On the Shoulders of Many Giants -
A Brief History of the CPD Division of ASEE

1965 – 2001

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March, 2003

updated slightly January 2004
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DEDICATION

To all the great individuals (and their organizations) who made this history possible. Most of those since the mid-60’s are listed in the leaders section of the Appendix A and the Honors and Awards Section in Appendix B. It is hoped that none were missed but my apologies are extended in advance for anyone due to the writer’s error.

But most of all, to Joe Biedenbach. The finest “public servant” it was ever my privilege to know and work with. Great friends like him were well noted in this Division over my 28 years with it. Hence the title: We Stand on the Shoulders of Many Giants.

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ACKNOWLEDGEMENTS

A lot of good people have contributed to make this Brief History possible. Of course the officers and leaders who did so much in our behalf – especially those who most diligently saved minutes, publications, newsletters, etc. Special note needs to be made to Bob Anderson, Owen Osborne and Bill Cooper who sent in many items for the Archives. Morrie Nicholson actually inspired the making of this publication many years ago and served us in many capacities – but none more importantly than as our first Archivist.

A special thanks to Linda Krute and Helene Demont who most significantly made sure this project got completed and now Helene is hosting the Archives for the next few years anyway.

The CPD Office at ASU and then the Joint Arizona Consortium for Manufacturing Engineering Education for Tomorrow (JACME$^2$T) office under Dave Lowery most graciously provided office space and resources for the Archives. Teresa Grider has so diligently made sense of my handwriting in preparing the manuscript. My wife Elaine gave me time off from house repairs to finally get it finished. And especially to Joe Biedenbach who took me – and many, many others “under his wing” and led us to far greater things than we would have ever done on our own.
INTRODUCTION

Many leaders within the CPD Division have had an interest in compiling a reasonably thorough – but yet relatively short – history of the Division for many years. In fact during the 80’s we contacted a university history professor who was interested in doing this for us but the time, cost and effort were way beyond our resources. Our long time Archivist – Morrie Nicholson from the University of Minnesota prepared several short versions of parts of our history which ran as his regular column’s in many of our Newsletters. Finally, upon taking early retirement from his engineering CPD position, the writer (who succeeded Morrie as Archivist) agreed to try to prepare what has resulted here.

The Division officers had done a reasonably good job of maintaining files of the division’s activities over the years – Board and Annual Business Meeting Minutes, Newsletters, CES and CIEC Proceedings and related materials still contained in our Archives. While materials from the very first years are no longer to be found, this brief history covers much of what has been a very outstanding organization.

While an engineer should probably not try to be a Historian, it is hoped that this publication will both document what many have done in our behalf and also pay respects to those many, many volunteers who have served us so ably.

The history is primarily presented in a year-by-year basis from the beginning and ending in 2001. Perhaps updates every five years or so will be prepared by someone in the future to keep it going. The Appendices also include our lists of Officers and Board members through the years as well as of our Award Winners.

We hope you enjoy the journey!
The following was the Forward in the Proceedings of the First Continuing Engineering Studies (CES) Division Annual Conference held on December 12-13, 1966 in Chicago:

The Continuing Engineering Studies Division of the American Society for Engineering Education was established in 1965-66. It was an outgrowth of the Evening Engineering Education Division and came into being because of the growing conviction that Evening Engineering Education was only one aspect of what was to be the great era of Interest in the future – Continuing Engineering Studies.

The change was made about the time that Engineers’ Council for Professional Development, Engineers Joint Council, ASEE, and the National Society of Professional Engineers formed a Joint Committee on Continuing Engineering Studies and published a report in 1965 entitled, Continuing Engineering Studies: Meeting the Challenge Through Industry Academic Institutions, Engineering Societies and Government. After studying this report, the new Division decided that the immediate need was the sponsorship of an annual conference to enable Industry and Education to come together to discuss needs, programs, new developments, etc. The first such conference was held in Chicago, December 12-13, 1966, and is reported in this monograph.

The Chairman of the Division of Continuing Engineering Studies for 1965-66 was M. L. Smith, Ohio State University; for 1966-67 was J. O. Luck, Bell Telephone Laboratories; and for 1967-68 is J. F. Connors, The Martin Company. The Division is also active in developing programs on continuing education for engineers for presentation at the ASEE Annual Meeting and Conference.

While no Proceedings Editor is specifically listed, it is highly likely that Walter Turkes from the University of Pittsburgh who was the Division's Editor is the Editor of the Proceedings.

These are the earliest available records still remaining in the CPD Division Archives.

Our Division used to hold its own Annual Conference before we joined with other ASEE Divisions in establishing today’s CIEC Meetings. We published our own inexpensive Proceedings, usually in five inch by seven inch printed format after
the conferences were held. These Proceedings are all contained in our current Archives. Some brief highlights of these meetings follow and then within the years they were held.

1966 CES Conference December 12-13 – Chicago, Illinois

J. W. Hostetter at what was then known as the Polytechnic Institute of Brooklyn was Program Chairman for this first Annual Conference of the CES Division. The Proceedings were published after the meeting, totaled 61 pages and were sold through ASEE for $2 each! There is no record of how many were sold! Asa Knowles, President at Northeastern University and an icon in Continuing Education gave one of the keynote addresses entitled: “New Oil for the Lamps of Learning.” The lamp symbol was used by the Division for many years before updating with the current hot air balloon. Asa’s vision was evident in his abstract and opening paragraph:

Continuing education represents a wide range of programs using a variety of presentation methods. Attitudes toward continuing education have become favorable in recent years. An effective continuing education program has a good administrator, is promoted widely, has a faculty skilled in working with adults, and meets the needs of industry. Special techniques that will be widely used in the future are the dial access learning system, programmed learning, the telelecture, instructional radio and television feedback systems, and computer instruction. Colleges and universities must meet the challenge of continuing education for engineers.

CONTINUING EDUCATION is many things. It can be formal, degree programs and it can be informal, non-credit programs. It can be self-study; the National College Board Association is already developing examinations to measure achievement through means of experience and self-study. Continuing education can be correspondence and home study programs. It can be on-the-job training or in-plant programs or even a television course. It can even be a professional meeting. In short, continuing education represents a wide range of programs utilizing a variety of presentation methods.

There were sessions on Program Design, Instructors for CES, International Commitments, In-House Programs, Relations with Degree Programs and Workshops on Motivation, Teaching Methods, Commitment of Resources and Contributions to Professional Development.
The first published list of Division Officers is from 1966-67 as follows:

Chair
J. O. Luck, Bell Telephone Laboratories

Vice Chairman
J. F. Connors, The Martin Company

Program Chairman
J. W. Hostetter, Polytechnic Institute of Brooklyn

Secretary-Treasurer
W. R. Turkes, University of Pittsburgh

Editor
W. R. Turkes, University of Pittsburgh

Executive Committee
Frank Croxton, Battelle Memorial Institute
Israel Katz, Northeastern University
Monroe Kriegel, Oklahoma State University
R. R. O’Neill, University of California, Los Angeles
F. G. Rizzardi, North American Aviation, Inc.
E. J. Thielen, Consultant
The CES Annual Meeting Proceedings are the only remaining Division records of the early years. Our first Newsletter of sorts is from May, 1967 and our first Executive Board Meeting Minutes are from June, 1970. But the Division was obviously a dynamic, active group of leaders who clearly were progressing in establishing an organization dedicated to the continuing education needs of practicing engineers.

The first Division “Newsletter” still available is dated May, 1967 and is essentially an outline of the Division’s program sessions at the Annual Conference.

The October 16, 1967 Issue was titled “News Brief” and calls for attending the Second Annual Conference and outlines the structure and operation of Section Representatives.

1967 CES Conference – New Orleans

Our second annual division conference was held on November 12-14. The 78 page Proceedings published as Monograph No. 2 in what would be a nine “volume” series contains many interesting items. An early look at the Genesys TV network in Florida – the first in the country – started in April, 1965. It had four originating studio – classrooms and three sites in Central Florida with full audio talk-back. It was presenting 40-50 graduate courses each quarter and several non-credit courses each month. The system was developed by the University of Florida’s Dean of Engineering Thomas C. Martin, Jr. who would later lead in similar efforts at Southern Methodist University and the Illinois Institute of Technology and also serve on the National Technological Universities, first Board of Trustees. Other articles covered the “Mid-Career Education in House” at the Livermore Labs, a Canadian “Proposal in Certified Continuing Education for Engineers”, the “Electronic Blackboard” and several others. It is easy to spend an hour reading these monographs as they provide some excellent historical perspective.

The next available Newsletter in the Archives is from October 1969 and outlines the Annual Division Conference Program, Nominations Committee Report of candidates, Chairman’s message and several general news items. It totaled 5 pages.
Cheit Brisley from the University of Wisconsin was Program Chair. The following was taken from the Forward to the Proceedings:

Because of the confusion exhibited by speakers and workshops regarding the definition of continuing engineering studies, the 1968 program identified this Division’s purposes as established by ASEE:

Purposes: The purposes of this Division are: to foster, OUTSIDE OF CURRICULAR PROGRAMS, the development of courses, seminars, conferences, institutes, workshops and related educational offerings uniquely designed for service to groups of practicing engineers for the purposes of enhancing their competence within the profession, and to do this in full support of and in a manner consistent with the purposes of the Society.”
Major addresses were given by Kurt Wendt, Dean of the College of Engineering at the University of Wisconsin, Fred Harvey Harrington, Wisconsin's President and Paul Grogan, Professor of Engineering at University Extension there. Paul was a long time leader within the profession – and had just completed a two-year assignment in Washington, DC. His abstract stated:

Continuing Education Comes of Age

Interest in continuing engineering studies as a specialized kind of continuing education has been growing apace coincident with the organization of the CES Division in ASEE some three years ago. Support of the entire engineering community is now strong. This ground swell of support may also be found among a host of educational institutions, industrial organizations, professional associations, and governmental agencies. Of particular significance is the National Planning Conference of July 1968, which authorized a National Task Force to define a unit of continuing education that can be applied to all organized learning experiences, albeit noncredit, and thereafter become a permanent, transferable, and accumulative individual record. Broad acceptance of the fundamental work of the National Task Force is yet to be obtained. But this effort, building on much excellent work by numerous predecessor activities, is now given a good chance of success.

While Wendt outlined a new degree which is still being offered at UW:

A Challenge to Industries and Universities

Continuing engineering studies programs should be integrated and substantial, with continuous evaluation of individual performance and accomplishment. Both the university and industry should give substantial and tangible recognition. A possible solution is to use the professional degree. This degree program would include 20% for updating, 30% for upgrading in a specialization, 30% for courses in management, and 20% for humanities courses. Half the course work would be transferable. Two essential elements are counseling and record keeping. The proposed solution is challenging.
Harrington discussed a still continuing aspect of our programs:

Continuing Education Revolution

Continuing engineering studies programs to meet future needs will require efforts from industry and education. As the cost is going to be high, scholarships and loan programs should be offered. Most universities do not recognize the importance of CES. However, interest shown by industry, the military, the professions, and the Federal Government is encouraging, indicating that CES will be a basic part of the future university.

As with many of our recent CIEC meetings, there were program descriptions from Iowa State, North Dakota State, The University of Minnesota and one on Wisconsin’s by John Klus – who continues active with us to this day. Future education needs for engineers and evaluation of CES programs were panel discussions and workshops were conducted on Individualized Study, Motivating Teachers, Using Media, CE as an Industry Investment and several other topics.

1969 CES Conference – Pittsburgh, November 5-7

Minor Hawk from the University of Pittsburgh was conference chair.

Donald Gordon, Director, Office of Industrial Liaison in the College of Engineering at Cornell University said the following in his preface in the Proceedings:

I came away from our previous conference in Milwaukee feeling that neither the representatives of industry, nor those from the academic world, took home any new tools that significantly improved their capability to perform continuing engineering studies (CES). Let me assure those responsible for the programming and presentations at that conference that what was said was well said and was probably perceived by most of those present to be what one would normally expect to hear at such a conference.
He then went on to say:

**Departure from the Past**

The time is long past for beginning to look methodically at CES operations for industry. This division’s members have arrived at a level of experience that permits us to cease massaging the definition of our problems. We should now attack them with a view toward solution. There has been enough of exchanging with our counterparts “The problems as I see the.” We have completed the exercise of pointing the finger. We all have read the “Why don’t you” and “Why don’t they” published articles. We have dealt with widely varying degrees of success, with “the philosophy of CES”; all the tangled aspects of assignment and transfer of credits; faculty motivation, frustrations, participation, and remuneration; and the updating of both the broad foundation of an individual’s engineering education and his narrow steeple of specialization. The time has now come to assign to industry’s interests in CES a degree of importance, a sense of urgency, and a concentration of effort at least equal to those previously assigned to CES aspects of primary interest to the academic world. If industry is to provide wholehearted, generous support for advanced degree programs, which are not of immediate profit to industry, then industry should be provided with its special requirements in CES. It must be done responsively, at the level requested, at the desired degree of application, and by instructional techniques most suitable for industrial students. By suitable, I mean taking into account their age, experience, selective areas of interest, and ability to contribute significantly to the instruction.

**Staying in Line**

This conference has been called to deal primarily with the problem of improving communications and interactions between industry and education on CES matters.

Let us then, from the start be perfectly clear about the main thrust of our discussions. Our academic representatives are usually driven by dual interests I CES: on the one hand, the programs in pursuit of advanced degrees: and, on the other educational efforts, the primary purpose of which is to refresh, update, and diversity the industrial student’s engineering education. Although industry has a ancilliary interest in the derives eventual benefits from the support of advanced degree studies, the course content and level and method of presentation are universally acknowledged to be the primary responsibility of the world of education. It is the second category of
continuing education which we must apply our best efforts here today. In this field industry is, in essence, maintaining and updating one of its basic resources, its personnel. It wishes this job done expeditiously, economically, and according to its own specifications, which are based on the requirement for updating its engineers in existing fields of knowledge and technology and preparing them for anticipated tasks of the near future. It is primarily in this area of CES that we must produce something more efficient as a process for collaboration.

In the short time available, I charge you to focus your attention on the general conference objective and to discuss and consider in your workshops in light of this objective only. I look to you, presumably some of the most interested and most experienced individuals in this field, to return either specific recommendations for the solution to the workshop problems or – if available knowledge or time or both prove insufficient – recommendations for specific individuals to form working committees to continue the attack of these problems after this conference ends.

If you examine the problem areas for discussion and solution by your workshops, you will see that in no case will the usual one-or two-page summary, hurriedly prepared by the workshop leader, constitute completed actions. For example, Workshop I, “How can a university organize and operate an office of continuing engineering studies?” is too large a mission to be completed by the workshop in the time available. It would require, for proper response, preparation of a small handbook for directors of continuing engineering education. What I anticipate receiving from this workshop is a rather detailed outline for this handbook and recommendations concerning an outstanding continuing engineering educator best qualified to prepare each segment. This workshop might also name the individual to shoulder the task of pulling together and editing the efforts of the other contributors. When all is completed this division can then consider the problems of publication and dissemination. If each workshop will approach its problem with this type of responsive, specific, pragmatic solution in mind, this conference may well become a turning point in the history of CES.

**Expectations**

In preparing these remarks, I have asked myself what I am seeking for CES in the future.
I look forward to the establishment of universally accepted standard CES categories, the wide knowledgeable use of which would permit educational institutions to respond accurately to industry's educational specifications for substantive content and method and level of presentations. In the end, industry will be better able to prepare and present its specific requirements for education. There will be better understanding, through increased interaction, of the peculiarities of the annual cycle of academic effort and faculty pursuits and how they generate methods of instruction, attitudes, lead-times, scheduling constraints, and levels of compensation that are sometimes difficult for industry to understand and accept.

I look forward to regional coordinating of CES programming to include melding together the efforts of engineering colleges, technical institutes, technical societies, and even some commercial educational enterprises. This coordination will help reduce wasteful duplication of offerings and the "guesstimate" and "grab-bag" effects now working on most directors of CES. A center for such regional coordination may well serve in the future to coordinate CES programming for the proliferating regional closed-circuit TV systems. These systems are now coming rapidly over the horizon and, hopefully, will be subject to better broad prior planning and coordination than our present CES efforts. Such coordination logically falls within the purview of this division, but, as with present CES activities, this responsibility must be sought and grasped; it will not seek us out. It may well go, by default, to government educational agencies.

I look forward to regional working meetings, perhaps held semiannually, of instructional directors of CES and their counterparts in industry, where instructional capabilities are arrayed against requirements for the specialized CES in industry. At these meetings the information could be amassed that is needed to operate a clearinghouse on current faculty and industrial instructor expertise in the region. Industry's complaints, recommendations, and suggestions concerning the educational services being provided, reviewed at these meetings, might well be disseminated via periodic newsletters that include suggestions for corrective actions or innovations.

I look forward to the establishment of an industry-education CES advisory council, with industry represented, not only by workers in the technical education programs, but also by vice presidents of manpower development or vice presidents for management development, or others of their ilk, by whatever title. Investment in CES by major corporations is now of such magnitude, and CES has
had attributed to it such importance, that personal involvement by this level of management is becoming mandatory. Because the success of a CES program in industry does depend so much on policy formulation, power structure advocacy and support, and continuing funding support, it can only work to the advantage of industry, as well as the academic world, to more deeply involve these individuals.

I look forward to more widespread recognition in the academic world of the growing demands for and peculiar requirements of CES for industry, and I hope for reaction in the form of more adequate organization, more forceful, expert staffing, formal assignment of faculty effort and official recognition and credit for participation, and better use of available technologies to present the instruction where, when and in the form needed. In like manner, I look to industries that have not already done so to recognize their responsibilities to their engineers by providing them with published CES policies, workable programs, and liberal, enlightened management support for the CES endeavors.

I also look to industry to assign continuing education responsibilities to active, imaginative individuals who are not only knowledgeable about the future plans and current operations of the elements of their own organization but are also familiar with the capabilities and limitations of the academic world in general, and particularly of those institutions that are active or dominant in the technological areas in which the corporation functions. There are many who believe that these individuals are the keystones in the arch of CES for industry. They consider failure to appoint a qualified director to an appropriate level of authority and to include him in planning sessions when entry into new areas of technology is being considered the two major causes for less-than-optimum utilization of academic potential in CES. This personnel slot certainly should never be used as a back street on which to store less-than-satisfactory “good ole Joe” types until they can retire.

Enough of expectations. In keeping with universal practice, they are stated in terms both hopeful and optimistic. There is much to be done. In your discussions, keep your specific workshop objective in mind, pursuing this subject in light of the general conference objective. There will be other times and other places in which to examine the many CES problems unrelated to the prime objective of this conference. You must produce here, on each side of the industry-education fence, such a high degree of understanding of the problems on the other side and such knowledgeable treatment of the problems on your side that this
conference cannot fail, with respect to CES, to improve communications and interactions across the industry-education interface.

Isn’t it amazing how true most of this still is today?

There were excellent presentations and Proceedings notes on “Creativity in Engineering” by Paul Grogan, Industry and University Views of the Conference Objectives by D. L. Thomsen from IBM and Dean Griffith then at the University of Texas –Austin respectively.

The May, 1970 Issue of our Division Newsletter is called the “Spring Newsletter” and outlines the Division’s Sessions at the June ASEE Annual Meeting at Ohio State, and Annual Division Conference and a proposed revision of the bylaws. It totaled 8 pages plus a promotional brochure for Albuquerque - site of the Annual Division Conference.
1970-1971

The Minutes of the June 22, 1970 Board Meeting at the ASEE Annual Conference held in Columbus, Ohio are the first ones remaining in our Archives. Russ O’Neill from UCLA was Division Chair and seven members were present, three noted as absent and eleven “guests” also attended. As a personal note, all seven members were still active in the Division when the writer attended his first meeting in 1975! It was noted that postage had negatively impacted the Newsletter budget that increased from 6 cents to 12 cents! There were reports from the past and upcoming Annual Conferences, Proceedings and costs, Research Committee, Marketing Committee, Newsletter, the status of the CEU and it was noted that the May-June 1971 Issue of ASEE’s “Engineering Education” would be devoted to CES. The Board also met in Albuquerque on November 4 and 5 as part of the Annual Division Conference with 15 present and again on March 4 and 5 in Washington DC with 8 present. Task forces were working on key issues: Investment by Industry in CES, New Methodology, A CES Handbook and a Survey of Education by Users of CES materials.

Guidelines were established as follows:

CES Division ASEE

1. All task forces, and assignments thereof, are to be approved by the Chairman, Continuing Engineering Studies (CES) Division, ASEE or his designated representative.

2. Task Force topics may be proposed at any time by any member of the CES Division for consideration by the Chairman, CES Division or his designated representative.

3. No task force may consist of less than two people.

4. Task force topics should be those of interest to a large number of CES Members. Those topics supported by the greatest numbers of members shall receive the earliest attention of the CES Division.

5. All task forces must agree to complete their defined study within 12 months of approval of their study topics.

6. Final task force reports must be submitted in sets of 12 to the Chairman, CES Division upon completion of the study as indicated in Number 5 above.

7. Action to be taken on all task force reports shall be decided by the Board of Directors, CES Division, ASEE in the Board meeting following report submission if possible.

Prepared: Dean E. Griffith, Chairman       Approved: CES Division, ASEE, Directors
Task Force Committee      March 4, 1971
CES Division, ASEE
Paul Grogan from the University of Wisconsin was Program Chairman. Russ O’Neill from UCLA gave a most interesting paper on “Trends in CES” in which he stated:

This paper looks forward to the decade of the seventies, speculating on what lies ahead. By looking forward it may be possible to design and implement more effective CES programs. A good forecast will let us decide optimally with respect to those variables over which we have control and will help us adapt to those variables over which we have no control. A ten-year span is neither a short range nor a long range forecast and in some ways it would be less risky to forecast to the year 2000 because by that date both the forecaster and the forecast would likely be forgotten.

