted that many affiliated academies do not take advantage of this generous offer.

## NATIONAL SCIENCE FOUNDATION SUPPORT OF ACADEMIES

It is usually quite difficult to definitely ascertain the origin of an idea or the beginning of a project. The records are inconclusive regarding the origin and development of NSF grants to state academies, but it should be pointed out that in 1953 Dr. Raymond J. Seeger, of NSF, requested information on state academies from AAAS and he was referred to the Academy Conference. A copy of the "History of Academy Conference" was mailed to Dr. Seeger and Leland H. Taylor (W. Va.), secretary of the Conference give him pertinent information relative to academy activities. Dr. Taylor stated that certain problems prevail in all academies and the Executive Committee urges the NSF to consider further consultations for exploration of means of mutual assistance. Secretary Taylor further explained:

The perennial problems of most state academies are:

1. Sponsoring science teacher groups and Junior Academies of Science.
2. Providing scholarships for winners in Science Talent Searches.
3. Supplementing research grants which the AAAS provides in small amounts.
4. Obtaining good speakers for annual (and other) meetings of academies.
5. Aiding in the publication of proceedings, journals, etc. of academies.

The suggestion had been made that academies submit proposals for financial aid to the Academy Conference, and at the February 1958 Executive Committee meeting there was considerable discussion regarding policies concerning educational projects submitted for financial support.

"It was decided at this time that due to the changing national picture the AAAS, and the Academy Conference can best serve as an advisory group to affiliated societies and academies in preparing proposals in science education. It should be clearly understood that while the Academy Conference and the AAAS will offer all aid, advice and help to any Academy preparing or planning a Science Education proposal or project request for a grant-in-aid to a National Foundation, the recommendations of the Academy Conference do not in any way guarantee the approval of such plans. Likewise it should be understood that any recommendation or suggestion of the Academy Conference is strictly advisory and not binding either on the AAAS or the National Science Foundation. Staff Officers of the AAAS and members of the Executive Council of the Academy Conference will undertake studies to gain information concerning the policies which should be followed by affiliated academies in applying either directly to the NSF, or

through the Academy Conference to the NSF. It should be remembered also that the AAAS and/or the Academy Conference has no control over monies which might be appropriated to affiliate academies for science education projects. Should it be decided that the Academy Conference serve in an advisory capacity to affiliate groups seeking foundation aid, it is certain to add stature to the Academy Conference. At the present time it is strongly advised that if any of the affiliated academies decide to apply directly to the NSF they are free to do so, and should not await any decisions which may be formulated concerning this matter by the Academy Conference. As a precedent for this last thought, the Oak Ridge Center receives grants-in-aid directly from the NSF."

President Yarbrough (N.C.) of the Academy Conference then presented to the Executive Committee fifteen proposals that he had received, as condensed below:

Mississippi - College Teachers to Counsel High School Teachers	1 year	\$25,000
Florida - Sessions on College Campuses for In Service High School Teachers	1 year	\$94,000
Tennessee - College and University Sessions for In Service High School Teachers	1 Yr	\$25,350
Indiana - Undergraduate Research; Summer Session Projects	3 years	\$34,000
Indiana Junior - Send High School Science Teachers to Senior Colleges	1 year	\$ 1,500
Oklahoma - College Teachers to Counsel High School Teachers	1 year	\$ 6,000
Nebraska - College Teachers to Lecture to High School Teachers	3 years	\$47,500
South Dakota - Loan Science Kits; Do-it-yourself Outlines; Work Shops.	1 year	\$ 4,500
Colorado-Wyoming - College Teachers to Lecture to Junior Academy and H.S. Teachers	1 yr	\$ 1,900
New Orleans - Summer Fellowships for High School and College Students	5 years	\$ 4,500
Pennsylvania - College Biology Department to Counsel High School Science Teachers	1 year	\$ 500/school
California - Summer Institute for forty high School Teachers	1 year	\$30,245
North Carolina - Develop a Science Fair Manual	5 years	\$ 1,500
Louisiana - Expenses for Junior Academy Committees to contact h. s. Teachers	1 year	\$10,000
Washington (DC) - Lectures and Discussions with High School Teachers.	--	\$150,000