The CES programs of the sixties were extensions and modifications of the CES programs of the fifties. Thus, it would appear reasonable to consider the seventies in terms of the sixties, assuming that the massive momentum of the existing programs and the trends we have already observed will shape the decade ahead. Certainly these continuities will make a significant contribution to the future. However, there are discontinuities, still below the surface, which are already making changes over which we have no control. We must look at both the continuities and the discontinuities.

There were also interesting presentations and papers on: “Technological Forecasting in the Planning of Continuing Education” by Lt. Col. Joseph Martino of the U. S. Air Force and workshops on “Recognition Within the Profession,” “New User Concepts in Educational Technology” and a variety of other topics.

The April, 1971 Spring Issue of the Division Newsletter is the first one still in the Archives which used the ASEE Headquarters recommended dark orange block cover used by most divisions at the time and by the CES Division up through the June, 1975 Issue. Leslie Wilson from Addison-Wesley Publishing is shown as Editor. It was 11 pages in length and rather thoroughly covered the wide ranging activities of the Division.
The Board met in Annapolis, Maryland on June 21, 1971 at the ASEE Annual Meeting hosted by the US Naval Academy with Ed Cox of Dupont as the new Division Chair. Among several appointments made were Joe Biedenbach to serve as our Program Chair for the Annual ASEE Conference in 1972. The Division Bylaws were first adopted in June of 1968 and revised in June of 1970 and again in 1971. They were three pages long and much of its basic information is still contained in our Bylaws.

The Board met again on November 3 and 5 in Boston at the Division’s Annual Conference with 8 members and 6 guests attending. At this time the Division was using Section Representatives for each of the ASEE geographic Sections and they reported on their activities. The Division had a total of $2920.21 in its treasury and received a $500 Annual Budget from ASEE. At that time, ASEE did not use Division Dues as it does now.

1971 CES Conference – Boston, Massachusetts – November 3-5

Dean Griffith at the University of Texas – Austin was Program Chair. There were workshops on Budgeting and Finance of CES, Determining Educational Needs of Engineers, Program Evaluation and other topics. A timely keynote address was:

EXPANDING HORIZONS FOR CES
Israel Katz
Dean, Center for Continuing Education
Boston, Massachusetts 02115

You may feel that these are troubled times for continuing engineering studies; consider the temporarily depressed status of business and industry (especially those that are advanced technology based) and the stringency of funds for company-supported education that attends an economic squeeze. Engineering enrollments generally are feeling the pinch of the nation’s economic stress as well as the disenchantment with engineering by a segment of youth who no longer feel that engineering or the physical sciences provide enduring, socially constructive of satisfying career opportunities. Many people even blame engineering and automated industry and the invasion of privacy by computers.

Actually, these are great times for engineering! When reflecting on the options still open to mankind, it becomes clear that technology has a crucially important and
constructive role in shaping the future. For example, technology is a key factor in preventing famine and pestilence around the world as well as in the more effective utilization of the continental heartlands and arid areas that modern agriculture, rural electrification, desalination and transportation make possible. The efficacy of medicine has been extraordinarily amplified by new techniques in surgery and instrumentation that technology has helped implement. With the perfection of multiphasic diagnostic apparatus that unburdens them medical internists from routine examinations, adequate health care will be brought to most people on the planet. Moreover, automation has extended the productivity of factory workers and made available to the world’s masses a myriad of good and services that enhance the lifestyles of most people presently alive. In saying this, I do not claim that technology has been or will be the savior of the human race, nor do I intend to diminish the contribution of technology to the violence and destruction of war or pollution or our air, soil, rivers and oceans. I do maintain, however, it is man’s misuse of technology, and a lack of concern for the consequences of technology on the part of some engineers, businessmen and government officials, that contribute to the adverse aspects of technology.

With the foregoing in mind, then, the constructive uses of science and technology must become a top priority consideration for governments, industries, businesses, engineers and the public at large. Continuing engineering studies has a related role in the exchange of new knowledge among generators and users of technologies that will help bring about a new era of economic prosperity of unprecedented proportions in this country and around the world as well as enhance the image of the engineer.
The next Board Meeting was March 20-21 in Washington DC at ASEE Headquarters with 9 members attending. A report from Headquarters still indicated that NSF was receptive to the idea of a CEE goals study. An Ad Hoc Committee chaired by Dean Griffith was established to work on the proposal. In considering “new directions,” key issues concerned:

Are we involving as many members as possible?

Are we structured to adequately investigate and report on problems raised by our members?

Should we have additional committees?

Should existing committees be made to include more than a chairman?

Is one annual meeting in November enough?

Fall and Spring Newsletters were published. The Spring Issue asked if the scope of the Division should be broadened and stated the following:

The objective of the CES Division as stated in our bylaws is:

“To foster programs designed to assist the practicing engineer to maintain a high level of engineering competency by: stimulating awareness that engineering education is a continual learning process; providing incentives for educational institutions, professional societies, business and industries to create, improve, and support continuing education programs; and encouraging innovation and aiding in dissemination of information for and about continuing engineering studies; accomplishing this in full support of and in a manner with the purposes of the Society.”

Although this objective is quite wide in scope, our actual definition and practice of continuing engineering studies has been centered almost exclusively on non-degree-credit courses for the employed engineer. We now note a strong trend toward off-campus programs through TV and other media, more emphasis on individualized learning, the concept of the “university without walls,” and the blurring of lines between credit and non-credit continuing engineering education in many universities and industries. Therefore the Executive Committee feels that the Division should seriously consider widening its concerns and practices to include off-campus credit courses as part of an engineer’s career development program. The Division must, however, continue to be as concerned as it
has always been with non-credit courses to help the practitioner develop his competency.

It is the wish of the Officers and Board of Directors that the Division membership have an opportunity to discuss this matter fully at the June business meeting, and to hear more input from the Executive Committee. To this end, Chairman Kriegel has appointed a subcommittee chaired by Howard Shelton (Sandia Corporation, Albuquerque, New Mexico) to report in more detail at Lubbock. Members having thoughts on this matter are invited to communicate them to Mr. Shelton prior to the June meeting.

A new initiative using the Greek symbol for “PI” and standing for Personal Involvement was being pushed to make the Society more useful as an organization. The fall issue noted that the CES Division Chairman Monroe Kriegel would represent ASEE at the World Meeting on Continuing Education to be held in Helsinki, Finland on August 21-24, 1972.

1972-1973

The Board met next at the ASEE Annual Meeting at Texas Tech in Lubbock, Texas on June 19 with 14 attending and Monroe Kriegel from Oklahoma State as the new Chair. The Treasury balance was up to $4251.36 with conference income. Consideration of a name change for the division resulted in the decision to keep it as is.

The next Board meeting was November 1-2 in Denver, Colorado at the Annual Division Conference with 22 attending. A new publication of the Division came out: “Use of Instructional Technology in CES” by Joe Biedenbach

March 12-13 was the next board meeting in Washington, DC with 18 attending. The Treasury was now up to $6,846.32. Liaisons with ASTD and other technical societies were a key issue as well as setting some long-range goals to include:

- We have set up task forces but not tackled any new items.
- We need a catalog of CES people, a membership directory.
- The “handbook” was started but seems to be delayed.
- We need a mechanism for government agency interaction.
- Perhaps we should have a CES conference in Washington.
- How do we involve the Deans of engineering schools in CES?
- How do we get recognition and improved pay for CES faculty?
• How do we measure CES effort in the colleges?

• We need a sense of direction; what should we do in the next five years?

• What is the purpose of the June meeting? Is it a cooperative program with CES and other division? Should we have a program committee with a chairman and a vice-chairman so that continuity from one year to the next is carried out?

• Will CES accept the challenge and set the leadership in continuing education for all of industry, government, and the university?

• What should CES be doing now and what should we change?

1972 CES Conference – Denver, Colorado, November 1-3

Marion Smith at Ohio State was Program Chairman. Lindy Saline from General Electric gave one of the keynote addresses:

“CAREER-LONG LEARNING FOR ENGINEERS: PERSPECTIVES AND PROSPECTS”

Lindon E. Saline
Manager-Corporate Education Services
General Electric Company
Management Development Institute
Ossining, New York

The genesis of my remarks this morning is rooted in at least four propositions that to me are self-evident.

The first proposition is simply that career-long learning is now becoming a fact of life whether or not it is recognized as such by some individuals or organizations.

The second proposition is that continuing education is only a part of career-long learning and is distinct from degree- or curricula-oriented education. Nevertheless, I will tend to use continuing education and career-long learning interchangeable and will not dwell on what the totality of career-long learning includes. Within continuing education I include the entire array of courses, workshops, seminars, programs, and similar activities.
The third proposition is that continuing education deserves to be taken more seriously by individuals, employers, and educators.

The fourth proposition is that there are identifiable and worth-while challenges to meet within continuing education.

My approach to this subject is contained in the advertised subject of these remarks. First, I will focus on perspectives by which I mean how various aspects of continuing education can be viewed. Perspectives should not be confused with a factual report on “how it is” or with theoretical concepts. Rather, in describing perspectives we should take the opportunity to try to understand some of the various ways that a variety of forces might influence and/or interact in relationship to continuing education.

Then, after having looked at various perspectives of continuing education, we will look at the prospects for continuing education which have to do with the future outlook. Inherent in “prospect” are all of the dangers of prognostication.

Finally, as part of prospects, I’m going to offer some fairly crisp statements of challenges (that are also opportunities) for individuals, or employers, and for educators.
Ames, Iowa and the ASEE Annual Meeting at Iowa State University was the site of the next Board Meeting on June 25 with Chet Brisley of the University of Wisconsin as Division Chair and 13 attended. Duties and responsibilities of Section Representatives were established as:

**Name Change:** from Ces Section Chairman
   To CES Representative in the ASEE Section

**Duties:**

1. Essentially, liaison with the section. The eyes, ears and voice of CES in the section. A two-way communication.

2. Become acquainted with CES activities and needs in the section and report these to the CES board and planning committee.

3. Participate actively in section organization. Should be on board and/or program committee and see that CES appears on the program.

4. Plan to attend a minimum of three meetings a year – the CES annual meeting, the section meeting and ASEE annual conference.

5. Maintain close liaison with CES membership committee. Try to get new members into the ASEE and the CES Divisions.

**Length of Term:** Normal is two years. Appointed by the outgoing and incoming CES chairmen prior to the June, ASEE conference. The names of the appointees will be printed in the CES brochure, which is distributed at the ASEE annual conferences.

It was decided to print a new Membership Brochure and 1500 copies of the new Membership Directory with a copy to be mailed to each member.

The board next met on November in Atlanta at the CES Annual Conference with 17 attendees. The Treasurer stated a balance of $5,578.30. A total registration of 126 for the Atlanta meeting was reported and the registration fee was $45. Eleven of the twelve section representatives had attended their special meeting held at the conference and a very detailed report of their activities is attached to the Minutes.

Again, Fall and Spring Newsletters were published under a new Editor – Fred Burqwardt of Xerox Corporation. The Fall issue contained the following:
WHY CES? – A MESSAGE FROM THE MEMBERSHIP COMMITTEE

You cannot hope to keep abreast simply by reading the journals. Keeping abreast means being involved with others – accepting, rejecting, exchanging and sharing – ideas, information, ideals and knowledge.” Sound familiar and comfortable? It should, for in preaching the gospel of lifelong learning for engineers we have all used the same basic theme. But do we apply it to ourselves? Are we really involved with others in the field, accepting, rejecting, exchanging and sharing ideas, information ideals and knowledge or are we somehow imbued with a wealth of knowledge through some form of educational osmosis? How often do we examine what we do through the eyes of someone else and thereby add new dimensions to our work. And how often do we share our success with others so that they to may learn and succeed? This idea of learning with and from colleagues is continuing education at its best. We must believe it or we wouldn’t say it so frequently in our advertising, our news releases or our speeches at the local professional societies. But then, that message is for the other fellow – not us. Right? Wrong! We can’t afford to be like the obese doctor who wants all of his patients on a strict diet but neglects himself. If our prescription for lifelong learning is good for our “patients” then perhaps we should be prepared to take a good healthy dose ourselves. One of the best ways is through increased CES Division activity. If you have a better idea – share it with others. If you think the philosophy of the division should be changed – get involved and change it. If you think continuing education should take a new path, that the research should be expanded and improved, that meetings should have more “meat” – then get involved! Help set the goals, add to the research, contribute your wealth of knowledge to the meetings. Or perhaps you just want somewhere to turn to find some answers, to improve your own contribution to the engineering profession. Then get involved! The CES Division doesn’t have all of the answers; it hasn’t yet learned all of the questions. One thing is certain – the best answers for continuing education are going to come through continuing education; by accepting, rejecting, exchanging and sharing – ideas, information, ideals and knowledge.

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In July 1973, a conference was held in South Berwick, Maine on “Maintaining Professional and Technical Competence of the Older Engineer.” It was sponsored by the Engineering Foundation of New York City, the American Psychological Association and the Engineering Foundation for Professional Development. ASEE was also a supporter and published the papers from the conference. It was a solid contribution to understanding the issues and what industry, government and universities were doing and what they needed to be doing about this continuing challenge. The 246 page report is very worthy of review – even today.

The division published three Newsletters this year with the new winter issue being dedicated totally to section representative reports under special editor Bob Anderson –
then at Purdue University. Bob also covered the Illinois-Indiana Section, Morris Nicholson from Minnesota covered the North Midwest, Peter Chapman at Shell Oil the Southwest and Al Cassel at Livermore Labs the Pacific Southwest. The spring issue reported on the following:

39 MEET AT MIT ON MARCH 29 TO DISCUSS PACKAGED CES COURSES

Thirty-nine CES members came to a meeting at MIT to share information on the production and use of audio-visual packaged programs. In the February Newsletter, our group was called “The Packaged Video Tape Users/Producers Group.” Six committees reported progress, and a new committee was started.

Art Collias of the Massachusetts Institute of Technology, Center for Advanced Engineering Study, hosted this meeting. Art is secretary of the PVU/PG. John T. Fitch of MIT conducted a tour and lectured on the center’s video and film making facilities.

You Can Help: Here is a list of committee chairmen and the field that they are investigating. If you can help in any of these areas, contact the listed chairman, the secretary, or the general chairman – Albert K. Ackoff, Eastman Kodak Company, Engineering Division, Kodak Park, building 23, Rochester, New York 14650.

1. Are you now using readily available packaged audio-visual courses? If so, we want to know what they are and who distributes them so that we can compile a directory. Contact: Arthur J. Collias, MIT, Building 9-232, 77 Massachusetts Ave., Cambridge, MA 02139.

2. Have you produced a packaged video/film program for in-plant or in-the-university use but do not wish to offer it for general commercial distribution? If you would prefer to consider a swap, barter or exchange with others, we want to compile a catalog of programs available on an exchange basis. Contact: Robert B. McBride, Union Carbide Corporation, P. O. Box 8361, South Charleston, WV 25303.

3. Do you use programmed learning packaged courses in industry or college? If so, we want to know what they are, and who distributes them so that we can compile a PL directory. Contact: L. William Ledgerwood, Esso Production Research Company, P. O. Box 2189, Houston, TX, 77001.

4. Do you have ideas on how to elevate and review packaged programs? We want to develop a review format. Contact: Frederick C. Burgwardt, Xerox Corporation, Joseph C. Wilson Center for Technology, Webster, NY 14580.
5. Do you produce CES programs, and will you accept contracts to make them for others? Do you need a packaged program on a specific subject but do not know if anyone has produced it? We want to foster development of needed programs. Any ideas? Contact: Paul E. Brown, MIT, Building 9-221, CAES, Cambridge, MA 02139.

6. If you company conducts in-house courses, have you supplied a list of catalogs to our committee? We want to correlate and catalog company CES course offerings. Contact: Joseph Biedenbach, Milton S. Hershey Medical Center, Hershey, PA 17033

7. If a national center for CES packaged audio-visual programs were established, what would you want it to do? What services should it perform, what role should it play to help engineering educators in the university and the working engineer in government and industry? Contact: David K. Blythe, University of Kentucky, College of Engineering, Lexington, KY 40506 or Robert L. Craig, Applied Associates, 50 W. State Street, Westport, CT 06880

Come to the Next Meeting at RPI: The group will meet on Sunday, June 16 at Rensselaer Polytechnic Institute, Management Building, Room 104. The meeting will start at 4:00 p.m., recess for dinner at 6:00 p.m. and resume at 8:00 p.m. Come whenever you can. All committees will distribute reports at the RPI meeting.

It also reported on a special workshop as follows:

HIGHLIGHTS OF CES WORKSHOP – LUBBOCK

A workshop session conducted by J. Biedenbach the last morning of the Annual Meeting resulted in a spectrum of suggestions for CES activities, each deserving of follow-up. The following is Joe’s report:

After a lively discussion among 25 session participants the following action items were thought by the group to be appropriate for submission to the Executive Board of the CES Division of the ASEE.

- A survey of current in house programs for continuing engineering education conducted by industry should be taken and reported upon.

- A survey of what colleges and universities are doing in CES should be completed and reported on at the national meetings.

- An evaluation of “Who did” compared to “Who didn’t” participate in continuing education on a company basis should be attempted. Although this is a broad and difficult topic to get a handle on an analysis of this kind of data might give us some trends for future CES involvement from industry.
A contact with the National University Extension Association should be made and an offer of cooperation between the two groups might prove to be quite beneficial for both parties. It was felt the National University Extension Association has long been a leader in adult education in the United States and we should take advantage of their experience.

The possibility of receiving a federal grant to research the evaluation of the CES programs throughout the country should be attempted. Perhaps a university group would be willing to do the work and accept the grant, if the Continuing Engineering Studies Division of ASEE can stimulate the thinking and help with the proposal draft.

An exploration of industry decision-makers attitudes towards Continuing Engineering Studies should be made and published in the ASEE Journal or presented at one of our national meetings.

A list of the present programs available using instructional technology that are available for purchase should be tabulated by the CES group.

Individualized instruction techniques should be explored for possible CES formatting and perhaps presented in the form of papers at the annual meeting.

The CES group of ASEE should write a policy statement and recommendations for the necessity of CES involvement from an individual and industry standpoint. We should develop a position paper suggesting a minimum number of hours of CES necessary to maintain technical viability in the market-place per year.

Joseph M. Biedenbach
Director, CES Division

Our thanks to Joe for summarizing the highlights of this “Last Day” workshop. While they represent a number of new concepts and ideas—they will be of little future value to CES Division members unless someone “picks up the ball” and brings them to fruition. Perhaps several of them could be implemented through new Task Force efforts.

In the spring Issue, Chair Chet Brisley reported the following:

At the Lubbock, Texas Meeting, Joe Biedenbach as leader of a discussion involving twenty five people on the subject: “What Should CES Be Doing?” From that discussion came the following topics:

1. Need for more “Nuts and Bolts” information.
2. Determine the benefits of CES to the individual, company, professional society or governmental agency.
3. How much should be budgeted for CES by entrepreneurs, companies, professional societies, or government agencies.
4. Evaluation of techniques to determine worth of CES programs should be developed.
5. The CES Division should exert more leadership.
6. More information is needed on the use of instructional technology in CES programs.

1973 CES Conference – Atlanta Georgia – October 31 – November 1

Al Ingersoll from UCLA was Program Chair. Just to provide some perspective, the entire program was as follows:

ASEE CONTINUING ENGINEERING STUDIES DIVISION

Annual Conference – Atlanta, Georgia – October 31-November 2, 1973
Theme: Professional Renewal through Continuing Education

With primary emphasis on university and industrial resources, coordinated with programs and requirements of professional societies and state licensing boards.

WEDNESDAY, OCTOBER 31

4:00-8:00 p.m. Registration
2:00-6:00 p.m. Committee Meetings
2:00-5:00 p.m. An additional Feature
   “Continuing Education in Engineering Technology,” Presiding: Bill L. Cooper, Supervisor, Technology Extension, Oklahoma State University
   “The Role of Continuing Education in Engineering Technology,” Dr. Richard J. Ungrodt, Vice President for Academic Affairs, Milwaukee School of Engineering; and Chairman, Technical College Council, ASEE
Specific Programs of Technology Extension Leaders: R. F. Tanner, Coordinator of Industrial Services, Mississippi State University
B. L. Cooper Oklahoma State University
Organizing for Future Activities—A group discussion period.

This session is open to all interested persons.

8:00 p.m. “Cracker Barrel” Discussion, Presiding: George J. Maler, Associate Dean of Engineering, University of Colorado, Boulder

Provocateur from Industry: “Why I can’t Abide University Based CES Programs,” Joseph M. Biedenbach, Director, Educational Resources, The Milton S. Hershey Medical Center

Provocateur from Education: “Why I Can’t Abide Industry Based CES Programs,” Dean E. Griffith, Director, Continuing Engineering Studies, University of Texas

Interactive Free-For-All

Free: Cheese & Crackers, Beer & Pretzels—Also Cash Bar

THURSDAY, NOVEMBER 1

7:30 a.m. First Timer’ Breakfast – Newcomers, Officers & Directors of CES Division

8:00-9:00 a.m. Coffee and Danish

MORNING SESSION

Presiding: Monroe Kriegel, Director, Engineering Extension, Oklahoma State University; and Chairman, Council for Graduate and Continuing Education, ASEE

9:00 a.m. Welcome to Atlanta and Georgia Tech, Dean T. E. Stelson, College of Engineering, Georgia Tech

Welcome to the Conference, Howard R. Shelton, Supervisor, Science & Engineering,
Education Division, Sandia Laboratories; and Chairman, CES Division

9:20 a.m. Presidential Address: “The University as a Resource for the Professional Engineering Society,” John C. Calhoun, Jr., Vice President for Academic Affairs, Texas A&M University; and President, ASEE

9:45 a.m. Coffee and Conversation

10:15 a.m. Session Theme: “The Role of the Professional Engineering Society in Continuing Engineering Studies.”

For Institute of Electrical and Electronics Engineers: Robert M. Saunders, Dean of Engineering, University of California, Irvine

For American Society of Mechanical Engineers: Rogers Finch, Executive Director, ASME

For American Institute of Mining, Metallurgical and Petroleum Engineers: Claude R. Hocott, Esso Production Research Company

12:15 p.m. LUNCHEON SESSION

Presiding: Charles Vail, Associate Dean, College of Engineering Georgia Tech

“The Universities and Technical Societies in Continuing Engineering Studies,” Joseph M. Pettit, President, Georgia Tech

2:00 p.m. AFTERNOON SESSION

Presiding: Joseph M. Biedenbach, Director, Educational Resources, The Milton S. Hershey Medical Center, Pennsylvania State University

WORKSHOPS-THE NUTS AND BOLTS OF CONTINUING ENGINEERING STUDIES
Note: Each workshop topic is presented once before the afternoon break, and once after, with different leaders and resource people.

Topic 1: Evaluation Techniques to Determine Worth of CES Programs, Leader: Dean E. Griffith, Director, Continuing Engineering Studies, University of Texas; Resource Person: Lois B. Greenfield, Associate Professor, University of Wisconsin


Topic 3: The Continuing Education Unit—Future of the CEU Leader: Paul J. Grogan, Professor of Engineering, University of Wisconsin, Resource Person: Minor C. Hawk, Assistant Dean of Engineering, University of Pittsburgh

Topic 4: Use of Instructional Technology in CES Programs Leader: Charles L. Townsend, Professor, Continuing Education Iowa State University, Resource Person: L. W. Ledgerwood, Jr., Production Technical Training Coordinator, Esso Production Research Company

Topic 5: “Nuts and Bolts” Ideas on How to Run CES Programs Leader: Bobby E. Price, Chairman, Continuing Engineering Education Advisory Committee, Louisiana Tech University; Resource Person: Paul A. Burns, Director, Division of Continuing Engineering Studies, Newark College of Engineering

Topic 7: Goal-Oriented CES Programs, Leader: Joseph Movshin, Director, Office of Continuing Professional Education, Washington University; Resource Person: Dr. Dean Taylor, Jr., Navy Department Joint Chief of Staff

3:30 p.m. Refreshment Break

4:00 p.m. Topic 1A (Evaluation Techniques): Leader: Dr. Jack Barnette, Assistant Professor, Educational Psychology, Penn State University; Resource Person L. J. Phillips, Director Division of Continuing Engineering Education, Texas Tech University


Topic 4A (Instructional Technology): Leader: Morris E. Nicholson, Director, Continuing Education, University of Minnesota, Resource Person: David K. Blythe, Associate Dean, Engineering, University of Kentucky

Topic 5A (“Nuts and Bolts”): Leader: Frederick H. Roever, Specialist, Engineering Personnel Administrator, McDonnel Aircraft Company, Resource Person: Dr. Anton Brasunas, Director St. Louis Graduate Engineering Center, University of Missouri-Rolla

Topic 6A (Industry): Leader: Herbert Lee Antzes, Manager, Engineering and Technical Education, Postal Service Training and Development Institute
5:30 p.m. Adjourn

Dinner arrangements are left for the individual's choice.

7:00-10:00 p.m. Meeting of Executive Board: Howard R. Shelton, Chairman, CES Division, Presiding

FRIDAY, NOVEMBER 2

8:00 a.m. Coffee and Danish

MORNING SESSION

Presiding: Alfred C. Ingersoll, Director Continuing Education in Engineering and Mathematics, UCLA

8:30 a.m. Annual Business Meeting, Howard R. Shelton, Chairman, CES Division

9:15 a.m. Session Theme: “Continuing Education for Professional Renewal”

“The AMA Physician’s Recognition Award-A System for Documenting the Physician’s Participation in Continuing Medical Education, Clarke W. Mangun, Jr., M.D., Assistant Director, Continuing Medical Education, American Medical Association

“Continuing Legal Education: Method of Operation in the American Bar Association,” Willard Bushman, Chief of Training, National Center for State Courts, Denver, Colorado; and President, Association of Continuing Legal Education Administrators

10:15 a.m. Coffee and Conversation
10:45 a.m. “Continuing Engineering Education for Professional Development” C. Allen Wortley, F. ASCE, Warzyn Engineers, Madison, Wisconsin; and Chairman, Committee on Continuing Education, American Society of Civil Engineers

11:30 a.m. Discussion

12:15 p.m. WRAP-UP LUNCHEON

Presiding: John R. Van Horn, Manager, Education and Training, Westinghouse Electric Corporation

“Maintaining Professional Vitality,” Michael H. Mescon, Chairman, Department of Management, Georgia State University

2:00 p.m. ADJOURN
The Board met again on March 26-27 in Cambridge, Massachusetts. The subject of paying travel expenses to meetings was reviewed at length and decided that the individual’s organization would have to cover those costs. Most interestingly, sites for the proposed 10th Division Conference in February of 1975 were discussed. It was later decided to not hold this meeting but instead join with other ASEE Divisions to form what has become the CIEC Meeting.

One of our most significant Division Publications ever was published with the usual ASEE Copyright on March 5, 1975. Entitled: Engineers Involved in Continuing Education: A Survey Analysis by John Klus and Judy Jones of the University of Wisconsin – Madison. The monograph reported the results of their survey done in March 1974 of engineers participating in University of Wisconsin – Extension programs. A total of 257 questionnaires were returned and many of us used the results for many years. Our Division did similar studies and published monographs for 1986-87, 1987-88, 1988-89 and 1989-90. Lloyd Dennington, first at Purdue University and then at the University of Denver was the primary author of the report and did most of the survey work.

1974 CES Meeting – October 30 – March 1 in San Francisco

This was the Ninth and last separate annual CES Conference before starting up CIEC. The Proceedings were printed in larger (8 ½ x 11) format, ran 74 pages and speaker photos were included for the first time. Bill Wuerger from the University of Wisconsin – Extension was the Editor and Don Miller from IBM made all local arrangements and John Klus from the University of Wisconsin was Program Chairman. The program was as follows:
Program
1974
ASEE Continuing Engineering Studies Division
Annual Conference - San Francisco, California -- October 30 - November 1, 1974
Theme: Looking Ahead the Next Ten Years

Wednesday, October 30
8:00 A.M.-7:00 P.M. Registration
9:00-12:00 noon Special Interest Group Meetings
1:00-3:30 P.M. CES Section Representatives Meeting
2:00-5:00 Continuing Engineering Technology Education - 1974
Moderators: Richard J. Umsgard
Milwaukee School of Engineering
Speakers: L. D. Chipman
Western Electric Co.
M. R. Koch
Oklahoma State University
Frank K. Eells
Sheppard Air Force Base
3:30-6:00 Standing and Ad Hoc Committee Meetings: Long Range Planning, 1974 Annual Meeting, Membership Task Force and others
6:00 Social Hour
7:00 Traditional Japanese Banquet
8:00 Entertainment - classical oriental music & art forms

Thursday, October 31
7:30 A.M. First Timers' Breakfast - Newcomers, Officers, and Directors of CES Division
8:00-9:00 Good Morning Coffee
9:00 Welcome
John R. Von Horst, Westinghouse Electric Company; and Chairman CES Division and
Lee Harrisberger, The University of Texas of the Permian Basin; and President-Elect ASEE
9:10 Remote Address
9:45 Coffee and Conversation
10:15 What will be happening in CES in 1978
Industry Scenario:
Donald Hammond
Mawley-Puckard Co.
Education Scenario:
Robert M. Anderson Jr.
Purdue University
12:15 P.M. Luncheon Session
Edward Teller
Lawrence Livermore Laboratory
2:00-3:30 Afternoon Session A
Workshop: How to Get From 1974 to 1978
Panel Leader: Joseph M. Liben
University of South Carolina
Panel Members:
William M. O'Brien, Jr.
Princeton University
Robert Koch
Illinois Bell Telephone Co.
Russell E. O'Neill
U.C.L.A.
Topic: Establishing CES Program Behavioral Objectives
Expert: A. R. Hamilton
The University of Calgary
Expert: Chester L. Bruley
University of Wisconsin - Extension
Topic: Planning Short Courses
Expert: Tom R. Hincher
University of Wisconsin, U.C.L.A.
Topic: Publishing Films As a Source of Program Ideas and Materials
Expert: Robert E. Paul
John Wiley and Sons, Inc.
Expert: Donald O. French
Northeastern University
Topic: Establishing Program Fees
Expert: George H. Moore
IBM Corporation
Topic: Establishing Mailing Lists
Expert: William W. Long
University of Wisconsin - Extension
Expert: Dean E. Griffith
The University of Texas at Austin
Lois B. Greenfield
University of Wisconsin-Madison
Topic: Evaluating Programs
Expert: Joseph Moshkin
Washington University
Topic: Motivation
Expert: Donald E. Miller
IBM Corporation
3:30-4:00 Refreshments and Conversation
Many of the features still being used included SIG Meetings and a First Timer’s Session. Other special features were the availability of individual consultation sessions with a wide variety of experts and a unique purple Japanese symbol logo was used with
special stickers for your luggage sent when you pre-registered. This was an outstanding meeting and the first one attended by this writer who was then at Wayne State University in Detroit. Those who attended were still raving about the Myakko Hotel and the meeting content for many years afterwards.

1974-1975

The Board met at the ASEE Annual Conference at Rensselaer Polytechnic Institute in Troy, New York on June 10 and was chaired by John Van Horn from Westinghouse with 26 attendees. The Treasury Balance was $4185.73. It was noted that this was the first time that both outgoing and incoming Boards met together. Morris Nicholson from Minnesota was appointed Program Chair for the 1975 CES Meeting (which was never held). He instead served us as our Division’s Program Chair for the first CIEC meeting in 1976. Special interest groups (SIG’s) on Registration and Certification; Packaged Video, Film and Programmed Instruction; and Television reported. Work continued on long range planning, the development of CEU and the spring CES Annual Conference. Meeting minutes and attachments had by now grown to about 60 to 80 pages and needed their own folder in our Archives.

An NSF Grant made it possible to hold a special “Workshop on Continuing Education for Engineers at Midcareer” on August 21-22 at the Dallas-Fort Worth Airport with 67 participants. Lionel Baldwin then Dean of Engineering at Colorado State and later founder and President of NTU – National Technological University was one of four co-directors. The main attendees were those then operating instructional TV systems and the workshop objectives were as follows:

To devise a plan to meet these needs in several representative regions of the United States.

To explore a sharing of resources for instructional program development, evaluation, marketing and financing.

To produce a state-of-the-art report summarizing the discussion papers outlined below and the critical evaluation of participants from both universities and industry who represent many regions.

The paperback Proceedings contain all the key speeches, detailed reports from 25 universities and systems such as Tager in Dallas and notes from discussion groups. The foresight and leadership are obvious in the contents of this most valuable report. Continuing efforts from the workshop led to the founding of AMCEE – Association for Media Based Continuing Education for Engineers.

The Board next met on October 29 and November 1 at the Fall Conference (over 250 attendees) at the Myako Hotel in San Francisco. There were 15 items on
the agenda covering the Division’s wide scope of projects and activities. There were 23 attendees at the Board Meeting including Bob Anderson then of Purdue, John Klus from Wisconsin and then young Chuck Elliott, Extension Program Coordinator at Wayne State University in Detroit, attended for the first time. Joe Biedenbach, then at the University of South Carolina who was General Conference Chair reported on the upcoming CIEC-College Industry Education Conference which would replace the CES Annual Conference and one held by RWI-Relations with Industry Division (now known as CIP – College Industry Partners). The other three groups were the Cooperative Education Division, Engineering Technology Division and the Technical College Council. It was at this meeting that the idea to have an International Conference in Mexico City was born.

A projected cash flow budget of $35,185 for the Division was approved with $14,000 for the fall conference.

Division objectives for the year were as follows:
1974-75 CES DIVISION OBJECTIVES

CES Division Purpose

"...To assist the practicing engineer in maintaining a high level of engineering competency."

CES Division Accomplishes Purpose By

1. Making engineer aware that engineering is a continuing and life-long learning process.
2. Encouraging appropriate educational institutions, professional societies, and business and industries to develop and support continuing educational programs for the practicing engineer, and
3. Fostering new approaches and activities in continuing engineering education.

1974-75 CES Division Objectives

I. Make the engineer aware that engineering education is a continuing and life-long learning process.

Griffith
1. Determine status and potential for funding of goals of CES National Study. Revise or amend proposal as required.

Cobb
2. Provide the engineer, through STCRAC, current information on recertification and/or relicensing and registration requirements as they relate to continuing education in the profession and in engineering education, in particular, with analysis of future trends.

II. Encourage appropriate institutions, professional societies, government, business and industries to develop and support continuing engineering studies for the practicing engineer.

A. Maintain and extend membership of CES Division.

1. Increase participation, and, in particular, industrial participation from 18% (Don Miller) to 25%, thru Membership Committee activities.

Miller
a. Learn why people join ASEE-CES
b. Conduct activities designed to increase membership
c. Determine whether membership members are sensitive to promotional activity and changes in services
d. Understand the nature of our membership
e. Publish new membership brochure for aggressive membership solicitation.

Miller
Anderson
(Reconcile with 1 E)
2. Increase interest in and participation in, CES and CES Division through Section Representatives

- Providing names for membership solicitation
- Bringing CES to sections, by gaining appointment of CES Representatives to all 12 Section Executive Boards, and by all section representatives having a CES program at their 1974-75 Section meeting.
- Input to 1974-75 Newsletter from each section representative.

B. Establish Honors & Awards Committee and develop CES "Man of the Year Award" for presentation at ASHE Annual Meeting to recognize outstanding contributions to field.

C. Establish task force -- provide objective evaluation of CEU Unit (representing pros and cons, "users" and "producers") for presentation at June meeting with publications following.

D. Publish 4 Newsletters per year, 2 devoted to Section activities.

E. Publish updated CES Brochure.

III. Foster new approaches and activities in continuing engineering education.

A. Obtain increased funding from ASHE Headquarters and use net income from CES Division activities, such as Annual Meetings and from Publications to help finance CES Division activities designed to increase membership involvement in CES Activities, strengthening service to CES Division members and initiating new ventures in support of Division objectives.

B. Publish at least 3 of following documents:

1. "Pilot Survey of Programmed Instructional Materials" (Ledgerwood)
2. "Cost Effectiveness of Continuing Engineering Studies by Television" (Morris)
3. Publish CES Handbook
4. Other candidates to be recommended by Publications Committee (with input from Task Force Committee, etc.)

C. Submit proposal and obtain funding for National Center for National Center for Packaged Continuing Engineering Education.
Lionel Baldwin also played a key role as one of the four Deans of Engineering in Colorado when they published in January a most interesting report on *Engineering Education in Colorado*. A significant section covered continuing education and public service.

A major activity of the Division at this time was assisting Al Morris in a study on Return on Investment in Continuing Education which was later published and sold by the Division through Joe Biedenbach and ASEE Headquarters.

The Board met on March 10-11 at the Grammercy Hotel in Washington DC with 19 attendees. A Task Force was appointed to prepare a white paper on the CEU. Progress on the first CES Handbook was reported and up to $2000 was allocated for this. Joe Biedenbach and Fred Burgwardt were the editors. A proposal to NSF to support a National Center for Packaged Learning Programs was being developed. Cooperation with ASTD – American Society for Training and Development was suggested and is to be pursued. It was reported that five members visited Mexico City to meet with UPADI – a consortium of Latin American Engineers. Those efforts led to their later hosting the First World Conference on Continuing Engineering Education. Four issues of the Newsletter were published – fall, winter, spring and summer, including detailed section representative reports and constant updating of the members on the many Division activities.
In the summer of 1975 one of ASEE’s regular summer faculty workshops sponsored jointly by NASA – National Aeronautics and Space Administration was held at the Ames Research Labs. Among the 19 Faculty Fellows there were Bob Anderson from Purdue and Joe Easley from the University of Michigan who edited their final report entitled: Engineering Education and a Lifetime of Learning. This 215 page monograph includes sections on trends in engineering education and a brief section on continuing education as follows:

After Career Entry

1. Continuing Education

a. Professional Development

Courses and programs for the continued professional development of the practicing engineer often are available on a haphazard basis. A greater variety of subjects coupled with more and better delivery modes are needed. Most important, all this material needs to be catalogued, categorized, and advertised so that individual engineers or companies can know what is available and can plan the best way to integrate it into their own plans. These courses and programs in continuing engineering education should have one or more of the following objectives:

(1) Help the practicing engineer improve his competence in his primary field.
(2) Help him gain competence in closely related fields either to broaden his competence or to evolve in new directions.
(3) Help him move to a new field (career change).
(4) Be broadly available geographically.
(5) Be reasonably price.

Lifetime learning activities should achieve a prestige comparable with pre-career learning by moving from a remedial status to a primary activity in our society.

b. Personal Development

In striving to produce engineers of high technical competence who have the breadth of vision and understanding to care about and deal effectively with the problems of modern society, we must not overlook that the engineer needs to develop in ways that are separate from, through inextricably linked to, his professional life.
This kind of personal development is usually carried on in a random fashion with little continuity or coherence. The longing for personal growth, self-fulfillment, and self-development is the capstone of all man’s needs and symbolizes his desire to realize the full range of his individual potential as a human being.

This is uncharted territory. In the future, engineers should give more attention to this aspect of their lives. Employers should be willing to give equal status to personal development explorations as they do to increase technical training. This need not be viewed as an entirely charitable act, since there is growing belief that personal development can have professional payoffs.

It also includes a lengthy, informative appendix on “recurrent Lifelong Education” with several ideas and suggestions which are still viable today!

The Board met three times this year under new chair Iz Katz from Northeastern University - on June 19 as the ASEE Annual Meeting at Colorado State in Ft. Collins, on January 13 at the first ever CIEC Meeting in Orlando and on April 8 at ASEE Headquarters in Washington, DC. The minutes, reports and attachments were again voluminous. The outgoing board also met at the beginning of the ASEE Conference on June 16. It is especially interesting to note that two leaders had to resign their positions within the Division due to lack of funding support – one from a major industry and another from a major university! The Agenda’s could in most respects parallel today’s, with overall conference planning, honors and awards, SIG’s, Long Range Planning, the Newsletter and finances taking up much of the meetings. Some differences – continued work by the CEU Task Force which published its White paper and continued discussion on cooperation with ASTD. The Treasury balance stood at $5432.58.

The Board approved the following recommendations regarding the CEU:

1. The CES Division should oppose the adoption of the CEU, as presently defined by the National Task Force on CEUs, as a standard for measuring individual continuing educational attainment.

   Because the CEU is based on contact hours rather than on the basis of achievement or competence, the quality dimension must be addressed before the CEU can be of any significant value.

2. The CES division should form a task force to study:
   - The need for a non-traditional educational accounting systems.
   - The development of new criteria for awarding the CEU in the context of competency-based education.
The merits of other approaches such as the American Council of Education (ACE) project.

Because the CES Division represents a major force in the engineering profession and should adopt a professional stance in relation to the CEU. The fact that use of CEU’s is growing cannot be ignored—if CEU’s are to be with us, the CES Division must assume an active and responsible role in the direction CEU’s will take.

3. The CES Division should actively oppose the use of CEU’s (as constituted) as a condition for licensing or relicensing.

Because the CEU is not an indicator of engineering proficiency or competency. Attendance at CEU courses would not verify maintenance of engineering skills, knowledge, and application.

4. The CES Division should coordinate its actions relating to the CEU with other major professional societies such as the American Society for Training and Development (ASTD), Engineers Council for Professional Development (ECPD), The Institute of Electrical and Electronics Engineers, Inc. (IEEE), etc. because the major forces in adult continuing education should present a united front and a substantial influence concerning any action to adopt the CEU as a national standard of recognition for continuing education.

The Newsletter was published four times - once each season. The fall issue discontinued the brown front page of ASEE and began a simple white cover format. Bob Andrews and Al Cassel continued to share the leadership with each doing two issues.

The spring issue lists several research items (reported by John Klus) and a bibliography on career management which was part of a 35 page Annotated Bibliography prepared by Don Miller at IBM – San Jose.

But without a doubt, the highlight of the year was the first CIEC Meeting in Orlando. The 456 page Proceedings are still worth a look, edited by Joe Biedenbach and Larry Grayson who would continue to do so for many years – they reflect that we had folks who wrote more (and longer) in those days. Motivation of Engineers to continue their education was a major topic along with video and self-study, professional society roles, reports on several surveys, career development and professional registration. It was the writer’s privilege to organize and chair a session in which Charles Weaver – Vice President for Continuing Education at the University of Tennessee gave a splendid “views of the current scene.” Morris Nicholson organized a most comprehensive and informative program and having access to other divisions and their issues and concerns broadened one’s perspective a great deal. These brief notes can not do justice to what went on at this meeting in which General Chair Joe Biedenbach laid the foundation for what continues to this day.
The Board met three times this year under new Chair Joe Biedenbach from the University of South Carolina – on June 16 at the ASEE Annual meeting at the University of Tennessee in Knoxville, on January 21 at the CIEC Meeting in San Antonio, and on May 12-13 at the Bell Systems Center for Technical Education in Lisle, Illinois and hosted by Chuck Sener. That meeting was truly one of the best this writer ever had the privilege of attending and also offered an in-depth look at their relatively new residential training center. Lois Greenfield from the University of Wisconsin was leading our efforts to work with the ERM – Educational Research and Methods Division of ASEE to conduct Effective Teaching Institutes. The Evaluation of learning was and continues to be a significant issue. The June meeting was primarily a special brainstorming session which produced the following:

With the group in a brainstorming mode (ideas only—no evaluation of ideas), the following activities were suggested as being related to potentially worthwhile goals for the division.

1. Identify people really interested in CES by checking the membership list for those persons who listed code 15 (CES) as their major interest.

2. Get more members from industry actively involved in CES activities.

3. Develop “Industry Activity Coordinators” (ASEE has Campus Activity Coordinators). Perhaps solicit help from RWI in this regard.

4. Redesign or reaffirm the role of Section Representative: give increased help and support to the Section Representative.

5. Spend more time on research on what is being done in continuing education; spend less time on organizational matters.

6. Provide professional development for CES people with emphasis on effective adult education/learning techniques; seek faculty involvement.