A discussion of the fifteen proposals resulted in the following observations:

1. Stated fund for most proposals too small, or too modest.
2. Contingency and overhead funds should be requested.
3. Requests for free or donated services of talented speakers or scientists is not recommended. An average fee of twenty-five to fifty dollars, plus per diem and travel, is generally accepted as proper.
4. Most proposals were not detailed enough in plans or needs. A better worked out proposal indicates more complete knowledge or product.
5. If available or planned, mention collateral or supplementary funds and services. Indicate funds given by the State Academy, or the value or services rendered by members in relation to the project proposed.

Dr. Walter Peterson of the Special Projects in Education of the National Science Foundation discussed in detail at the Conference (December 1958) the possibility of NSF support for Science Education Projects of the State and Municipal Academies of Science. He stated that the lateness of this announcement was due to the fact that it was signed into law late in the last Congress.

The NSF announcement on October 24, 1959, invited proposals from state academies of science requesting support of projects planned to improve the status of science and mathematics education. It was anticipated that most proposals under this program would fall under one of these headings:

1. Development of collaborative efforts by professional scientists and high school science teachers to improve science instruction;
2. Development of coordinated programs for stimulating interest in science among young people, principally at the pre-college level and providing them with opportunities for science experience;

however, proposals with similar objectives not described in the two categories above would be considered. Novel ideas designed to accomplish the objectives indicated above were encouraged.

The proposal of NSF further stated that: "Although the Academies are independent and autonomous, in general it is true that they have such common objectives as: (1) stimulation of interest in science among young people; (2) improvement of science instruction at all levels; (3) dissemination of

scientific knowledge among their widespread membership including not only scientists from the colleges and universities and secondary schools but also from industrial, governmental and private establishments of the region served; and (4) interpretation of science and the need for better science education to the general public."

"The purpose of the Foundation's program directed towards Academies of Science is to foster these common objectives by awarding grants to Academies for special projects proposed by them which they can be expected to administer effectively. It is anticipated that the enthusiasm and drive which have led more than 25,000 scientists and interested laymen to associate themselves with these Academies and their goals may be utilized to give this program a most effective impact on the total American population."

By 1963 approximately \$2,500,000 had been appropriated by the NSF for Academy activity. The programs were quite varied ranging from Junior Academy support, Collegiate Academy, Improvement of Science Education, Science Clubs Service Programs, Traveling Science Institutes, Seminars for High School Teachers, and Visiting Scientists Programs. The Visiting Scientists Program was supported in 24 states in 1961 and in 1963 thirty-six academies received at least one grant for one of the above projects. Many Academies received a grant or grants annually with preference being given to the Visiting Scientists Program. In 1963 NSF suggested that every Academy should have this type of program.

"The Day of Reckoning" was the title of the presidential address given by Gerald G. Acker in 1963 to the Academy Conference. This referred to the time when such funds would no longer be available to Academies. President Ackers said in part:

"It is the general practice among governmental agencies to provide funds for the initiation of a program and to decrease the support periodically until the financial burden rests entirely with the sponsoring organization. National Science Foundation no longer supports some of the programs that were given consideration in the past years. I do not foresee a refusal on the part of NSF to support worthy projects, but, I expect a shift of emphasis from time to time that in effect will permit new activities to be supported and at the same time phase-out some of the present programs."

President Acker had a few specific suggestions on how Academies can consolidate their gains for the crisis if and when it appears. These are: Long Range Planning, Development of

Leadership, Establishment of Good Public Relations, and Operation Under a Sound Fiscal Policy. He concluded his address with this statement:

"I have attempted to direct attention to the possibility of situations arising that are unfavorable to the operation of your academies. I would urge you to study your objectives, policies and programs with the idea of streamlining the organization to meet future needs. If your Academy's program has the inherent flexibility necessary for the efficient operation of a program compatible with reasonable objectives, and is supported by adequate communications and sound finance, the DAY OF RECKONING can be postponed indefinitely."