7. Show interested people how to start and structure a CES course to meet adult education learning parameters.

8. Develop ethical guidelines for CES activities that can be used to discourage CES vendors (university, business, etc.) whose practices may give CES type activities a bad name.

9. Broaden and strengthen the relationship between the CES Division and professional and technical societies that offer CES packages or activities.
10 Increase the useful and relevant services offered to CES Division members by the Division.

11 Develop and offer information on how to market CES activities or packages.

12 Offer seminars (workshops) on various CES topics in conjunction with the Annual ASSEE meeting or the January College-Industry Conference.

13 Develop sources of reliable information on career planning and give this information to the membership.

14 Form a consortia of instructors from academic institutions, industry, and government to provide CES programs for institutions who have CES education "needs" but no faculty to provide programs locally.

15 Define the CES division’s role in the development of CES courses by consortia.

16 Serve as market consultants for packaged video programs (AMCEE).

17 Study CES instruction costs as a function of the kind of activity developed and programmed.

18 Determine the minimum acceptable quality for packaged CES (video) programs for adults.

19 Develop guidelines for basing CES on adult learning characteristics.

20 Explore the interrelationship of Organization/tuition/costs/quality of CES.

21 Assist in sorting of the type and kind of course material to be given in a CES activity and encourage only that type of course material that is really needed by the practicing engineer.

22 Define the CES clientele; who are they; what quality programs do they need; is program technical content of production quality (video) more important?

23 Get more new member participation.

24 Determine the most productive way to use available CES Division manpower.
25 Sponsor a plenary session on adult education (as continuing – life long education) at an annual ASEE meeting.

26 Sponsor a special issue of Engineering Education that deals with adult education, career planning, continuing education, etc.

27 Develop programs that give more information to the membership (i.e. share mistakes, what doesn’t work, what does, etc.)

28 Strive for more effective inter-society affiliation with various engineering groups.

29 Work toward improved professional attitude—self critique and sharing of mistakes.

30 Return to the use of “cracker barrel” (brainstorming) sessions at Division meetings.

31 Prepare a statement of how CES Directors implement their goals and objective.

32 Prepare a statement of the goals and objectives of the CES Director.

33 Support and encourage existing and new special interest groups.

What should the CES Division Do in the Next Twelve Months?

The Chairman and the assembled group evaluated the foregoing activities and selected those on which they felt the Division’s resources should be concentrated during the next 12 months. The result was three first order activities and five second order activities. The first order activities are:

1. Conduct a CES workshop just before or just after the annual ASEE meeting. Use the general format used by the ERM’s National Effective Teaching Institutes. Workshop to deal with, among other things, adult education/learning principles and how to develop, market, conduct, and evaluate CES activities. (Chuck Sener will do one; Lois Greenfield and Dean Griffin looking at another; Alden Jones is formatting a third.)

2. Seek to foster the professional development of CES practitioners (growth in adult education/learning principles).

3. Reinstitute the “cracker barrel” session at CES Division meetings. (Lee Phillips is initiating this for the San Antonio Conference.)
The second order activities selected by the group are as follows:

1. Redefine or reaffirm the role of the Section Representative and develop means of supporting the Section Representatives in their work.

2. Increase communication within the Division through more effective use of new or old publication. Perhaps make the CES division Newsletter into something like the ERM Magazine – communicate examples of CES implementation – publish meeting papers and send to member.

3. Develop ways to attract and involve more new members.

4. Present a plenary session on adult education at the Annual ASEE Meeting next year; then build on that with two other CES sessions at the following annual ASEE meeting.

5. Update the CES Division Directory, and develop a list of ASEE members whose primary interest is CES (code 15). (Stan Greenwald and Joe Biedenbach are going ahead with this.)
Joe Biedenbach also sent the board a series of provocative “Thought Starters” prior to the meeting as follows:

LOCAL SECTION REPRESENTATIVES ACTIVITIES

Some of the sections meetings that I have attended around the country in the past have not been organized and run in what I consider to be the best adult education format. In the CES Division we have the expertise to help the volunteer section chairman who are responsible for these meeting to have “Better Programs” for the ASEE membership in general. Perhaps the local CES Directors and a team of people who would act as advisers could help develop program formats which would encourage more participation by members of the section.

Making them a member of the Division Executive Board, with or without a vote. That would add stature to the position and also make it easier to get travel funds from their employer. If we are concerned that they are not “elected” to such a position, we could elect them at Section “meetings” held at each CES annual meeting. I’d like to have such a meeting of my section at San Antonio anyway.

Getting headquarters to provide mailing labels (3-4 sets per year) of the CES members in their Section for the Section Rep’s use.

Supporting Section meetings possibly as you’ve suggested by setting up “expert” teams or at least with some token financing to allow you (or others) to come to my section meeting next year to run a session (or two).

Developing a more clear statement of what the Division expects of its Section Reps.

Having the Division Chairman each year write the “boss” of our Representatives who function well (and with their knowledge) letting him or her know of their contributions to CES. You know how the academic reward game (and corporate too) runs!

Perhaps present a small award each year to the most active and successful (?) Section Rep.

WORKSHOPS FOR IMPROVING OURSELVES

We need to devise training for our own members which exemplifies all the good aspects of continuing education. As I see it this idea is
close to your #1 except that I envision a minimum of 3 days. I’d really like us to offer something real value to the member willing to pay and take time.

Workshops – It might be a good idea for us to have workshops on various phases of the continuing education directors work at institutions or industry. We ought to continue our own continuing education and develop a much more professional group of people who are responsible for adult learning experiences. Could we put together a team of people who could give workshops on the various sections throughout the country preceding, following or during the annual local section meetings? Is this a desirable activity for us to participate in?

Set up a joint CES-ERM working committee charged to develop workshops, recommend reading lists, etc. on how to incorporate the latest educational technology into CES programs, courses, and activities.

SERVICE TO OTHER DIVISIONS IN ASEE

I feel the classical pattern of meetings of professional societies is not competitive anymore and additionally, I feel much of the time we end up talking to ourselves. We need to find a way to infuse new content and new processes of getting together. An example of both was the Career Workshop we held in the Bay Area with several societies working together.

Tailor a “new approaches” workshop to CES needs (one to two days) and hold it in connection with an annual CES or national ASEE meeting.

What are some of the services CES division members could give to ASEE in general throughout the country? Are there any activities that we could participate in and develop that would help the sections of ASEE be more productive to the membership?

PUBLICATIONS ACTIVITIES

Publications – I believe we ought to help contribute to the development of publications in the adult education area. The CES division has many people in it who are experts in particular aspects of adult education programs. Could we share this expertise by providing monographs, books, and so forth on various aspects of continuing education for the technical person working in industry. I
believe we have a wealth of talent and all we have to do is kind of organize it so that we can get more participation.

Provide the engineer each year with an accurate statement of the extent to which registration and licensing in the professions in general depend upon continuing study, and with an analysis of the probable future trends as regards engineers in particular.

Every 3-5 years, provide engineers in each major disciplinary or technology area with a statement of what is new in his area and of instructional packages he can use or steps he can take to acquire this new knowledge.

Locate and publicize case histories (anonymously) of engineers who did and did not avail themselves of CES.

Publications are another good possibility. I would prefer to see articles put together frequently in a special, low cost but readable publication rather than in the Newsletter. We should inexpensively but definitely publish the CES—related articles from each June’s annual meeting.

OTHER PROFESSIONAL SOCIETY AFFILIATIONS

Encouraging appropriate education institution, professional societies, government, business, and industries to develop and support continuing engineering studies for the practicing engineer.

A. Develop some sort of a guideline as to how many hours per year of CES an engineer should be expected to obtain and industry should be expected to support (these many not necessarily be the same number). (The 1969 NSF Survey of R & D labs made a stab at getting this number for R & D work.) Once a reasonable number (or numbers) has been established, develop ways to gain industry and government support for the guideline(s).

B. Establish the CES Division as the umbrella organization to coordinate the activities of the individuals or organizations, within each professional or technical society, that are charged with the responsibility for continuing education within their own society. If this goal could be accomplished, then a number of subordinate goal possibilities open up:

1. Compile a master list of CES materials available from all societies, and distribute.
2. Locate areas where additional CES materials are needed and act as a catalyst to effect the merger of the necessary resources and talent to develop these materials.

3. Develop and get acceptance for a general code of ethics for CES practitioners.

4. Develop a policy for fees paid to instructors when their materials will be used over and over in some form of packaged instruction.

5. Represent CES national interests in matters of copy-right policy as that policy affects the use of printed and non-printed materials in the preparation of packaged instruction. (Congress is wrestling with this problem now.)

C. Act as the advocate for the Continuing Education Unit and effect its adoption by universities, professional and technical societies, and industry as a commonly accepted measure of continuing education.

PACKAGE CES LEARNING ACTIVITIES

Establish a continuing means to identify, abstract, and where possible obtain user-evaluations of all types of “packaged” instruction materials available that can be used by engineers or companies to implement CES. (Packaged instruction includes programmed instruction, audio tapes, video tapes, movies—i.e. anything other than live instruction, which once put together will not change, and hence can be evaluated.) Obviously, a part of this goal must be to distribute and continuously update an indexed compilation of these aids and their sources.

CES MEMBERSHIP ACTIVITIES

We've got to attract new talent. I feel CES is almost a one-horse show. When a few of us disappear what have we got?

As of November, 1976, Division membership totaled 1095— a gain of ten from the same period in 1975. Consideration of a change in the name of the Division received much review but a consensus for change could not be found among the six options to consider as follows:

Prepared by- By-Laws Committee

I. Continuing Engineering Studies Division
II. Professional Development Division
III. Engineering Career Education & Planning Division (ECEP)
IV. Continuing Professional Development Division
V. Continuing Professional Education Division
VI. Continuing Engineering Education Division

A list of 25 issues/concerns was generated at the January meeting for Chuck Sener to take to the CIEC leadership for future meeting consideration.

ASEE had just adopted a new policy allowing Divisions to change dues for the first time. This was considered but no decision reached.
Publications were proposed as follows:

Chairman Biedenbach advised the board that Bell Laboratories has given the CES Division the copyright on a Bell Lab report dealing with the evaluation of learning packages. Barbara Bowers who was instrumental in the preparation of this report for Bell has also agreed to write an introductory chapter describing the report and its usage. The question was raised does the CES Division want to risk capital into the publishing and sale of this report? After some discussion the Board approved the printing of 250 copies of this report to be offered for sale at a nominal cost of from $5 to $10 per copy.

Bell Labs has also offered the CES Division the copyright on another Bell Labs report dealing with Data Collection. This report is essentially a “how to” report regarding the collection of data from sample populations; its main technology is essentially sociological technology. The Board decided the CES Division did not want to risk venture capital in the printing and sale of this report and decided to refer it to the ASEE Publications committee for further handling.

The question was raised as to what other organizations may have publications that they themselves do not want to market but are willing to let some non-profit organization such as the CES Division market. There was brief discussion on this matter but no action was taken.

Joe Biedenbach asked the question would schools pay to have their yearly continuing education program put in a “Yellow Pages” catalog so that purchasers of such a catalog would have before them the annual continuing education program of a large group of schools? After some discussion, it was decided that because of, among other things, the adverse experience with “Learning Resources” that this probably would not be a worthwhile venture.

The issue was raised of whether or not the publication of an annual monograph of 40 to 50 articles on continuing education would be a salable item that would be marketed by the CES Division. The group seemed to think that this might have some potential. The Publications Committee was instructed to come up with a cost estimate for such a publication and to present that cost estimate at the June Board meeting for further consideration.

It was suggested that there might be value to having a point in time monograph of 300 to 500 pages on what professional societies are doing in continuing education in 1977. The Board seemed to feel that this is a major undertaking rather beyond the resources of the Board. As an alternate, it was suggested that it might be advisable to pull together a list of the names, addresses and phone numbers of the Continuing Educational Directors in the various technical societies and make this available so that people could call and get answers to questions based on current data rather than on something which had been
assembled and published many months prior to the actual course. No definite action was taken on this latter suggestion.

It was also noted that ASEE would jointly sponsor an International Meeting on CEE in Mexico City in April of 1979. This was the first World Conference on CEE and the Division would support that in a major way.

It was suggested (but not approved) that we consider “abandoning” program efforts at the ASEE meeting since so few of our members appeared to attend:

Active SIG’s were:

- Career Management
- Producer/Users
- ITFS (Television)
- Personalized CEE
- Registration and Certification

Four issues of the newsletter were again published with Al Cassel as the editor. Tom Talbot from the University of Alabama at Birmingham came on as Associate Editor with the fall issue. They ran 12 to 14 pages and were very informative. A. M. Jones of General Electric had a most interesting article in the spring issue on “What Does Industry Require of CES.”

Approximately $1000 was spent to publish our membership directory and mail it to all members during the year.

The 1977 CIEC meeting was held on January 18-21 in San Antonio with the same five sponsors. Lee Phillips from Texas A & M served as our Program Chair. An evaluation committee was established and our John Van Horn served as the first Chair. Again, there were many excellent sessions and papers/presentations including Myron Tribus’ (from MIT) excellent paper which was published after the conference and later distributed again by our division.

1977-1978

The Board met three times again (four if you count special outgoing meetings) under chair Ray Page from General Motors Institute on June 29 at the Annual ASEE meeting in Grand Forks, North Dakota, on January 17 at the CIEC Meeting in San Diego and April 26-27 in Dearborn Michigan not far from the Detroit Airport. The Division received $274 as its share of the “profits” from the 1977 CIEC. A CES Director’s Workshop was suggested by Monroe Kriegel. Joe Biedenbach conducted a “quick and dirty” survey of the membership as to whether they would support dues of $3, $5 or $10 per year. At the Annual Division Business Meeting, a change in the Division’s name to the Continuing Professional Development Division was approved for sending to the ASEE Board. The Board deferred on this and requested more documentation. Our
relations with ASTD continued and it was reported that ASTD would establish a Technical Skills Division in the near future. A Board member was to be assigned to “coordinate” SIG activities. Member discussion was devoted to Dean Griffith's Summary of Research Needs in CES as follows:

Although it is possible to prepare a long shopping list of research needs in various aspects of Continuing Engineering Education, there are three areas of research, or study, that need priority attention at this time.

The first area needing research attention is the modern description of engineering work, that is, what is it that modern engineers actually do? College and university faculty, and many members of technical societies, would have you believe that most if not all, of what engineers do involves cognitive activities, highly sophisticated manipulation of extremely technical subjects. There are growing indications that weaknesses in the technical work force are not due to lack of technical knowledge but instead are due to lack of skills in dealing with people and/or things. Teaching cognitive skills without concern for the “environment” in which they must be employed results in less than optimum engineering productivity. Many new graduates, according to engineering recruiters, do not know how to get the job started or how to get the job done. Older engineers are finding project critical paths involving activities outside traditional practice.

While the heavy emphasis on engineering science in the immediate “post-sputnik” era of the late 1950's and the early 196's was appropriate to then existing problems, engineering practice has had to change considerable within the last decade to cope with growing governmental regulation and consumer concerns. The skills needed to design a large bridge crossing a major waterway will seldom suffice in a courtroom where conservationists, environmentalists, and advocates of planned growth challenge the issue of a building permit.

I believe a major new study (research project) of engineering practice should be undertaken by ASEE to obtain a better categorization/description of current engineering practice than exists in the literature. I believe such a research project could be conducted under the REETS (Review of Engineering and Engineering Technology Studies) Committee of ASEE.

Second area needing priority research attention is how engineers learn. What are the natural avenues of engineer learning? How much learning actually takes place on the job? How much learning
takes place through job rotation? How much learning takes place through self-study? How much learning takes place through formalized study? Can we obtain research data which verify the Lindy Saline estimates for these activities?

If we can arrive at a better understanding of the natural learning tendencies of the practicing engineering work force, could we not design better learning experiences to take advantage of these natural learning forces?

For example, if learning desires are at a maximum when an engineering/scientist is in a new position and wants to know how to do her/his “best”, learning experience should be designed to provide the appropriate activity while the motivation is still very high. What are these activities? Are we allocating any/sufficient resources toward these activities?

Evidence is growing that speculative education, that is education which is not immediately applicable on the job, is very ineffective and inefficient in that up to 85% may be forgotten in less than a month after a “course.” Data on the long-term consequences of learning should be obtained relative to engineering education. This is the third major area needing study; the longitudinal evaluation of the consequences of engineering education. Can we demonstrate that our educational programs truly make (made) a difference in the actual performance/results of the participants? Or are our educational programs really ancillary to the principal activities which make a difference in performance/results? Are engineering education programs only useful in providing credentials for job entry? Is there any correlation between student educational performance and engineering practice in later life? Is the accreditation process, as currently practiced, completely without a validated basis?

Research in this area will cause the focus of the evaluation spotlight to change from the teacher/trainer to the student, and the time frame to change from the educational experience to post-program practice. This type of evaluation is expensive, time consuming, and complex. But it is absolutely necessary if we are to justify to business, government, or institutional leaders that our programs are efficient, economical and EFFECTIVE and deserve continued and increasing support.

More importantly, longitudinal evaluation is absolutely necessary if we are to persuade the increasingly cautious consumer (engineer/scientist) to put his valuable time and behavior in our
hands because we can “help her/him become what she/he wants to become.”

These challenges alone are enough to keep serious researchers in our field occupied for five to ten years. These tasks, though difficult, could well be the most important contributions to engineering education during this century!

The appointment of a Research Committee was proposed but not accepted by the Board due to the lack of people to carry it out!

The idea to hold full day workshops and charge fees at CIEC was approved.

Establishing dues was postponed and a request for “contributions” to primarily cover the Newsletter costs was tried – it did not work out!

It was also noted that the IRS was proposing to tax educational reimbursement “if the training received improves the student’s ability to be promoted.” All members were encouraged to contact their congressional members in opposition. It did become operational with exceptions and was interpreted differently across the country.

The treasury now stood at $2,854.72.

Al Cassell and Tom Talbot published four issues of the Newsletter continuing informative articles and Division information - averaging 12 to 15 pages.

The 1978 CIEC meeting was held in San Diego with Chuck Sener from the Bell Systems as our Program Chair. Interestingly, a longtime leader of ours – Tony Rigas at the University of Idaho also served as the COOP Division’s Program Chair.

1978-1979

The Board actually met four full times this year – including a new fall meeting. Meetings were held on: June 19 at the ASEE Annual Meetings in Vancouver, Canada, October 17-18 in Chicago, February 1 at the CIEC Meeting in Tampa and April 9-10 in Kansas City. Peter Chapman from Shell Oil in Houston served as Chair.

The ASEE Board approved on June 19 the change in name to CPD for the Division effective at the end of the Vancouver meeting.

Monroe Kriegel led a project that compiled a directory of “Names of Individuals with Administrative Responsibility for Continuing Education at Engineering Colleges, College Affiliates, Technical Colleges and Affiliates.” A total of 300
names were included in the 21 pages and 175 copies were printed and distributed to those requesting one. Those listed not belonging to CES would be contacted by the Membership Chair. A similar list for industry and government was suggested but not done due to a lack of volunteers. A motion was made at the June meeting to NOT participate in the 1981 CIEC but it was withdrawn. A straw vote indicated 6 for and 6 against.

A survey had been mailed to all domestic members (1042) in May of 1978. A total of 202 (19.4%) had been returned by June 9. Among the areas of interesting information included: About \( \frac{3}{4} \) of the members work in colleges and universities and most of the rest in industry; only 3 respondents read no part of the Newsletter – with two saying because they did not receive it!; that \( \frac{1}{4} \) would not be willing to pay dues to support the Newsletter but about \( \frac{1}{2} \) would pay from $3- $5; 40% had never attended a CES/CIEC Meeting and 31% had never attended an Annual Conference; 58 respondents indicated a willingness to undertake jobs for the Division (and the chair vowed they would be contacted). Lois Greenfield led this project. $1400 was requested as an annual budget from ASEE. The previous year $800 was requested and $775 received. The Newsletter and Awards were the major expenditures.

Our outstanding secretary – Bill Ledgerwood from Exxon Oil in Houston in addition to providing excellent meeting minutes in a thorough and timely manner also began the practice of showing all action items in blocks. The Fall meeting listed 23 such items in its 10 pages of single spaced text.

Evaluation criteria for SIGS was developed, we suggested several forms of organization for CIEC including the establishment of an Executive Committee (which was subsequently adopted and led to our continuing to participate in the meeting!)

Significant review and formalization of Honors and Awards was done and George Burnett from Iowa State brought a request from ECDP (the forerunner of ABET) that CPDD assist in a continuing education accreditation study and the board agreed. Our continued participation in CIEC was approved based on agreement in Tampa by other divisions as follows:

Continued Participation in CIEC: Chairman Chapman stated that currently CPDD is not committed to participate in the CIEC beyond the 1980 conference in Tucson. He reviewed the concerns that have led the CPDD to hold back from further commitment and the Division’s request that a meeting be held to resolve the CPDD’s concerns.

Peter stated that this meeting was held at Tampa and that the following was agreed to by the divisions involved.
1. The 1979 CIEC at Tucson will be the responsibility of the CPDD
   a. Joe Biedenbach will be General Chairman.
   b. Frank Burris will be the CPDD Program Chairman.
2. An executive Board will be set up to establish the policies that govern the planning and conduct of CIECs. The executive Board will consist of the Chairman of the Divisions and the Chairman-elect of these Divisions.
3. The International Division will no longer be allowed to participate in the CIEC.
4. A site selection committee will replace the long range planning committee; will plan sites four years in advance.
5. An Evaluation Group will be developed and given the responsibility of reviewing the functioning of each conference and making recommendations for changes and improvements.
6. The CIEC will develop a means of recognizing people for their work and support in connection with the CIEC.
7. The General Program Chairman will report to the CIEC Executive Board. The incoming General Program Chairman will “back up” the General Program Chairman, on an “intern” basis. Divisions will rotate the General Chairman’s job among the four divisions.
8. A Local Arrangements Committee Chairman will report to the General Program Chairman.
9. The General Chairman is accountable for cost control. He sets the budget. The budget will be set so as to ensure a minimum, clear, return of $1000 to each of the four sponsoring divisions. All profit from the CIEC will be split evenly four ways (25%) between the four sponsoring divisions.
10. The CIEC funds in the BASS account will not be allowed to increase further. Any added input to this account will be divided evenly among the divisions.
11. Programming will provide for one plenary session against which CPDD will not schedule conflicting sessions; a final common luncheon; common evening social; and the banquet probably will be eliminated. Otherwise, CPDD can schedule as we please and can obtain space.

12. Insofar as possible, other ASEE organizations that desire meeting space at the CIEC are to be encouraged to make their own space arrangements directly and not work through the CIEC.

On the basis of this report from Peter Chapman, it was moved and seconded that the Board endorse the proposal as presented and remain in the CIEC. Motion passed unanimously.

The membership approved the Board’s recommendation to establish Division dues at $5 per year at the Annual Business Meeting in Tampa.

A second version of the CEU White Paper was worked on. Our treasury balance stood at $2712.45 in the spring. The Honors and Awards Committee was assigned the responsibility of Best paper Award and Certificates of Appreciation.

The CIEC Meeting was originally scheduled for Mobile, Alabama but the hotel converted to a Retirement Center in the fall forcing a quick review under Joe Biedenbach’s leadership and relocation to Tampa, Florida. Chuck Elliott from Wayne State served as Program Chair. The 373 page Proceedings contained a wide variety of papers and outlines including one by Frank Burris on “Promotion of Technical Excellence at RCA” and one by Joe Biedenbach entitled “Continuing Engineering Education Costs Money, Colleges of Engineering are Not Going to Make Large Profits,” reports on several NSF funded studies by Gene D’Amour, Program Manager for Continuing Education for scientists and engineers at NSF and a report on the amount of Continuing Education conducted by Colleges and Universities done by John Klus and Judy Jones at the University of Wisconsin. Survey details were published in a monograph through ASEE and their landmark study would be replicated several times by the Division in future years.

Four Issues of the Newsletter were published by Al Cassell and Tom Talbot. The summer version was labeled CES/CPD Newsletter, the fall one the CPD Newsletter and the winter issue showed our lamp of learning logo in the masthead. The spring issue had an article on “How to Write a Best Paper” by Jay Gilbert from the Empire State College. It also noted that John Klus was spending a year in industry.

The World Conference on Continuing Engineering Education with Conference Chairman John Klus was held on April 25-27 in Mexico City with Alvin Toffler of Future Shock as keynote speaker. The Proceedings were published under Joe
Biedenbach’s leadership and contained an excellent summary of the profession internationally.

1979-1980

The Board met four times again this year under Chair Dean Griffith from Oklahoma State University. Dean would later move to the Mobil Oil and then passed away much too soon. Jay Gilbert became Secretary and Lois Greenfield stayed over another year as Treasurer to get the terms of Secretary and Treasurer to expire in different years. Meetings were held on June 16 at LSU in Baton Rouge at the ASEE Annual Meeting, on October 24 in Lisle, Illinois, and January 29 in Tucson at the CIEC meeting, and on April 10 in Chicago.

The treasury balance in June stood at $4400.23 and we made more money from our CIEC workshop than from the meeting itself that year. Bob Hall from U Mass served as our ASEE Meeting Program Chair. Board discussion indicated that we need to get more minorities and women involved in our Division.

The NCEE – National Council of Engineering Examiners had proposed establishing a system to measure and record continuing engineering education to maintain professional registration. The Board did not accept their proposal but resolved to work with them on the issue.

Sales of the second edition of the CES Director’s Handbook were going well as were those of the World Conference. Three hundred copies of the handbook had been printed. Membership stood at 1300. Each Director for the first time was assigned a specific area to oversee – Long Range Planning, Publications, Liaison Contacts, SIGS (Ray Morrison), Section-Reps and Industrial Members. It was proposed (and later done) that the TV and packaged learning SIG’s be merged. An award to recognize the outgoing Division Chair was established. It became a plaque with a gavel.

Future programming proposals included the following:

Dean Griffith has asked Al Cassell to develop and collect suggestions and potential approaches for future CPD^2 programming. Several questions/ideas were discussed:

- Should we continue “Nuts-and-Bolts” programs, and/or should we consider a more “advanced” level program in this area?
- Should we try to draw more industrial participants into our programs?
- Should we consider open sessions/calls for papers/unique sessions? Our C.I.E.C. is, in effect, “closed” quite far in advance of each conference?
Might we consider differently structured sessions (poster, workshop, etc.)?

Should we consider a joint Industry-University program on common problems?

Should we develop programming to encourage minorities and women to participate and join?

Should we bring in participants from other professions with parallel interests and needs?

Should we arrange more interactions with professional societies?

Dean Griffith then discussed the possibility of an invitational conference to explore the wide array of methods and procedures, used and proposed, to assist the continuing development of professionals and assure their continuing competency. Dean has explored with NSF the possibility of their funding a conference on, for example, “Assuring the Continuing Competency of Professionals in Engineering and the Applied Sciences in the 1980’s.” The conference would bring together representatives of Licensing Boards, Professional Societies, Academia, Accrediting Agencies, and Employers, and would be sponsored by organizations such as NSPE, NCEE, ACET, and the Association Member Council.

The Board endorses Dean’s efforts, and, assuming external conference funding, was willing to provide leadership and people for such a conference.

Other long-range planning thrusts were as follows:

- Possible use of our national people/workshops for regional members; eg, could be bring our “Nuts-and-Bolts” workshop to a number of the regions, possibly coupled with section meetings?
  Action Item: Chuck Elliott will poll the staff of the “Nuts-and-Bolts” workshop regarding their willingness to “take the show on the road;” he will report results to the January Board meeting.

- We must shift the emphasis at our conferences away from having too few people doing too many things. We should have “unwritten guidelines” to “spread the participation around;” we must get more and different people on our programs.

- We need better evolution/continuity of programming for CIEC:
  Action Item: Dean Griffith will set-up a meeting of present and future CIEC Program chairmen (Elliott, Burris, Bedrosian, Cooper; Knight, Trammel, Hall)

- We need to develop formal mechanisms to get “new young blood” involved in CPD² activities.

- Time should be set aside for the CPD² Board to be able to pay attention to long-range planning; it should occur as a non-structured
agenda item by the “committee of the whole,” and should occur preferable during a morning.

The following publications have been sold through the USC/College of Engineering/Continuing Education Department for CPD Division as of October 1, 1979.

<table>
<thead>
<tr>
<th>TITLE</th>
<th>NUMBER</th>
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<tbody>
<tr>
<td>Survey of Continuing Education Activities – Klus Jones</td>
<td>159</td>
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<tr>
<td>The Return on Investment – Morris</td>
<td>149</td>
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<tr>
<td>Continuing Education Director’s Handbook - *Elliott Biedenbach</td>
<td>240</td>
</tr>
<tr>
<td>1st World Conference on Continuing Engineering Education Proceedings</td>
<td>83</td>
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<tr>
<td>Individualized Learning Course Evaluation Guidelines – Bauer, Everett</td>
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*We have entered our second printing for the handbook in addition sales are being made at ASEE Headquarters and through Al Morris.

Problem area is how to determine what new publications should be developed for CPD Division. We need some ideas from the CPD board members. Some suggestions are:

- A collection of interesting papers dealing with adult education could be done annually or every two years.
- A set of articles describing industrial training centers around the world.
- A set of articles describing continuing education centers in universities.
- A set of articles showing how universities are utilizing off-campus facilities to bring education to engineers, i.e. TV systems, in-house programs and the like.

By the CIEC meeting our Treasury balance had grown to $9622.05 – mostly due to publication sales. The board finally agreed – with much discussion – to have the Honors and Awards Committee make the final decisions rather than have the Board approve them but it still opposed allowing Board members to receive one. We agreed to become a member of the Council on the CEU (and would do so for several years). It was reported at the April Board meeting that 423 members had not paid
the newly established Division Dues when renewing their ASEE membership. The membership chair is to write to them. New publications in process were a revision of the CPD Director’s Handbook and a Compendium of Articles on CEE.

Four issues of the Newsletter were published and Morrie Nicholson became editor with the Fall (Volume 9, Number 3) Issue, printing and mailing were moved to Joe Biedenbach’s office at the University of South Carolina and a new Masthead with both ASEE and our own lamp logo was instituted. Board member Chuck Elliott moved to Purdue University and in the Fall Bob Anderson unexpectedly left Purdue to head up Technical Education at GE.

The CIEC Meeting was held in Tucson with Frank Burris as our Program Chair and Joe Biedenbach was Registration Co-Chair. Fees were $50. There were excellent sessions on mentoring, external Master’s degrees, in-house programs at Los Alamos, and an entire session on the CEU and “Bloopers” made in CPD programming! There was also a “Meet the Experts” session where you visited with designated topic experts including: professional societies, industry programs, individualized instruction and research in CE.

1980-1981

The Board met four times this year under Chair Chuck Sener – on June 23rd at the ASEE Annual Meeting at the University of Massachusetts – Amherst, September 29-30 in Lisle, Illinois, January 27 in Orlando at the CIEC Meeting and April 28-29 in Lisle, Illinois. The Treasury balance at the beginning of the year was $15,921.71. There were 720 dues paying members – with about 75 being outside the USA. Tony Rigas developed a manual for Section Representatives. The SIG ITFS group was dissolved. Considerable efforts were made to develop more direct liaison activities with other professional societies. The idea to develop a Faculty Development effort was discussed at some length but felt to be too big for us to undertake and should be deferred to other ASEE groups such as ERM. Most SIG’s continued to be very active.

Four Newsletters were published with a mixture of subject articles, division news, program outlines and research articles.

The CIEC meeting was held in Lake Buena Vista, Florida on January 28-30 with Chuck Sener as our Program Chair. The 356 page Proceedings contained several interesting, full length articles. We conducted four workshops – Nuts and Bolts of University CE Programs, Industrial Programs, and Course Learning Evaluation and Career Management.
1981-1982

The Board met four times again under Chair Chuck Elliott from Purdue University this year but the spring meeting was a telephone conference call. This year we made a significant change in office turnover by changing from the June meeting to the CIEC meeting. Thus only half a year was led by Chuck and then Bob Anderson at GE become chair. This was done to reflect our high point of the year being CIEC. We operated this way for several years and then reverted back to June changeovers. The Board met in Los Angeles at the ASEE Annual Meeting at UCLA on June 23, on October 1-2 in West Lafayette, Indiana, February 2 in San Diego at CIEC and by phone on May 4. We began the year with a Treasury balance of $23,558.28 – including $3,400 in dues and $4,126 from CIEC. ABET continued its pursuit of the accreditation of CE. Our publications program continued active with another Membership Directory, and the Compendium of CE articles. And also in:

Future Planning: A wide-ranging discussion was held on the goals and philosophies of the Division. Our bylaws goals were reaffirmed. The following is a brief synopsis of the discussion outcomes:

- That we respond to members to address their needs, to help them meet their CPD objectives, and that we continue to bring people together with common backgrounds and interests.

- That we continue to provide a “climate;” a “greenhouse” environment, in which many CPD ideas and efforts can be developed and supported.

- That we “reach out,” that we “link up” with like-minded people in other organizations and other professional societies, to avoid “reinventing the wheel,” and to serve our members as a “clearinghouse” and a collection point for information, techniques, and people.

- That we continue to strongly support career development as a necessity for technical and engineering professionals.

The Board will continue to address these goals, as well as beginning some formal steps to implement a “project reach-out.”

Wally Decker from Livermore Labs developed a new Membership Brochure.

Four Newsletters were published by Morrie Nicholson – and printed and mailed by Joe Biedenbach. Major articles on “Management at Honeywell” – reprinted
from Industry Week and “A Method for Assessing Regional Continuing Education
Needs” which was one of our NSF funded studies.

The CIEC meeting was held on February 3-5 in San Diego with Bill Cooper from
Oklahoma State as our Program Chair and George Mailer from the University of
Colorado was Site Selection Chair and served in this capacity for several years.
The 352 page Proceedings contain many interesting articles.

1982-1983

Division Chairs for this year were Bob Anderson, GE and Frank Burris, RCA.
The Board met three times – on June 21 at the ASEE Annual Meeting at Texas A
&M in College Station, February 1 at the CIEC Meeting in Lake Buena Vista,
Florida and May 9-10 in Lisle, Illinois. We began the year with $27,408.23 in the
treasury. Under John Vollum’s (University of Minnesota) leadership, we began
an experiment on computer conferencing using the CONFER system to facilitate
meetings. The dialup telephone system was used for several years and served
us well in most respects. The Second World Conference on CEE was held on
April 16-8 in Paris. The Board agreed to co-host the 1986 Third World
Conference if held in the USA. Chuck Elliott was making the first attempts to
compile our Archives. Lionel Baldwin kept us updated on the formation of NTU –
National Technological University.

Hank Oppenheimer of the MGI Management Institute in Larchmont, New York
became the Newsletter Editor replacing Morrie Nicholson. Four Issues were
published continuing the strong tradition and informative approach. He greatly
expanded input from other sources and publishers such as ASTD. The Spring
Issue reported on our recent membership survey in which 195 of about 800
responded. Results showed 58.5% of our members are from colleges and
universities with 16.9% from industry; the most common title was professor
(30.8%) and Director (24.1%); top areas of interest were in computer based
education, video and education training technologies; 43.1% had attended a
CIEC meeting and 58.5% had attended an ASEE meeting.

The CIEC Meeting was held in Lake Buena Vista, Florida with Donna
Christensen from the Aerospace Corporation in California as our Program Chair.
The Proceedings started to get thinner (220 pages) and items shorter. The
Division leadership was concerned as post conference sales in the past had
aided our income. Educational Telecommunications, CPD in consulting firms, a
Professional Paper Session and a show and tell were some of our major efforts.

Our new Membership Brochure “Count Me In” was published. We changed our
Distinguished Service Award to the Joseph M. Biedenbach Distinguished Service
Award. We developed our first Operations Manual for the Division. ABET’s
accreditation of CEE was put on hold. We requested no funding from ASEE due
to our solid position.
1983-1984

Bill Ledgerwood returned as a secretary. The Board actually met five times this year – on June 21 at the ASEE Annual Meeting in Rochester, New York, at Rochester Institute of Technology; on September 22-23 in Princeton, New Jersey; on January 24 (outgoing Board) and January 27 (incoming Board) at the CIEC Meeting in Dallas; and on May 16-17 in Culver City, California under chairs Frank Burris (RCA) and Estelle Klingler UCLA).

A major item this year was the finalization of CIEC leadership with fixed rotation of chairs and other positions among the four division leaders. Only five of the eleven Board members were able to attend the fall meeting which had 37 items on the agenda. Our membership records through ASEE Headquarters were a major problem to resolve. We began an investigation to put our CES Proceedings on Microfiche. George Moore from IBM reported having done this in May and sending them to Morrie. They were not in our Archives when sent several years later by Morrie Nicholson to the new Archivist. The Treasury balance was $37,640.74 on September 22. Eileen Matz from the University of Arizona served as our 1983 ASEE Program Chair. Our active SIG’s consisted of:

- Industry Training Directors
- International CEE
- Engineering Consultants
- ITFS (which had been re-instated)
- Management of Careers
- Professional Societies
- Registration and Certification
- Research in CPD
- University CE Directors
- Videotape Instruction Programs
- Telecommunications

We continued our CONFER activities with additional participants. To those active in it, it was a most interesting and informative activity – one of the early versions of e-mail! A total of 62 people attended our Annual Business Meeting in Dallas on January 25. A special award was presented there to Joe Biedenbach commemorating our change in name of the Distinguished Service Award for him. He was visibly moved to say the least! Morrie Nicholson became our official Archivist and our files and records were shipped to him from West Lafayette, Indiana. As of May, our membership totaled 610. It was noted that the Section Representative manual had not been updated and thus was badly out of date. A request for $5000 to fund a research project on engineering productivity was not approved.
Hank Oppenheimer published three issues of the Newsletter with a combined Winter-Spring issue. The topics of “Whole Brain Learning” and “Artificial Intelligence” sparked our interest with articles.

The fall issue started our new Masthead design Hank had prepared.

The CIEC meeting was held in Dallas, Texas on January 25-27 with Dwayne Rublee from the Bell Systems Center for Technical Education in Lisle, Illinois as our Program Chair. Our Bill Cooper from Oklahoma State served as General Conference Chair and our Bob Anderson at GE was Chair of the CIEC Executive Committee. Our Jim Wilbanks from Auburn University was publicity chair and George Maler from the University of Colorado was site section chair. The Proceedings totaled 287 pages. Don Miller from IBM at our request presented a special workshop on “Career Development for the University CEE Director.” We had an excellent session on Computer Based Technology in CEE.

In 1984, the Oryx Press published the results of one of the NSF – funded projects entitled: Measuring Learning in Continuing Education for Engineers and Scientists by a team of staff members at the University of Kentucky. Again, our Division supported their work and it was given our Best Publication Award for 1983-84. We also obtained permission to reproduce the report and distributed it again in 1998, as it was still very informative in our work.

1984-1985

The Board met three times this year – on June 26 at the ASEE Annual Meeting in Salt Lake City and twice – “old” and “new” Boards at the CIEC Meeting in San Diego. The chairs were Estelle Klingler from UCLA and Hal Abramson of AlChE – American Institute of Chemical Engineers. Bill Ledgerwood completed his term as Secretary and sent his files to Morrie Nicholson for the Archives. We made $3,800 from the 1984 CIEC Meeting. The Board approved that the chair ask CIEC to provide a participant list at the CIEC’s. We continued our membership in CCEU and paid the $250 annual dues. Marlin Pound from Sandia Labs and our membership chair made over 300 mailings to prospective members and to those 86 not renewing and reported gaining 30 new members thus totaling 571. The Treasury balance stood at $45,634.64 on February 5. Joe Greenberg from Arizona State University served as our ASEE Annual Meeting Program Chair. Our first Archivist report from Morrie Nicholson was as follows:

CPD Archivist Report 1984-85

During the year, I have received materials from Chuck Elliott and George Moore.

I have had little opportunity to review the material and to catalogue it.
I was planning to purchase a filing cabinet for the Archives this year. I have not done so.

I plan to begin to review the material actively beginning late spring or early summer. At that time, I will purchase a four-drawer filing cabinet. During the review of material, I will prepare guidelines for the Archive Files.

I’d like to have the board answer two questions at the February meeting:

1. Regarding publications, should the archivist be the repository of one of each CPD publication? What about the Annual Meeting volumes? Personally, I believe these should be kept somewhere. Headquarters? Archivist?

2. If someone wants an article, how do we handle the cost of duplication? If no one wants copies, why keep them?

Three issues of the Newsletter were published. The Summer Issue welcomed 73 new members! The Fall/Winter issue contained the CCEU’s “Principles of Good Practice in Continuing Education” and a report of the World Conference in May of 1986 in Orlando. The eighth revision of our bylaws was included in the spring issue.

The CIEC Meeting was held in San Diego on February 5-8 with Jim Wilbanks from Auburn serving as our Program Chair. The Proceedings totaled 206 pages (note the declining number!). John Wilhelm from IEEE reported on their fourth year (since 1982) of satellite videoconferences – reaching 2,737 with two in 1982 and an estimated 13,800 with four in 1985. While shorter, we still had several interesting papers.

1985-1986

The Board actually met five times this year – on June 20 at the ASEE Annual Meeting in Atlanta, on February 4, 5 and 7 at the CIEC Meeting in New Orleans and on May 6 at the World Conference in Orlando. Chairs were Hal Abramson (AIChE) and Glen Martin (CH2M Hill – an engineering consulting firm). Bill Cooper from Oklahoma State had assumed operations coordinator for CONFER and reported limited usage. Major concern was reported over the lack of some awards presentations since suitable candidates were felt to exist. Section representatives reported very little activity. Bill Cooper also served as our ASEE Annual Meeting Program Chair. Bill also coordinated a survey of our members on CPD Program Planning with 86 returned from 400 mailings. His 17 page summary report included a wealth of useful information. The Treasury balance
was $58,121.71 in January but only $41,539.90 in April due to $14,000 in publishing costs (most to be recovered). We also spent $2,101.25 on CONFER, $300 on CCEU dues and $101.24 on the Archives. Chair Glen Martin asked all board members to get on CONFER as he planned to do much business on it. Three issues of the Newsletter were reportedly published but only two reside in the Archives (Volume 15, Number 4 – missing). Morrie Nicholson began regular columns on the Archives with his retirement from the University of Minnesota. The second edition of the TV compendium edited by Pam Atkinson (University of California – Berkeley), Gene Chennette (University of Florida) and Joe Biedenbach was published and sold for $25.

The CIEC meeting was held on February 5-7 in New Orleans with Owen Osborne from Iowa State as our Program Chair; Gene Chennette served as Evaluation Chair. The Proceedings totaled 226 pages. The registration fee was $110.

We were extensively involved in the World Conference in Orlando. Joe Biedenbach and Larry Grayson edited the Proceedings. The following was reported:

World Conference a Success

The World Conference on Continuing Engineering Education which is a premier conference in this area of professional interest was held in Orlando, Florida, May 7 – 9, 1986, at the Americana Dutch Resort Hotel. The conference was well attended with over 415 professionals from around the world exchanging views about the continuing engineering education activities for technical people in their companies, universities, professional societies or governments. Twenty exhibitors presented the latest equipment available to people who are responsible for running continuing education programs. The 1200 page, two volume, soft cover proceedings are now available for purchase. You might find that someone who is responsible in your organization for continuing education activities might find this a very worthwhile investment for their organization. The nominal charge of $50 postpaid is a real bargain to find out what is going on in technical continuing education around the United States and the rest of the world. These can be ordered from Dr. Joseph M. Biedenbach, College of Engineering, University of South Carolina, Columbia, SC 2908 (803) 777-6693.