The presidential address in 1964 of J. Teague Self (Okla.) continued and expanded this theme in "NEW HORIZONS", as follows:

"Perhaps one of the greatest dividends that has accrued from the effects of the academies under the National Science Foundation support has been the bringing into focus of a state organization which cuts across all institutions and operates programs in which the various educational institutions of the state participate. This has tended to minimize inter-state institutional rivalries and competition in preference to collaborative efforts on the part of faculties of the colleges and universities. It is conceivable that this may bolster administrative efforts toward collaborative efforts in solving many serious educational problems in higher and secondary education."

"The degree to which academies are participating in these programs is quite variable, but, the best information available is that 28 of the 41 contacted are sponsoring some type of program with at least part-time NSF support. Two State Academies report that their programs under NSF support have been decreased in emphasis and one has dropped the NSF supported programs entirely. Twenty-four of the 32 Academies responding report that the NSF support has broadened and improved their functions. Only two report that the NSF supported programs have been of little permanent value. One must, of course, remember that in most cases, perhaps too often, the response to questionnaires are filled out by one individual and probably is based only on that individual's opinion, rather than on that of the total membership of the Academy. It is obvious, however, that most State Academies which have operated the programs under NSF support have felt that they have used this support profitably and that their functions have been improved as a result."

In 1959-60 \$460,000 was granted to state academies followed by \$600,000 the following year. Approximately \$500,000 annually was awarded followed by a tapering off in 1967.

In 1966 it was announced that the Visiting Scientists Program would be eliminated from NSF support and that future programming should come from the academies.

In an address by E. G. Sherburne, Jr., Director of Science Service, in 1966 to the Academy Conference, on: THE ROLE OF THE STATE AND LOCAL ACADEMIES OF SCIENCE IN THE PUBLIC UNDERSTANDING OF SCIENCE, it was pointed out that the academies are in a position to render a valuable service. The academies could encourage the appointment of a Science Advisor to the Governor of the state, and a Governor's Science Advisory Committee. They could conduct science seminars on relevant topics for members of state legislatures or county councils. They could organize a Speakers Bureau which would provide scientists to talk to clubs, associations and other groups. The Science Fair movement is large and well established, and so the question here concerns improving rather than initiating the program. Instead of being critical about the way Science Fairs have been run--of the judging, of excessive competition, or of the requirements for Science Fair projects as part of course work, the Academy could use these projects as an important means of reaching the attentive public.

Academies could present a "Report on the Status of Science" in a state or city. It could be the theme of a symposium that would be of great interest to the news media as well as to leadership groups and the attentive public.

Dr. Sherburne then stated: "There is a Public Understanding of Science program supported by the NSF, aimed at developing and testing mechanisms which will lead to a greater public understanding of the nature of science and its relationship to daily living. Many of the activities which I have suggested could conceivably be supported under this program, although its total funds are pitifully small. You might be interested to know, incidentally, that to date, no state or local Academy has received a grant under this program."

In 1967 Dr. H. J. Hausman, of NSF, indicated that there is not an adequate budget to continue doing a quality job and therefore there had to be a shift and it was considered advisable to delete the Visiting Scientists Program and introduce funds into the school system in the hope that new rather than the same old things might be engaged in. He indicated that we are not out of business but that the suggestions for future programming must come from the academies.

In 1968 it was reported that seven Academies submitted proposals for Supplementary Training for undergraduates. These proposals were supported at a cost of \$26,300. In 1965 five academies received \$12,380, in 1966 six received \$18,155. The

same six received \$10,800 with the understanding that similar activities would be supported locally in 1968.