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1986-1987

The Board met three times – on June 26 at the ASEE Annual Meeting in Cincinnati, Ohio, February 3 and 6 at the CIEC in Orlando. True to his promise, Chair Glen Martin did much business on CONFER. Bill Cooper from Oklahoma State became chair at CIEC. Six Board members and/or guests attended the June Meeting. We received $6220.86 from the last CIEC. It was noted that many of our industry members whose dues are covered in their company’s industry membership in ASEE were thus not showing up on our list. We organized very successful tours of GE and Proctor and Gamble for the June meeting. It was noted that probably we should change our officer terms back to June to become in step with the rest of ASEE. The Treasury stood at $47,574.08 on June 30. Seven SIG’s remained active but those on Engineering Consultants, Management of Careers and Registration and Certificate were no longer functioning. We continued to have problems with our membership records from ASEE. Our share of profits from the 1986 World Conference was $2500. We provided $1000 as an advance to China for the 1989 World Conference as one of its co-sponsors. Stan Love from Sandia Labs served as our ASEE Annual Meeting Program Chair.

It was suggested that we establish a Research and Special Reports Committee and publish an RFP for Research projects. A total of $10,000 for four @ $2,500 was authorized. We reportedly had 90 members attend the 1987 CIEC.

Three Newsletters were published running 18 to 26 pages in length. They are full of interesting news updates and activity reports. Special mention was made with their home addresses for contact of two long time leaders who were now retired – Peter Chapman and Al Ackoff. The Fall-Winter issue reported that IEEE had several home video tutorials.

The CIEC Meeting was held in Lake Buena Vista, Florida. The Proceedings totaled 276 pages. Gene Chennette from the University of Florida was our Program Chair. Lionel Baldwin gave a thorough update on NTU and we had several excellent reviews of industry programs.

1987-1988

The Board met four times – on June 22 at the Annual Meeting in Reno, on December 2 via conference call, and on February 9 and 11 at the CIEC Meeting in San Diego. Joe Greenberg from Arizona State University became Division Chair in February. Our share of the 1987 CIEC proceeds was $11,198.38. The Treasury balance stood at $52,953.29 on December 31. There were eight active SIG’s including MTD – Management Training and Development. We sponsored a survey of CE in Engineering done by college and universities in 1986-87 and published the results in a monograph. This was similar to the Klus/Jones survey of years earlier and meant as a follow-up.
Three Newsletters were published running 22 to 28 pages. "A Brief History of the CEU" by Archivist Morrie Nicholson was in the spring issue. The winter issue had a lengthy interview with Joe Bidenbach on his recent visit to China in our behalf for the 1989 World Conference.

The CIEC meeting was held on February 8-12 in San Diego with our Joe Greenberg from ASU as General Conference Chair and Gary Workman from the University of Alabama in Huntsville as our Program Chair. The Proceedings totaled 322 pages with a much larger number of good papers and presentations.

In 1988, the National Academy of Engineering published a most useful report: Focus on the Future: A National Action Plan for Career-Long Education for Engineers. Several of our division membership provided input and Pam Atkinson from the University of California – Berkeley was study director as an NAE Fellow. We widely publicized the availability of the report and its executive summary is as follows:

Executive Summary

The ability to compete in the international marketplace is determined in critical ways by a nation’s resources of engineering and scientific intellectual capital. The high quality of recent graduates from engineering colleges in the United States provides a strong base for formation and growth of this capital. A combination of circumstances, however, may cause the supply and quality of engineering intellectual capital of the United States to be insufficient to meet future goals for economic growth, security and improvements in quality of life. These circumstances include the fierce worldwide economic competition, rapid technological advancement, the changing pool of people in the United States from which our future engineering personnel is likely to come, serious questions about the quality of public education for young people in mathematics and science, and increasing needs and opportunities for engineers in organizational functions where they previously were seldom found.

Investment in post-baccalaureate, career-long education of practicing engineers can help overcome shortfalls of engineering intellectual capital. Indeed, compared to the investments already made in the resource, the increment for career-long education may be modest and strongly justified. Benefits to the nation and to employers from enhanced programs of career-long education appear to be considerable.
Equally important as the national need is the need for individual engineers to participate in continuous career development. A career typically lasts 35 to 40 years. The value of professional engineering expertise depreciates rapidly in many areas, so that obsolescence may become a serious problem as soon as 3 to 7 years after completion of formal education. Career-long education helps an engineer perform more effectively on a current job, prepare for a new job and gain greater personal satisfaction from work.

In the committee’s judgment, investment and participation in career-long education remain below desirable levels. This is attributable in large part to the structural reality of a system in which costs and benefits are not always closely tied to one another in space or time. There is no doubt that career-long education of engineers is beneficial to society as a whole. However, there is no guarantee that the individual employer, the main source of financing for this education, will benefit directly from the investment in employees, who are free to change employment or may not make use of what they study. For the individual engineer, benefits of career-long education and the penalties for lack of such education typically accrue after, sometimes long after, the effort to obtain the education has been expended. The situation is especially troubling for engineers who do not work in large firms or central locations.

This report sets forth actions for institutions and for individual engineers to help preserve and expand intellectual capital resources to the benefit of the nation and the betterment of career prospects for all engineers. The Committee’s principal recommendations are as follows:

1. A nationwide coalition should be formed to coordinate, monitor, urge and advocate action for career-long education for engineers.

At the present time, there is a vacuum at the national level in the engineering community where there should be active and sustained leadership guiding and supporting engineering professional development through career-long education, although significant effort and leadership in individual engineering disciplines exist largely as a result of engineering society programs. No institution or group of individuals, no government agency or industrial association has assumed the critical role of advocacy and enhancement of career-long education across all engineering fields and for interdisciplinary areas. No single organization acts with broad and comprehensive nationwide effect as a source of
information about how to provide career-long education or performs the function of informing and motivating engineers. The proposed coalition would serve as a catalyst for implementation of many of the other recommendations in this report. If requested by the other elements of the engineering community, the National Academy of Engineering should be willing to serve as the initiating organization to ensure formation of the coalition.

2. The engineering community as a whole must exercise leadership in communicating the concept that engineering education is an integrated system. It must clarify the desired characteristics of the career-long portion of the system and improve the accessibility and other features of career-long education.

3. All private companies and other organizations that employ engineers should clarify and focus their educational objectives by linking those objectives and company goals. They should design infrastructures that encourage, support, and sustain a policy of career-long education from the highest level of the enterprise through managers and supervisors to the line engineer.

4. Engineering schools should reassess their role as professional schools with regard to the educational demands placed on the B.S. engineering professional by technological advances and other influences and they should include the career-long education of engineers as part of their mission. More engineering schools can respond effectively to the educational needs of engineering professionals, in addition to responding to those of conventional, full-time students. Engineering schools should also make a concerted effort to impart to undergraduate and graduate engineers a desire for, and an understanding of the need for, career-long education.

5. The federal government and state governments should recognize the growing importance of career-long education for engineers and begin to assume more responsibility for it, taking appropriate actions to foster improvement of programs and facilitate participation, as well as support research in the field.

6. Engineering professional societies and other independent groups should assume an even stronger leadership role in the outreach to individual engineers.
The Board met three times on June 20 at the Annual Meeting in Portland Oregon, December 7 via teleconference and January 31 at CIEC as best that can be determined from the Archives. Owen Osborne from Iowa State was our Annual Meeting Program Chair and Patsy Sherman from 3M became Division Chair in February. Only four Board members could attend the June meeting. We received $6,749.54 from the 1988 CIEC. Harvey Stone from the University of Massachusetts - Amherst was working on a special “Survey of Video Board Student Performance.” Glen Martin suggested a History of CPD be prepared! We started organizing a group trip to the China World Conference via Chuck Sener and a travel agency. The treasury balance stood at $59,261.23 in December. Joe Biedenbach announced his plans for a sabbatical and then retirement in three years so that a “publishing house” replacement could be found. The Board approved spending $100 in dues to become a charter member of IACEE – International Association of CEE which was founded at the 1989 World Conference. The Board later in the year approved $10,000 for a History and a RFP was to be prepared for it.

Three issues of the Newsletter were published. Morrie Nicholson had Archivist columns in each and John Klus and Darrel Petska from the University of Wisconsin continued abstracts of articles and research.

The 1989 CIEC Meeting was held in New Orleans on January 30 – February 3 with Jay Gilbert from Sevens Institute of Technology as our Program Chair. The Proceedings totaled 161 pages. We had a series of excellent reports on video education. The writer cannot add anything personally about the meeting as it was the only CIEC meeting he did not attend to this date!

The World Conference was held in Beijing China on May 16-21 and the IACEE was officially established there. Joe Biedenbach, John Klus and Glen Martin were elected to the Executive Council of the organization. It was a fascinating and informative meeting. Unfortunately the demonstration then going on in Tianamen Square resulted in shootings shortly after the conference. The city was effectively ringed with tanks and shut down during our conference resulting in our inability to tour the Great Wall. But it was still “one heck of an experience.” You should review the Proceedings – again published by Joe Biedenbach and Larry Grayson for their valuable contents.

It is assumed that the Board met three times this year – at the June ASEE Meeting in Lincoln, Nebraska and for sure via teleconference on December 14 and on February 6 at the CIEC meeting in Lake Buena Vista, Florida – but no Meeting Minutes exist in our Archives! More curiously, the next Minutes of 1/27/91 do not show any Meeting Minutes approved of past meetings. Owen
Meeting Minutes exist in our Archives! More curiously, the next Minutes of 1/27/91 do not show any Meeting Minutes approved of past meetings. Owen Osborn became Chair in February and soon moved back to Oregon State University from Iowa State. The division was active including the following publications.

- "United States Competitiveness Through Interactions and Collaborations Between Academe, Industry and Government," by: Mary Gail Biebel, Carwile Biebel Consulting Inc.; Johnna L. Howell, Lawrence Livermore National Laboratory and Philip H. Swain, Purdue University. (293 pages) $35.00

- "Survey of Continuing Education Activities for Engineers and Scientists Conducted by Colleges and Universities in the United States and Canada," by: Charles S. Elliott, Arizona State University and Lloyd J. Dennington, University of Denver. (80 pages) $25.00

- "Research Abstracts on Continuing Engineering Education," by: John P. Klus and Darrell Petska, University of Wisconsin. (132 pages) $20.00

- "1987 Compendium on Uses of Television in Engineering Education," by: Joseph S. Greenberg, University of Connecticut and Joseph M. Biedenbach, The University of South Carolina. (674 pages) $35.00

- "Supplement – 1987 Compendium on Uses of Television in Engineering Education," by: Joseph S. Greenborg, University of Connecticut; Floyd L. Cash, University of Texas – Arlington and Joseph M. Biedenbach, The University of South Carolina. (160 pages) $20.00

- "World Conference on Continuing Engineering Education – May 7-9, 1986 – Lake Buena Vista, Florida," Edited by: Lawrence P. Grayson, Catholic University of America and Joseph M. Biedenbach, The University of South Carolina. (2 Volumes, 1196 pages) $40.00

- "1988-89 Membership Directory, Continuing Professional Development Division," by: CPD Publications and Membership Committee Free

Jacki Price from Oklahoma State served as our Annual ASEE Conference Program Chair.

The Treasury balance stood at $58,779.99 on September 30. Proposals from designated Board members on a Market Plan for the Division, Succession Planning, Guidelines for Local Workshops and Conferences and leadership development were formulated and reviewed.
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Three Newsletter issues were published ranging from 17 to 28 pages with an updated and more attractive masthead.

The CIEC meeting was held in Lake Buena Vista, Florida on February 5-9. Stan Love from Sandia Labs served as our Program Chair. The Proceedings totaled 161 pages.

On April 17 we all suffered a tremendous loss when Joe Biedenbach passed away due to a heart attack. We organized an effort to contribute to a special scholarship fund established in his memory at the University of South Carolina. The following tribute was published in our Spring Newsletter:
JOSEPH M. BIEDENBACH — A MAN FOR ALL SEASONS

[Editor’s Note: As reported in the Spring newsletter, Joe Biedenbach died suddenly on April 17th, 1990. The following tribute to Joe, from the University of South Carolina Times, is reprinted in its entirety.]

JOSEPH M. BIEDENBACH

When Dr. Joseph M. Biedenbach died April 17, the College of Engineering lost more than a valued faculty member. It lost the driving force behind an entire era of excellence in continuing engineering education.

"Joe was generally recognized as the outstanding figure in continuing engineering education in the country," said engineering dean Dr. W. Kenneth Humphries.

"He brought tremendous national and international visibility to the University by virtue of his activities in all the major professional organizations with which he was affiliated."

Biedenbach, 63, was a master at organizing conferences, Humphries recalled.

He organized the first world conference on continuing engineering education in Mexico City in 1979 and helped organize three others.

"Whether it was an international conference of thousands or a meeting of a local engineering society here at the Swearingen Center, when Joe planned it, it was always done right," Humphries said.

In the course of his career, Biedenbach held more than 80 offices in various professional organizations. He was a Fellow of the Institute of Electrical and Electronics Engineers (IEEE) and the American Society for Engineering Education (ASEE).

He received the Distinguished Service Award of the professional development division of ASEE in 1976. This award was renamed the Joseph M. Biedenbach Distinguished Service Award in his honor in 1982.


Now, the South Carolina Council of IEEE has announced the creation of the Joe Biedenbach Distinguished Service Award and the College of Engineering will remember him with a distinguished service award named in his honor.

"All of us are going to miss Joe tremendously," Humphries said. "We'll miss his upbeat, positive personality and his contributions to the life of the college. He helped his colleagues and students do a lot of things, both professionally and personally, that wouldn't have been done without him.

"He was an irreplaceable part of our lives and we will remember him always with deep respect and affection."
Morrie Nicholson also contributed a lengthy article reviewing Joe's multitude of contributions as follows:

FROM THE ARCHIVIST
IN MEMORY OF JOE BIEDENBACH

Since Joe Biedenbach's untimely passing in April, I have thought about the many contributions he has made to the C.P.D. Division of ASEF as well as to continuing engineering education in general. He was very active in continuing education in I.E.E.E., being on the Education Advisory Board and Frontiers in Education meetings.

I thought it would be fitting to review the published information I have as Archivist, and to summarize how much Joe has contributed to the growth of C.E.S./C.P.D.

The first reference to Joe that I can find is in the Fourth C.E.S. Meeting in Pittsburgh, 1969. There was a panel discussion entitled "Tell It Like It Is." The panelists were Ir Katz, Chet Britley, Dean Griffin, Ken Moody, Julian Smith, Howard Shelton, and Joe Biedenbach. Joe was at RCA at the time.

At the Fifth Conference in Albuquerque, New Mexico, in 1970, Joe was the leader of a workshop entitled "New Vendor Concepts in Educational Technology." He also presented a paper entitled "Modern Instructional Technology: A Solution to Mass Continuing Engineering Education in Industry."

In Boston at the Sixth Conference in 1971, Joe presented a paper on Multimedia CES in which he presented an educational system for quality CES presentations.

In Denver in 1972, Joe presented the results of a Task Force Study on "Use of Instructional Technology in Continuing Engineering Studies." At that time, the division encouraged members to form task forces to study topics of concern to the division. Some of these were identified by the Board of Directors, who also selected the task force leaders.

In 1973, Joe had moved to the Milton S. Hershey Medical Center of Penn State University. At the 8th CES meeting in Atlanta, he was the general workshop leader. Seven topics were chosen, based on a newsletter survey Joe had developed. These were repeated twice so that the membership could attend at least two of the seven.

Joe believed in interaction of members at meetings through workshop formats. Later this led to the idea of workshops developed by Special Interest Groups. He also believed that the Newsletter should be used by CPO members as a forum for discussion. The proceedings showed that Joe was a member of the Board of Directors at the time of this meeting. He was also the editor of the proceedings along with Paul Burns of Newark College of Engineering.

By the time of the 1974 CES meeting in San Francisco, Joe had moved to the University of South Carolina. He was a panel leader supporting the theme, Continuing Engineering Education in the next decade. The topic was "How Do We Get from 1974 to 1984?" One of the panelists was Ross O'Neil of UCLA, a university with one of the largest Continuing Engineering Education efforts in the country.

In 1974, Joe, along with Larry Grayson, edited "Individualized Instruction in Engineering Education," published by CES. The CES Division also published a report of an Engineering Foundation-sponsored conference entitled "Maintaining Professional and Technical Competence of the Older Engineer: Engineering and Psychological Aspects." Both were marketed by ASEF Publications Sales.

In 1975 Joe, along with Fred Hergwalt of Xerox, edited the first major CES publication, The CES Directors Handbook.
The CES annual conference was abandoned in 1975 and replaced in 1976 by the College Industry Education Conference, involving relations with Industry, Engineering Technology, Co-op Education, CES, and the Technical College Council.

Who was the first General Chairman? Joe.

Who published the Proceedings and had them available at the CIEC meeting? Biedenbich and Larry Grayson. Who’s done it ever since? Biedenbach and Grayson.

The first Publications Committee Chairman that I can identify was Art Collins of MIT, 1974-1976. Joe became the CES Chairman for the period of 1976-1977. While Joe was Chairman, the Publications Committee Chairman was Stanley Greenfield, Director for Professional Development of ASME. Joe became Chairman of the Publications Committees in 1978-79 and remained so until his passing. During that time, there has been a continuous production of publications that truly have become the source of information regarding Continuing Engineering Education and Continuing Professional Development. For example;


1979 Continuing Education Director's Handbook, edited by Chuck Elliott and Biedenbach
A Survey of Continuing Ed for Non-academic Scientists and Engineers, by Gerard W. Levy and Sandy Newman, with permission of Battelle Memorial Institute

1981 Selected Readings of Continuing Professional Development of Engineers, edited by Elliott and Biedenbach

1985 Compendium on Uses of Television in Engineering Education, edited by Eugene Chennette and Biedenbach

1986 Compendium etc., edited by Pam Atkinson, Chennette, and Biedenbach

1987 Compendium, etc., edited by Joseph S. Greenberg and Biedenbach

1986-87 Survey of Continuing Education Activities for Engineers and Scientists by Colleges and Universities in the U.S. by Charles F. Elliott and Lloyd J. Dennington

1988 1987-88 Survey, Elliott and Dennington

1989 Supplement to 1987 Compendium, edited by Greenberg, Floyd Cash, and Biedenbach

1988-89 Survey, Elliott and Dennington

In 1972 a World Conference on Continuing Engineering Education was held in Helsinki. It was sponsored by FEANI and UNESCO. John Klos was one of the organizers representing UNESCO. The only other Americans attending were Monroe Kriegel and Joe Biedenbach. While Joe was Chairman of CES in 1977, he and John Klos along with others in Mexico set in motion the plans to hold the First World Conference on Continuing Engineering Education in Mexico City in 1979. The two Americans on the International Committee were John, representing UNESCO and Joe, representing ASHE.

Who edited the Proceedings? Biedenbach and Grayson. (Who was the best dancer at the final banquet in the Palacio de Mineria? Lenore Biedenbach!) I have little information about the Second World Conference held in Paris in 1983. I know that both Joe and John were involved.

The Third World Conference was held at Lake Buena Vista, Florida, in May 1986. Again, Joe was the General Chairman and John Klos was Associate General Chairman. It was hosted by the Continuing Professional Division of ASHE and the Education Society of IEEE.

The Fourth World Conference was held in Beijing in May 1989 at the time of the Tiananmen Square demonstrations. John and Joe were involved. Most of you have read about the conference and the
demonstrations, so that I need say no more about either.

Most of you have also received a notice from the International Association for Continuing Engineering Education (IACEE) about the association which was formed at the 4th World Conference on May 17, 1989. The 5th World Conference will be held in Finland in 1992. John Klus is President of the Council of the Association.

Prior to the 1976 CIEC Meeting, the CES Division apparently had never had an Honors and Awards Committee. Until that time, awards were occasionally made by the Board. One of those was the CES Distinguished Service Award presented to John R. Van Horn about 1973 or 1974. In 1975, the board chose to award two Distinguished Service Awards at the 1975 CIEC meeting, one to John Klus and one to Joseph M. Biedenbach. At the Annual Meeting in June 1976, the Board of Directors established an Honors and Awards Committee. Its first chairman was Peter F. Chapman 1976-77.

Incidentally, at the Annual Meeting in Vancouver in June 1978, the ASUE Board of Directors approved the name change from the Continuing Engineering Studies Division to the Continuing Professional Development Division. It had been proposed at least one year earlier while Joe was Chairman; Peter Chapman was the first Chairman of the CPD Division.

It is clear that Joseph M. Biedenbach has made a significant impact on the CPD Division and on Continuing Engineering Education throughout the world. He was recognized for his contributions by means of the Distinguished Service Award in 1976 at a time when many of his contributions were just beginning. At the 1982 CIEC CPD Division business meeting, John Klus proposed that the name of the award be changed to the Joseph M. Biedenbach Distinguished Service Award.

Joe was creative. He was a friend to all and was able to lead us to choose forward-looking ideas by his example. He was always thinking of new ways to "spread the word," particularly by using the written word. Working with Joe was fun. All of us who knew him are richer for having known him and having had him as a friend.

Morrie Nicholson
But more than all this – we lost one of the best friends possible – a guy who gave and gave and never took. He welcomed newcomers as much as us veterans. He has clearly proved to be irreplaceable.

The Best Paper Award for the 1997 CIEC was presented to one of our sessions:

J. Peter Graves
Assistant Professor of Business Administration
California State College San Bernardino, California

“NOW EVEN OBsolescence MAY BE OBsolete: A look AT CAREERS AND THEIR Development”

The supposed peak and decline in engineers’ productivity with increasing age has often been explained with the model of “technological obsolescence.” The picture portrayed by this metaphor is that an older engineer out of school 15 or 20 years, increasingly less conversant in the language of state-of-the-art engineering. The prescribed solution to the problem emerges, not surprisingly, as a return to education. Studies of Continuing Education, however, have not shown meaningful relationships between CE and continued career vitality.

This paper describes a model of career stages for the engineering professional: Stage I, an apprentice; Stage II, an independent contributor; Stage III, a mentor or manager; and Stage IV, an organizational leader or national expert. The author rejects the obsolescence model as an explanation for engineering career problems. Rather, he suggests that if the engineer, either by design or through ignorance, fails to move into the next stage when others around him expect him to, his perceived value to the organization is likely to decline. He gives some practical suggestions for both the individual engineer and the engineering organization to enhance engineering career vitality.

J. Peter Graves is currently Assistant Professor of Business Administration at California State College, San Bernardino. He has conducted research for and served as a consultant to many organizations, including Battelle-Northwest Laboratories, Lawrence Livermore Laboratory, Syntex Corporation, US Naval Weapons Center and Southern California Edison. He is a frequent speaker before both engineering and management audiences. His current area of interest involves the design and implementation of performance appraisal systems for engineers and the evaluation of training and development programs. He holds a Ph.D. in Social and Organizational Psychology from Brigham Young University.
1990-1991

The Board met three times this year – on June 25 at the ASEE Annual Meeting in Toronto, on September 14-16 in Albuquerque and on January 27 at the CIEC Meeting in San Diego. The Archives do not contain the June and Fall meeting Minutes. Jacki Price unusually served a second year as our Program Chair for the ASEE Annual Meeting.

In 1990, our Division published Video Delivery of Graduate Engineering Instruction by Harvey Stone, then at the University of Delaware but previously at the University of Massachusetts - Amherst. Many of our members had assisted by providing data from our TV students and our Monograph was dedicated to Joe Biedenbach.

Several of the SIGs were very active as were many committees, program chairs and others. Membership and leadership development were major areas of concern. Mary Gail Biebel ran a half-day workshop for the Board at the fall meeting and a similar one at the CIEC meeting. Our Division chair Owen Osborne had a most hectic year in changing jobs back to Oregon State. We conducted our fourth National Survey of University CEE activities and published a monograph with the results. The Treasury stood at $56,088.58 in September and our 1990 CIEC proceeds were $9,634.71. We established the following:

Guidelines for Research and Special Projects
January, 1991

Summary

The CPD Division will provide support for a small number of research projects in areas consistent with the objectives of the Division and which have the potential for improving our profession. The purpose of this initiative is to encourage college-industry partnerships in applied research that is related to continuing professional development of engineers.

Process

Proposals will be solicited formally through publications such as the CPD Newsletter and Engineering Education, and informally at meetings and conferences. Five copies of proposals must be submitted to the Project Committee for review and judgment. The Committee may, but is not obliged to, select projects meeting the Requirements and Criteria specified in this document. Selected projects will be presented to the CPD Board for funding.
Requirements

Projects may be submitted by any legitimate entity; however preference will be given to partnerships between college and industry, and particularly those involving qualified students. One-year grants should be in the range of $1,000 to $10,000, and all funding must be approved by the CPD Board. The CPD will fund direct costs only, no overhead. Joint funding, between CPD and others such as an industry, college, or other professional group may be considered.

- Proposals must be typewritten, five pages or less, and include:
  - Definition of the need or problem to be examined;
  - The importance and relevance of the research to CPD;
  - Plan of work, procedure and responsibilities;
  - Time schedule with anticipated milestones, as applicable;
  - Expected costs by type and amount (include any joint funding);
  - Qualifications of project team members, including lead contact person’s name, address, and phone number; and
  - Required approval signatures from host organizations.

Selection Criteria

Proposals will be evaluated against the following criteria:

1. Usefulness or applicability of the expected product (result) of the proposed project

The expected outcome should have some defined applicability to some CPD interest

2. Scope of the project

The researchers must be able to complete the proposed activity within one year

3. Creativity of the project
The project should have the potential to contribute to our professional capabilities in measurable and unique ways

4. Availability and intended use of the funding

Proposed spending should be an appropriate balance between labor and material costs, and the total amount must be reasonable for the proposed activity, and it must be within the range specified in the Requirements above.

Bob Anderson had moved from General Electric to Iowa State University as Vice Provost for Extension and Continuing Education and become our Publications Chair. He reported the following in January:

Recent Activities:
- Transferred the publications operation from the University of South Carolina to Iowa State University.
- Prepared an inventory of CPD publications.
- Designed a new order form for CPD publications.
- Redesigned the Newsletter cover.
- Published Harvey Stone’s report, “Video Delivery of Graduate Engineering Instruction.”

Please Note:
- Any authors that anticipate CPD publication of their report should contact Bob Anderson before the text is electronically formatted.

SICUCED reported the following:

Since taking over the chairmanship (for the third time – guess I’ll never learn!) from Mike Jackson this year, the following major activities have been attempted:

1. A memo mailing to all known Sig members (150+) in November with assistance from Don Spurrier in getting the list together. Copies were also sent to each of you.

2. Organizing the CIEC Cracker Barrel session for Monday night with the assistance of Jay Gilbert and Mike Jackson.

3. Organizing the Tuesday all-day Nuts and Bolts Workshop with assistance from Jay Gilbert, Art Zirger and Ed Borberly.
4. Began to prepare a new Directory of SIG members from the mailing responses to #1 above and from CIEC attendance.

5. Investigations of a summer workshop and/or other areas of interest to the SIG members.

6. Conducted the fourth national survey of university CEE activities with Lloyd Dennington. We propose to do another one this year if you approve.

Overall, it has been a good year. As always, your questions or suggestions are most welcomed.

Responsibilities of SIG Chairs were more formally established as follows:

The special interest groups provide members of the Continuing Professional Development Division (CPDD) the greatest number of opportunities for their own professional development. Membership in SIG is a relatively informal matter, mainly one of “association.” The SIG chair serves as the main point of contact between the membership of the SIG and the CPDD Executive Board. The SIG chair should inspire active participation by the members in CPDD activities. Specific responsibilities include:

- Serve as a member of the CPDD program committees for the College-Industry Education Conference (CIEC) and the ASEE Annual Meeting (program committee chairs for these meetings are appointed by the Executive Board).

- Encourage and coordinate organization of workshops and paper sessions for the CIEC and Annual Meeting.

- At CIEC: Serve as host and moderator of the annual SIG business meeting (usually convened as a breakfast meeting); attend the SIG chairs planning meeting (usually convened as a breakfast meeting).

- Periodically report SIG activities to the Executive Board and the newsletter editor. Attend Executive Board meetings as requested.

- Maintain the SIG membership roster.

- Recommend individuals and papers for CPDD and ASEE awards.
• Identify and recommend to the Executive Board research projects that could be sponsored by the CPDD.

• Coordinate any other activities of interest to the SIG membership.

• Recruit and nominate a successor as SIG chair (process not formally defined by the CPDD bylaws; should be considered at least biannually).

• KEEP THE SIG COORDINATOR (member of the Executive Board) INFORMED OF ALL SIG ACTIVITIES.

Three issues of the Newsletter were published and distributed via Bob Anderson and his staff at Iowa State. They ranged from 22 to 26 pages and really kept all of us updated on both the Division and the profession in general.

The CIEC Meeting was held in San Diego on January 28 – February 1 and the Proceedings totaled 227 pages. Larry Grayson continued on alone as Editor. He published within them the following tribute to Joe Biedenbach with a page of entertaining photos:

A REMEMBERANCE

On the night of April 7, 1990, after a long day at the office an evening meeting of a student honor society, Joe Biedenbach collapsed and died of a heart attack. The profession lost an exemplary volunteer and we lost a friend and colleague.

Joe’s professional contributions were significant and numerous. He pioneered the use of videotapes for employee education at RCA and was instrumental in developing home tutorials and course delivery by satellite for IEEE. He was one of the original organizers, first general chairman, and a continual participant in this meeting: the college Industry Education Conference. He began and credited every one of the CIEC proceedings from 1976 to 1990. He also co edited the proceedings from the first and third World Conferences on Continuing Engineering Education and served as general chairman of the third. He held a chaired professorship in continuing engineering education at the University of South Carolina, the only such chair in the country. Last year, in the course of a trip to China, he discussed continuing education with Premier Li Peng.

Born on January 29, 1927 the son of a U. S. Army test pilot, Joe inherited his father’s sense of achievement. He received a bachelor’s degree in engineering and a master’s in education from the University of Illinois, a
master's in physics from the University of Michigan, a PhD in higher education from the Michigan State University, and an MBA in finance from Southern Illinois University. As a graduate student entrusted with the care of his younger brother, Joe immersed himself in camping, scouting, basketball and other youth activities. For the depth of his involvement, the Chamber of Commerce selected him as Distinguished Young Man of the Year in 1960.

Professionally, Joe began his career as a research physicist at General Motors, served on the faculties of General Motors Institute, Florida Atlantic University, and Purdue University, was director of education at RCA, and director educational resources at Hershey Medical Center, before joining the faculty at the University of South Carolina. He received numerous awards for his achievements, including the CPD Distinguished Service Award, which has been renamed for him.

Joe's reach went beyond his specialty of continuing education. He edited over 50 conference proceedings for ASEE's Annual Conferences, the Frontiers in Education Conference and ASEE's Southeastern Section meeting; participated for more than a decade in the Southeast Consortium for Minorities; was active in the National University Extension Association; and produced a prodigious number of awards, certificates, and mementos for others to receive.

But his most notable influence was personal. His wife, confidant and constant companion, Dr. Lenore M. Biedenbach, shared his laughter, good humor, and concern for people, especially the young. Joe was proud of receiving the Boy Scouts' highest award, the Silver Beaver, in recognition of his service to youth. He enjoyed students, and his concern for their improvement ran deep. Joe was teaching a course on professionalism this past spring, in which he required students to attend a meeting of the local IEEE section, after which he had the class discuss attributes that made the speaker a success. When he was on the faculty at General Motors Institute, the students dedicated the 1960 yearbook to him - - the only time a faculty member was so honored.

Those of us who knew Joe well, who worked with him, who were involved with his activities, are better for it. Our lives have been enriched. His presence improved everything with which he became involved. We have lost a friend, but one whose spirit will continue to animate our activities.
1991-1992

The Board met four times with Chair Mary Gail Biebel as we returned to Division Officer turnover in June. The dates were: June 16 at the ASEE Annual Meeting in New Orleans; September 20-21 in Tulsa, Oklahoma; January 26 at CIEC in Las Vegas and April 10-12 in San Diego.

Mary Bonhomme from Purdue served as our ASEE Annual Program Chair. Bill Cooper replaced Joe Biedenbach as Site Selection Chair for CIEC. A proposal to raise our Division dues to $10 per year was considered but rejected. We purchased a “cold air balloon” for a Division display (and used it for several years). It started being used as a logo in several of our publications. We began providing a $1000 honorarium to the Joe Biedenbach Distinguished Service Award recipient. The treasury stood at $52,219.59 in September with $4785.56 coming from the 1991 CIEC. A formal Strategic Plan for 1991-94 was established and updated in the spring. We agreed to fund a research project on “The Strategic Relationship of CEE to Corporate Performance” by Carolyn Schultz – then working in the ITV system at Stanford and a graduate student at the University of San Francisco. The idea of a “Fast Back” series of short publications was adopted. There were six active SIGS:

- Management Training and Development
- Industrial Training Directors
- University CE Directors
- International
- Video based Instruction Program
- Telecommunications

Four issues of the Newsletter were published but the spring issue is not in the Archives. Morrie Nicholson continued an Archivist Column in every issue and the Newsletter continued its excellent coverage of the Division and activities in the profession.

The Fifth World Conference – now under the IACEE – was held on June 2-5 in Helsinki, Finland. Their excellent Proceedings in two volumes totaling 1199 pages are in our Archives. They are extremely informative and offer a worldwide view unobtainable anywhere else. Non-attendees at this (or any international one) would be amazed at how much CEE is done elsewhere.

The CIEC Meeting was held on January 17-31 in Las Vegas for the first time with our Tony Rigas as General Chair and Jerry Balm at IBM - Rochester as our Program Chair. The Proceedings totaled 218 pages and again contained several interesting, informative papers including ones on Mentoring at Bell Labs, 3M and Exxon.
We endured another tremendous loss on August 17 with the untimely passing of Glen Martin. The fall 1991 Newsletter contained the follow:
By this time many CPDD members have learned of the untimely death of Glen Martin on Saturday, August 17, 1991, while attending the annual meeting of the Council of the International Association for Continuing Engineering Education, IACCE, in Kuala Lumpur, Malaysia. His death is a tragic loss to CPDD, the engineering profession, and, of course, to his wife Theolyn and family.

Although many of you were as close to Glen as I was, I feel that it is appropriate to share my feelings with you regarding Glen and his contributions to the Division and ASEE. In preparing this note, I called John Klus, one of the founding members of IACCE to learn his feelings about Glen. Many of John’s impressions were the same as mine. John said, "Glen was an exceptional person. His dedication to his profession, and, in particular, to CPDD and ASEE was outstanding. Very few individuals show this dedication. This kind of commitment makes an organization."

Glen had visions of what CPDD should be. In particular, he wanted more industrial input to the organization; without the cross fertilization of industry and academia, he felt that we would wither and become an invisible society.

Glen was a born leader. I have seen only a few individuals who had his ability to formulate an idea or plan for the Division and obtain wholehearted support for it from his colleagues in his own informal person-to-person style. I am sure that all of us felt, as I did, that we were one of Glen's special friends. He made us all feel that way and it made us all feel good. An example of Glen's impact on CPDD was his rapid rise in the organization. He was elected as a member of the Executive Board in 1984-85 for a three year term, but resigned to become the Chair-Elect in 1985-86 and the Chairman in 1986-87. Glen was active on the Society level in the ASEE/CIEC Executive Board from 1985 through 1988-89, first representing CPD and then becoming chair in 1988-89. Glen was heavily involved in the Fifth World Conference on Continuing Engineering Education which will be held in Helsinki in June of 1992.

Glen was a wonderful person, a major contributor to CPDD, and the profession as a whole. He was loved. He will be missed.

Morris E. Nicholson
GLEN L. MARTIN, P.E.

[Ed. Note: The following brief biography of Glen Martin was prepared by one of his colleagues and friends at CH2M Hill, Mike Hamid. To quote Mike, "...it was not an easy task to condense Glen's extensive and considerable accomplishments/professional activities on one page."

I'm sure it wasn't. Mike — we thank you for your help and the fine tribute you've provided.]

Dr. Glen L. Martin, P.E., Director of Organization Development, CH2M HILL, Inc., Denver, Colorado, passed away on August 17, 1991, in Kuala Lumpur, Malaysia. He was attending the IACEE-International Association for Continuing Engineering Education Conference in Malaysia.

Prior to joining CH2M Hill, Inc. in 1979, Dr. Martin served for many years in the higher engineering education arena. He was Dean of the College of Engineering and Professor of Civil Engineering at San Diego State University; Head, Professor and Director of Research, Department of Civil Engineering and Engineering Mechanics at Montana State University. Dr. Martin's other academic assignments included Associate Professor, Department of Civil Engineering and Engineering Mechanics, Montana State University; Assistant Professor, Department of Civil Engineering, Oregon State University, Corvallis, Oregon. Additionally, Dr. Martin was a consultant to the USGS, U.S. Department of Interior; U.S. Forest Service; Montana Department of Highways and the Oregon Highway Department, and several private engineering organizations. As a consultant, he conducted a variety of significant research studies related to surface mining impact, highway information retrieval systems, and physical characteristics of soils. Dr. Martin's findings and recommendations were implemented by the respective agencies and resulted in enhanced systems and quality of user service.

Dr. Martin was dedicated to life-long learning and continuing engineering education and was active in many professional societies, organizations, and forums. He was a Fellow of ASEE and ASCE and served on the ABET, ASEE, ARBTA, and JETS Boards of Directors. He is listed in Who's Who in the West, Men of Achievement, Who's Who in Engineering, International Who's Who in Engineering, and Personalities of America. His keen intellect will be greatly missed by many of his former colleagues and associates who made it a point to be with him during conferences and meetings.

Dr. Martin authored over 30 publications in the areas of soil mechanics and foundation engineering, watershed management, transportation information retrieval systems, transportation planning, pavement drainage, engineering education, and continuing professional development programs.

He was born in January, 1932, and is survived by his wife, Theolyn Martin, three adult children, and a granddaughter.

A Dr. Glen L. Martin Memorial Scholarship Fund has been established to honor his memory. Anyone wishing to make a donation may do so by sending a check to:

Dr. Glen L. Martin Memorial Scholarship Fund

c/o Ms. Judy Bagdon

CH2M HILL, INC.
P. O. Box 22508

Denver, CO 80222
The Board met three times – June 22 at the ASEE Annual Meeting in Toledo, Ohio; on October 2-4 in Albuquerque, New Mexico and January 24 at the CIEC Meeting in Lake Buena Vista, Florida. Tony Rigas had returned to the University of Idaho and served as Division Chair. Drew Barrett was working on a Management Information System for the Division. We began compiling job descriptions for all our Division positions and they were “50% complete” by June. Mary Gail Biebel reported that “90%” of the 92-93 Goals were accomplished. We received $1913.33 from the 1992 CIEC meeting and our treasury balance was $42,064.63 in June of 1992. Joe Di Gregorio from Penn State served as our ASEE Annual Program Chair. Eileen Moree from NTU distributed the first draft of our “Division Handbook” while indicating it still needed more to be complete. The Board approved up to $3,500 for Frank Burris to support the June, 1993 Annual IACEE Council meeting at the ASEE Annual Conference provided a similar amount was matched from other sources. Long range planning at the Fall Board Meeting produced the following:

Define customer needs – Who are our customers?  
What have we done?

Not enough for industry people
   A. Reward/recognition for people in industry
   B. Investment instead of cost
   C. Retraining/Can CPD be a part of or take the lead?
   D. We should have a short vision statement

After much discussion, debate and changes the following vision statement was voted on by the Board:

CPD Vision Statement

The CPD Division is to be the pre-eminent organization for providers of continuing professional development in engineering and allied branches of science and technology.

Chuck Elliott made a motion that the Board approve the above mentioned vision statement. Drew Barrett seconded the motion and the Board so approved.

   E. We need more providers
   F. We do not provide industrial training for industry – industrial people need to be able to interface with industrial people
   G. Industrial people exchange training programs
   H. ASTD meets industrial training needs better than ASEE—more industrial people attend ASTD—more programs are pointed toward industry
I. CIEC does not attract engineers in industry as it should—CPD should help industry buy into both programs
J. CPD should develop an industrial mail list
K. Each Board member should give Drew Barrett the address of their industrial clients

Who are our customers?

Customers are providers who are individuals and organization such as:
A. Training groups
B. Consultants
C. Industrial trainers
D. Faculty
E. Government
F. Individuals or organizations who aspire to be providers.

Who are we (CPDD)?
What are CPDD’s Objectives?

CPDD is an organization whose educational activities are designed to maintain, update or redirect the careers of engineers and those in allied branches of science and technology.

Chair Tony Rigas decided we should let all the Board members review what they believe the objectives of CPD are and then share them before CIEC. We need to think about what CPD is all about—is it continuing engineering education? Life long learning? Or is our objective to foster and promote study of the process of continued learning, and to improve the management and development of professional programs designed to assist those working in engineering endeavors to improve their personal and professional growth through learning development activities?

Let it be noted that there is a difference of opinion between Board members who have been in CPD over a long period of time and new Board members just getting involved with CPD.

Page 43 (copy attached) is what the Board members believe defines customer needs.

What did we learn from the marketing survey?

How do we define customer needs?

We need focus groups for the following:
CIEC
Publications
Database
ASEE
SIG’s
Networking
Mentoring Programs
Special Projects.

Each board member will lead a focus group during the Thursday luncheon at CIEC. Chuck Elliott is to take charge of this function.

SIG’s should be meeting our customer needs.

We need to re-evaluate our SIG groups and their chairs.

SIG buffet instead of sit-down breakfast. People should be able to come without tickets!!!

We need to put SIG information in the newsletter and in a new flyer—need to get rid of the SIG’s where there is not interest and develop new SIG’s where the interest is.

SIG’s should be TASK oriented.

We should restructure the present special interest groups, so that SIG’s will be more relevant to the needs of the members and other providers of continuing professional development.

We should organize new functional interest groups, SIG’s, to address common problem areas among the various constituencies.

CPD Logo: Some new members believe our present logo is outdated; others believe that it represents CPD well. We should have a contest with a prize associated with it, and send it out to our members in our CPD/CIEC flyer and the newsletter to get input from our members. No action will be taken by the Board until this is accomplished.

Jacki Price and Pat Hall will see that this is done.

We should develop a Customer Profile Survey.

The CPDD handbook of missions, goals and job descriptions needs corrections and additions. It is a good start but it is still incomplete. Eileen Moree and Mary Gail Biebel are still working on changes.
They really have not been provided with excellent information concerning CPD background, etc.

What does CPD need to know?

1. The biggest problems you face on your job today.
2. What do you need to know today to do your job 18 months from now?
3. What do you do best?
4. What do you really know
5. What skills do you need to do your job.
6. What is your worst skill?
7. What is your biggest training problem and where do you go for help?

Development of a process to evaluate CPDD’s effectiveness at meeting customer needs at CIEC. Project 5 (page 45 attached).

Stan Love is working on new forms for CPD/CIEC evaluations.

During CPD/CIEC workshops we should be evaluating the following:
   - The evaluation itself.
   - How many people attended?
   - When and who left before the workshop/session was over?
   - How good were the speakers?
   - Where did the participants sit?—up front or in the back?

We should assign a CPD evaluator to each workshop/session

Jerry Bahm stated that this only tells us about the people who did attend, not about the reason why people did not attend.

Maybe we should get the Board members to each call three people they know who have not been attending CIEC and find out the reason why not.

CPD is no longer the largest division at CIEC, and we need to know why not.

Pat Chance from Livermore Labs was leading our Marketing and Publications efforts. She recommended that we adopt the Hot Air Balloon Logo to improve our identity. Our publications available were as follows:

“Video Delivery of Graduate Engineering Instruction: A Comparative Performance Evaluation with Analyses Including:
Mode of Delivery, Academic Discipline, Gender, Age;” by Harvey R. Stone, University of Delaware; 94 pages.