In July of 1969 all 48 state academies were asked by NSF to express their views on providing scientific assistance to state and local governments. The communication, from M. Frank Hersman, of NSF, <sup>1</sup>indicated that seed money would be available from NSF

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<sup>1</sup>Much of the statements that follow were taken from an address on "State Government and State Academies of Science" presented at the Academy Conference, December 27, 1969, by M. Frank Hersman, Intergovernmental Science Planning Program, National Science Foundation, Washington, D. C.

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for stimulating interesting projects by academies which demonstrate willingness and ability to assume more active public assistance roles. Of the 19 academies replying, only 4 indicated that they had provided assistance of some kind.

Most of the academies replying believed that state academies should definitely provide scientific assistance to state government. Several academies felt strongly that the state government should properly request help when needed. Most believed, however, that the initiative should come from both directions. It appeared that scientists, although highly motivated, do not know how to offer help, and the governmental community does not know how to seek technical guidance when needed. The most difficult task seems to be to initiate a communication process between state academies and government. The governmental decision-maker is likely to have the impression that scientists and engineers are too impractical to be of service on his problem, and the scientist may view the governmental administrator as too "political." A productive relationship will require effort on both sides, but the burden of the task should fall upon the state academy rather than government.

Environmental quality was the recurring theme suggested by many academies as the area most appropriate for public service. Other aspects of public programs mentioned were new concepts in education, including teacher training, teacher certification standards, health care systems, career guidance, and public understanding of science.

Some states felt that rendering scientific assistance to state or local governments might possibly impair their nonprofit status. This should not be a problem providing that the academy contents itself with a scientific analysis, and not pursue an advocate role.

A number of academies felt that a full-time staff director with some clerical help is absolutely essential to coordinate efforts of academy members to advise state governments.

There was indication that NSF support might be available for this program under the Intergovernmental Science Planning Program. It was suggested that the Academy Conference undertake to design a national program of experimental approaches, involving 5 or 6 states, which would connect state academies with state government at the decision-making level. The level of funding might average about \$10-15,000 per state experiment or a total of approximately \$75,000. It is anticipated that this challenge to active participation of academies in rendering scientific assistance and guidance to state and local governments will be accepted by the Academy Conference as a major project for 1970.

## ARCHIVIST

This appointed office was included in the constitution adopted in 1952. The "duties of the archivist shall be to preserve and keep on file the records of the Conference".

At an Executive Committee meeting in 1953 it was suggested that the archivist pro-tem should prepare a news-letter and should be a liaison between the AAAS and the Academy Conference. The present archivist was appointed in 1954.

During the formative years of the Academy Conference the officers followed a plan of mailing carbons to other officers of all letters written regarding Academy Conference activity. In addition considerable correspondence occurred between officers (others received carbons) regarding plans, purposes, programs, etc. and in many instances personal postscripts complicated the issue. The matter of the archivist sending out a news-letter waxed and waned, hot and cold. There was a feeling of overlapping duties expressed and that if the regular secretary did not undertake this chore all news must first be submitted to all other officers for approval. There was also hesitation in approving the archivists plan to request information from academies, and there was a fear that news printed in our Proceedings would be repeated in a news-letter. One news-letter was mailed out in 1953.

Again in 1958, a motion, passed by the Executive Committee, stated: "the archivist will undertake the task of preparing a newsletter. The staff of the AAAS and officers of the Academy Conference will make every effort to give material and aid." No mailing list was available to the archivist and no news was furnished. Thus there was no newsletter.

The peculiar role of an archivist was discussed at an Executive Committee meeting of the Academy Conference at a meeting on March 19, 1964, by President J. Teague Self (Okla.) who suggested the desirability of each Academy having a Permanent Advisor who would have such duties as follows: (1) Archivist, (2) Representative of his Academy at meetings of the Academy Conference, (3) Serve as delegate to the AAAS Council, (4) Serve as a representative of his Academy at meetings of other organizations with which it might be affiliated, and (5) Serve as an authority on the Constitution of his Academy. He stated that this office should be of a semi-permanent nature and that the experience of an individual in this office would tend to maintain continuity and increase effectiveness of academy activities. It was the consensus of the Executive

Committee that this office should be established where this had not already been done.

Again in the presidential address of 1965, J. Karlem Riess (N. O.), in reviewing ACADEMY HIGHLIGHTS-HISTORIC AND OTHERWISE, stated:

"To meet some of the shortcomings of our academies a permanent officer, with executive authority, is needed in each academy. It does not matter what the title is - executive officer, permanent secretary, or fiscal officer - but there must be one man who will have continuity - a long term of office - who will be able to transmit to the officers elected annually a clear picture of the state of the academy and its programs. He must have the authority to make decisions for the academy between meetings, and should have the responsibility for grants and other operational expenses. Too often the officers of an academy begin their terms completely ignorant of their duties or of the problems confronting the academy.

For example, the existence of NSF grants to academies has been unknown to officers in some academies, and they were surprised and baffled when asked to make the financial reports required by the grants. A permanent officer would also be a liaison between the AAAS and the academy, and between state and local science authorities and the academy. Our Academy Conference secretary has had much difficulty securing the annual reports of activities of the academies. In some cases he was not apprised of change of officers, and thus was unable to contact the proper parties for the report. Many of the new officers were ignorant of the scope of activities which should be presented in such an annual survey.

The Academy Conference should be reorganized along the same lines - with one or more permanent officers. Since the attendance at these annual meetings varies so much from year to year much time is spent in orientation of the delegates and of officers elected, and in the rehashing of discussions held at previous meetings.

The Academy Conference can only urge the individual academies to revise their constitutions and by-laws to permit the election of permanent officers, for the Conference has no power over the member groups. It is conceivable that the AAAS could force such legislation by assigning the council seat to the permanent officer in each academy. But there are many members of the Council of the AAAS who believe that the academies should not have individual representation on the Council, so that it is doubtful that such a procedure could be adopted."

The Executive Committee approved a motion in 1965 that: The Academy Conference recommends that each academy establish the office of Permanent Secretary or some similar office; that the individual elected or appointed to such an office, in addition to his other duties, serve as the representative of his academy at the annual business meeting of the Academy Conference, and to act as the liaison officer of his academy with the Academy Conference.

It is estimated that fifteen of our 45 affiliated academies have a permanent officer who is: Executive Director, Executive Officer or Executive Secretary.

It is believed that twelve of the academies are incorporated; a distinct advantage in receiving funds and donations that can be tax deductible. In order to incorporate some academies spend considerable amounts for attorneys fees, while others simply fill out papers of incorporation, send them to their state capitol, pay a small fee, and become incorporated.

## THIS AND THAT: ODDS AND ENDS

1944: Motion passed. The Academy Conference should take up a problem and really get behind it.

1957: There is a need for an operational guide for each academy so that incoming officers would be informed of previous commitments and policies in effect. A brochure would contain constitution and by-laws, procedure for meetings, projects, committees, awards, etc. of value to new groups forming academies. The Academy Conference would serve as a clearing house. No action. (West Virginia Academy published an excellent "Manual of Procedures" in 1964 and each academy should have a copy in their files.

Motion Passed: Each academy should give full status to the Academy Conference representative as an academy officer and member of the Executive Committee of the Academy. Each academy should accept a full report from the representative.

1957: A motion was approved that the Academy Conference give consideration to the making of an award on a national level to an outstanding high school teacher and that this matter be referred to the appropriate Committee. The Academy Conference will assume this responsibility.  
No action.

1960: Each academy should obtain photographs of their officers for archives and future historians.

1962: We should request NSF for funds for a national study of senior academies. No action.

1963: Some of our funds should be transferred to the AAAS for investment purposes. No action.

1965: The Academy Conference should ask NSF for some financial support for participants in the American Junior Academy of Science. No action.

After forty-five years of activity the Academy Conference has ceased to exist, in name only, being replaced by the Association of Academies of Science.