“United States Competitiveness Through Interactions and Collaborations Between Academe, Industry and Government;” by Mary Gail Biebel, Carwile Biebel Consulting Inc.; Johnna L. Howell, Lawrence Livermore National Laboratory, and Philip H. Swain, Purdue University; 293 pages.

“1987 Compendium on Uses of Television in Engineering Education;” by Joseph S. Greenberg, University of Connecticut, and Joseph M. Biedenbach, The University of South Carolina; 674 pages.

“Supplement – 1987 Compendium on Uses of Television in Engineering Education;” by Joseph S. Greenberg, University of Connecticut; Floyd L. Cash, University of Texas – Arlington, and Joseph M. Biedenbach, The University of South Carolina; 160 pages.

“Survey of Continuing Education Activities for Engineers and Scientists Conducted by Colleges and Universities in the United States and Canada;” by Charles S. Elliott, Arizona State University, and Lloyd J. Dennington, University of Denver; 80 pages.

“Research Abstracts on Continuing Engineering Education;” by John P. Klus and Darrell Petska, University of Wisconsin; 132 pages.


We also published an updated version of our CPD Director’s Handbook during the year. We compiled and published an extensive evaluation of the 1992 CIEC meeting and our sessions. We also made a $500 contribution to the Glen Martin Scholarship Fund.

The CIEC meeting was held in Lake Buena Vista, Florida and Tom Tucker from 3M served as our Program Chair. The Proceedings totaled 202 pages and included an excellent eight page “History of CPD Division” by our Archivist Morrie Nicholson. Frank Burris from UCLA also did one on CIEC. There were many other excellent papers still worth a look.
Three issues of the Newsletter were published ranging from 18 to 28 pages. There is an excellent paper in the winter issue by John Klus and John Lorriman (from England) on “CPD Worldwide.”

1993-1994

The Board met three times this year – June 21 at the ASEE Centennial Conference in Champaign – Urbana, Illinois; on October 9-10 in Albuquerque, New Mexico; and on January 30, 1994 at the CIEC Meeting in San Antonio, Texas. Stan Love from Sandia served as Division Chair. Pat Hall from the University of Tulsa served as our ASEE Annual Meeting Program Chair. She developed an expanded program of seven technical sessions, a cracker barrel, a poster session and Get Acquainted Breakfast and Board and Division Business Meeting. Frank Burris later provided an extensive report on the IACEE Council meeting held in Champaign. We held an extensive meeting with ASEE Headquarters Executive Director Frank Hubbard and Associate Director Woodrow Leake about our mutual problems, concerns and interests. Drew Barrett reported that our Membership Database was “together” but needed updating. All six SIGs continued active. We published our first “Freeze Frame” – Teaching Techniques for CEE by Ellen Wagner.

The CIEC meeting was held in San Antonio and Chuck Elliott from Arizona State became the first to naively serve a Program Chair for the second time. The Proceedings totaled 184 pages. An extensive report is in the Archives.

We published four issues of the Newsletter – still full of informative news. The Treasury stood at $44,117 in September.

Several of our members supported the IEEE-USA Careers Conference in April in Ft. Worth.

1994-1995

The Board met three times this year – June 27 at the ASEE Annual Meeting in Edmonton, Alberta, Canada; October 7-9 in Albuquerque; and on January 22nd at the CIEC meeting in New Orleans. Drew Barrett from the University of South Florida in Tampa served as Division Chair.

The Secretary – Pat Hall resumed publishing a special Action Items list for each meeting minutes to encourage us to “do as we promised,” – it worked, most of the time! The June list had 12 items. We received $6272.45 from the last CIEC Meeting. After review, we agreed to pay the $500 annual dues for IACEE. Tom Roberts from Kansas State served as our ASEE Annual Conference Program Chair. We strongly supported the presentation of a special award to Larry Grayson for his 20 years service to CIEC as Proceedings Editor and Co-editor with Joe Biedenbach for the first fifteen years. Chuck Elliott from Arizona State
replaced Morrie Nicholson as Archivist. Several boxes of items were received in Tempe. Chuck also began what turned out to be a lengthy term as chair of the Honors and Awards Committee. We recognized Morrie with a Certificate of Merit for his many years of serving as Archivist at the CIEC meeting. The editor raised the possibility of dropping the Newsletter. The Board decided to continue it.

Tom Roberts facilitated an extended long range planning session at the fall meeting with a SWOT analysis as part of it.

It was suggested that the Chair – elect of the Division become the SIG Coordinator. Work pressure caused several unexpected vacancies on the Board. The Treasury balance stood at $37,095.33 in December.

The CIEC meeting was held in New Orleans on January 22-27. Anita Gordy from Oklahoma State – Okmulgee served as Program Chair. The Proceedings totaled 165 pages.

Three issues of the Newsletter were published. Morrie wrote his last column as Archivist for the summer issue. The Winter-Spring issue included a call for our next Distance Learning Compendium to be edited by Joe Greenberg at Northwestern University and Mary Bonhomme of Purdue.

The 6th World Conference was held in Brazil and several of our members attended.

1995-1996

The Board met three times – on June 27 at the ASEE Annual Conference in Anaheim, California; October 20-22 in Tulsa, Oklahoma; and January 24 at the CIEC Meeting in San Jose, California. Our Division Chair began the year as Jacki Price but ended it as Jacki Swain with her marriage to Phil Swain of Purdue. Karen Fornaciari from Livermore Labs became Treasurer. Pam Albin from 3M in Minneapolis served as our ASEE Annual Conference Program Chair and we sponsored or co-sponsored eight sessions. Our participation in these meetings continued to be discussed/debated. We made several contacts in hope of finding a permanent home for our Archives - most likely at a university library. Tom Roberts reported that Bill Cooper and Don Spurrier (both from Oklahoma State) were recognized for their CPD contributions at the Midwest Section Meeting. Joe DiGregorio served as our representative to the CIEC Site Selection Committee.

Prior to the Fall Board Meeting, Bill Cooper led a presentation/discussion on “Higher Education and Technology in the 21st Century – Roles and Directions.”

The Treasury stood at $33,874.48 in the fall and we received $8644.25 from the 1995 CIEC. Again, major efforts were directed at long range planning, SIG
empowerment planning, membership, marketing and meeting planning, bylaw revisions, publications and an imposing list of ideas and possible projects. While the general membership may not “see” all this voluntary effort, it certainly continued to impress and inspire – this writer!

Our publications available included the following:

“Video Delivery of Graduate Engineering Instruction: A comparative Performance Evaluation with Analysis including: Mode of Delivery, Academic Discipline, Gender, Age;” by Harvey R. Stone, University of Delaware; 94 pages.

“United States Competitiveness through Interactions and Collaborations between Academe, Industry and Government;” by Mary Gail Biebel, Carwile Biebel Consulting Inc.; Johnna L. Howell, Lawrence Livermore National Laboratory, and Philip H. Swain, Purdue University; 293 pages.

“Supplement – 1987 Compendium on Uses of Television Engineering Education;” by Joseph S. Greenberg, University of Connecticut; Floyd L. Cash, University of Texas – Arlington, and Joseph M. Biedenbach, the University of South Carolina; 160 pages.

“Survey of continuing Education Activities for Engineers and Scientists Conducted by Colleges and Universities in the United States and Canada;” by Charles S. Elliott, Arizona State University, and Lloyd J. Dennington, University of Denver; ’86 & ’87 – 33 pages; ’87 & 88 – 84 pages; ’88 & ’89 – 80 pages; ’89 & ’90 – 92 pages; ’90 & ’91 – 101 pages.

“Research Abstracts on Continuing Engineering Education;” by John PI Klus and Darrell Petska, University of Wisconsin; 132 pages.

1988-89 Membership Directory, Continuing Professional Development Division;” by CPD Publications and Membership committee.

1993 “CEE Directors Handbook” by Charles S. Elliott, Arizona State University and Joseph Biedenbach, the University of South Carolina, 593 pages.

1996 “Compendium on Uses of Distance Learning Technologies in Engineering Education,” by Joseph S. Greenberg, Northwestern University and Mary S. Bonhomme, Purdue University, 127 pages.
Our hot air balloon logo came out this year and was used on our letterhead, new membership brochure, flyers and other publications.

We established a listserv on the Internet for our Division at Auburn via Jim Bryant and 82 members joined in. We investigated microfilming the Archives but it did not prove to be financially or operationally feasible. Five SIGs – Leadership Training and Development, Industrial Training Directors, International, University CPD Directors and Media-Based Programs – continued active.

The CIEC meeting was held in San Jose in January 25-29 with Mary Bonhomme from Purdue as our Division Program Chair and Karen Fornaciari of Livermore Labs as the General Conference Chair in our behalf. The Proceedings totaled 190 pages.

Three issues of the Newsletter were published. The Archivist column in the summer issue reviewed the March 10-11, 1975 Board Meeting Minutes in a 20 year look back.

1996-1997

The board met three times – on June 24 at the ASEE Annual Meeting in Washington, DC; November 8-10 in Santa Fe, New Mexico; and on January 26 at the CIEC Meeting in Tampa, Florida. Pat Chance from Livermore Labs served as Division Chair.

While Ed Borbely from the University of Michigan was assigned to be ASEE Annual Meeting Program Chair, the June Board Meeting Minutes state: “No program was organized.” They also report that we lost money on the 1996 CIEC Meeting. Our Treasury stood at $35,694.21. Our First home page on the Web was established through Kansas State University by Tom Roberts and we paid $300 for a student aide to set it up. ASEE was formulating a new Corporate Member Council and also initiating a proposal to provide a national electronic listing of CPD programs available.

Karen Fornaciari published an updated Division Handbook, which served as our Operations Manual. Significant efforts were directed at marketing within the division. Frank Burriss from UCLA had become chair of the International SIG. He provided an extensive report for the Board in the fall as did Pat Chance on the SIGS.

AMCEE celebrated its 20th anniversary at its fall meeting in Asheville, North Carolina. Many of our members had long contributed to this organization, which was noted in our spring 1996 Newsletter. Two Newsletters were published this year and the Balloon Logo and new name “CPDD Voice” were used. Hank
Oppenheimer continued as our long time Editor and they were published and mailed by Karen Fornaciari.

The CIEC meeting was held on January 27-31 in Tampa, Florida. Eileen Moree from NTU served as our Division Program Chair. The Proceedings totaled 204 pages. Our hospitality suite continued to be a most successful venture as was our Super Bowl Party. We continued – and had done so for many years, and still do – to “sponsor” AMCEE and NTU to have special meetings of their constituents at CIEC. The title “CIEC” was changed to Conference for Industry and Education Collaboration.

We again absorbed a major loss with the passing away of Eileen Moree on March 11 in Ft. Collins, Colorado. The spring 1997 Newsletter contained the following:
While he had not been active with us for sometime, that same Newsletter noted the passing away on January 17 of Monroe Kreigel with the following:

In Memorium
EILEEN MOREE
1939-1997

Eileen Moree, Director of Admissions and Records at the National Technological University (NTU), died Tuesday, March 11, 1997, after a brief illness. Eileen was born in Louisiana and spent much of her short life in her beloved Arizona. Eileen’s vitality and enthusiasm endeared her to friends and colleagues and she will be sorely missed by all who knew her. We will all remember her love of photography and the Arizona Desert. In addition to her son Tony, she is survived by her mother, a brother, and two sisters.

Eileen was actively involved in various aspects of engineering education since 1972, including academic programs, continuing education, professional organizations, conferences and publications. She had been Director of Admissions and Records at NTU since 1989.

An active member of ASEE since 1979, Eileen was the recipient of the 1995 Joseph M. Biedenbach Distinguished Service Award. She was CPDD Program Chair for the 1983 Annual Meeting and the 1997 CIEC; Chair, SIGVIP 1982-1987; and Treasurer of the CPDD Board of Directors 1986-1995. Other activities in ASEE include chairing numerous sessions and workshops at both CIEC and ASEE Annual Conferences. In addition, she also co-chaired a preconference workshop at the 1986 World Conference on Continuing Engineering Education, was a Poster Session participant and organizer of the AMCEE participation in the conference.

Eileen was Director of the University of Arizona’s interactive video education facility, VideoCampus (formerly MICROCAMPUS) which featured engineering education, from 1976 to 1989. Eileen was a co-developer of the UA’s unique academic program in electronic packaging engineering, which includes both research and education.

Eileen was a University of Arizona Member Representative to the Association for Media-Based Continuing Education for Engineers, Inc. (AMCEE) (1980-1989). During that time she was a member of the Board of Directors, (1982, 1984-1989); Secretary/Treasurer (1985-1989); Materials Utilization Committee (1983-1985); and, Chair, Nominating Committee (1985, 1987).


She touched our lives in so many ways and we will cherish the memories.

[Please note: The news of Eileen’s death was received after the newsletter had been typed and sent to California for printing. This article was inserted by me prior to printing. Karen]
Our Archives contain a most interesting videotape interview of Monroe done by Bill Cooper. We also have Bill Cooper, John Klus and Morrie Nicholson on tape.
1997-1998

The Board met three times – June 16 at the ASEE Annual Meeting in Milwaukee, Wisconsin; October 3-5 in Scottsdale, Arizona; and February 1 at the CIEC Meeting in Savannah, Georgia. Pat Hall from the University of Tulsa served as Division Chair. Mary Bonhomme from Purdue served as our ASEE Annual Program Chair.

Linda Krute from the University of Illinois did an outstanding job filling in for Eileen Moree in compiling a voluminous Final Report on the 1997 CIEC. The Treasury stood at $40,319.98 in September. The SIG on Leadership and Training Development ceased to exist but some of its functions were absorbed by other SIGs. The Web site was moved to Iowa State University with considerable assistance from Al Day. Efforts were directed towards developing a Financial Plan. Chuck Elliott from ASU agreed to prepare a Division History after his retirement in a few more years. Research and Special Projects received added emphasis. The Archives items list had grown to 3 pages. We received $13,722.14 from the last CIEC – a record amount. Jim Bryant, our Treasurer, compiled a five-year financial history. Our publications on hand were moved from Iowa State to Arizona State who assumed responsibility for sales.

The Seventh World Conference on CEE was held in Turin, Italy on May 10-14. Many of our members attended and Frank Burris became President of IACEE there.

Two issues of the Newsletter (CPDD Voice) were published. The fall issue’s Archivist Column asked if we needed an Archive.

In 1997 John Lorriman from Great Britain who would later lead a workshop for us at CIEC and also at other locations, published a most helpful book – Continuing Professional Development: A Practical Approach (Managing your CPD as a Professional Engineer). It was published by The Institution of Electrical Engineers in the UK and is available in our archives.

The CIEC Meeting was held on February 1-6 in Savannah, Georgia. Linda Krute from the University of Illinois served as our Division Program Chair and Karen Fornaciari from Livermore Labs was Publicity Chair. The Proceedings totaled 217 pages. They were dedicated in memory of Eileen Moree with the following:
This 23rd Proceedings of the Conference for Industry and Education Collaboration is dedicated to the memory of:

Eileen M. Moree
1939 - 1997

Eileen M. Moree, Director of Admissions and Records at the National Technological University (NTU) and an active member of ASEE and the Continuing Professional Development Division, died this past March after a brief illness. We were all shocked and saddened by her passing. To honor her memory, we dedicate this year’s Proceedings to her and have included photos and remembrances of her on the pages that follow.

Active in ASEE/CPDD for nearly 20 years, she was the recipient of the 1995 Joseph M. Biedenbach Distinguished Service Award which pleased her greatly. Eileen was fond of saying...and as Joe Biedenbach used to say, from one volunteer to another...as a means of thanking and encouraging everyone involved in continuing engineering education activities. She certainly demonstrated this principle with her service. She was CPDD Program Chair for the 1983 Annual Meeting and the 1997 CIEC; Chair of the Special Interests Group for Video-based Instruction Programs 1982-1987; and Treasurer of the CPDD Board of Directors 1986-1995.

Other activities in ASEE included chairing numerous sessions and workshops at both CIEC and ASEE Annual Conferences. In addition, she also co-chaired a preconference workshop at the 1986 World Conference on Continuing Engineering Education, was a Poster Session participant and organizer of the AMCEE participation in the conference.

Eileen was born in Louisiana and spent most of her short life in Arizona and New Mexico. She was actively involved in various aspects of engineering education since 1972, including academic programs, continuing education, professional organizations, conferences and publications. She had been Director of Admissions and Records at NTU since 1989.

Eileen was Director of the University of Arizona’s interactive video education facility, VideoCampus (formerly MICRO Campus) which featured engineering education, from 1976 to 1989. Eileen was a co-developer of the UA’s unique academic program in electronic packaging engineering, which includes both research and education.

She was the University of Arizona Member Representative to the Association for Media-Based Continuing Education for Engineers, Inc. (AMCEE) (1980-1989). During that time she was a member of the Board of Directors, (1982, 1984-1989); Secretary/Treasurer (1985-1989); Materials Utilization Committee (1983-1985); and, Chair, Nominating Committee (1985, 1987). Eileen is listed in the 17th edition of Who’s Who in the West and the 12th edition of Who’s Who in American Women.

We will miss her warmth, enthusiasm, and friendship.

The 1998 CIEC Executive Board
1998-1999

The Board met three times – June 29 at the ASEE Annual Conference in Seattle, Washington; September 25-26 in Pleasanton, California; and January 31 at the CIEC Meeting in Palm Springs, California. Karen Fornaciari from Livermore Labs served as Division Chair.

Jim Bryant from Auburn University served as our Program Chair for the ASEE Annual Meeting. The Division Handbook was updated. We reported receiving an average of 10 “hits” per week on our Web site. The Treasury stood at $34,731.15 as of June. Our Pat Chance became Chair of PIC IV – our official connection to ASEE. Louk Fennis from the Netherlands replaced Frank Burris as chair of our International SIG. A new Electronic Membership Directory became available through ASEE. A total of 257 members were listed in January. ASEE Headquarters continued to work on the continuing education database as follows:
ASEE CONTINUING ENGINEERING
EDUCATION DATABASE

ASEE will create a Continuing Engineering Education Database, which will be a web-based database of courses, offered by engineering colleges, professional societies, and others. The database will include courses offered in classrooms, on CD-ROM and video, and over the Internet. The system will be fully interactive, with the capability of identifying available courses matching user preferences for such criteria as subject, geographic location, format, and schedule. With the rapid changes in technology making engineers' knowledge obsolete, industry and their employees need to participate actively in lifelong learning. Currently, there is no single source that exists that compiles all available continuing engineering education courses. ASEE would create such a place for the engineering community.

As the national organization dedicated to improving engineering education, ASEE is the logical locus for this database. ASEE's mission includes the promotion and enhancement of lifelong learning for engineers. ASEE is the only individual member organization that represents all disciplines of engineering and through our membership has direct access to the providers and users. For a number of reasons ASEE has been collecting data from engineering and engineering technology institutions, which we publish both online and in printed directories. With the expertise we have gained through development of a cutting edge system for web-based surveying, ASEE is uniquely positioned to undertake this project.

ASEE will use a two-pronged approach to this project—system development and outreach activities. An advisory committee, including representatives from ASEE's CPD and CMC components, will be formed to assist in the development and implementation of the system. ASEE will contract for the creation of the database, and the system delivery is planned for early summer. A data entry capability is anticipated to be available by the summer, with the system becoming live three to six months later. During system development, ASEE staff will work with CPD members and other providers to gather the data. ASEE will launch an aggressive marketing effort to reach the providers and users by working with the "engineering founder societies" and other engineering and scientific organizations. Finally, ASEE will establish an active marketing program to promote the system to prospective users.

During the first year, ASEE will not charge fees for the providers or users of the system. After that time, revenues will be generated in one of three ways: charging vendors for being listed in the database per course, charging for access per search or per year, or charging providers for students that use the database to sign up for courses.

Benefits to the CPD membership include increased accessibility of their courses to prospective students, which should lead to increases in class size and participation, and increased revenue. Potential benefits to ASEE include increased visibility of the Society, which should lead to more corporate and institutional participation in Society activities generally.
Our Strategic Plan was updated for 1999-2004. Two issues of our Newsletter were published.

The CIEC meeting was held in Palm Springs, California on February 1-5. Mary Bonhomme from Purdue served as General Chair and Pat Chance from Livermore Labs as our Program Chair.

1999-2000

The Board met three times – June 20 at the ASEE Annual Conference in Charlotte, North Carolina; October 2-3 at Auburn University in Auburn, Alabama; and January 30 at the CIEC meeting in Orlando, Florida. Jim Bryant from Auburn served as Division Chair. Joe Greenberg from Louisiana State University served as our Division Program Chair for the ASEE Annual Meeting. We provided non-financial sponsorship to the Spring IEEE - USA Careers Conference in San Jose. Pat Chance provided a voluminous report on the 1999 CIEC. We netted $4,548.41 from the meeting. Our Treasury stood at $43,840.09 in the fall. We agreed to provide up to $10 each for speaker gifts for the next CIEC. The Board decided that the Fall Newsletter would be the last one issued in printed form. Members were being notified to download future ones from our Website. Karen Fornaciari agreed to update the Division Handbook one last time and it would then become the duty of the Chair – Elect. She also agreed to provide an electronic version for the Website.

Strategic issues to be addressed were:

- Go after more membership
  - Growth, participation, selective recruitment for key positions
- Member services (outreach, responsiveness, communication)
  - Provide more/better products, research, publications, directories, etc. for membership
- Periodically capture data from industry to determine their needs rather than form a industry board
- Make people more aware of membership opportunities, professional development and networking – do not have to be an engineer, must strengthen concept of membership efforts
- Strengthen technical content for programs – through SIGS, must have strong SIG Chairs
- More effective use of web page with membership, dynamic chat rooms, mailer, etc.

An update to the CPD Director’s Handbook was attempted. Bill Cooper completed a major section on Distance Education.

Two Newsletters were “published” with the Spring Issue being our first electronic one. A printout of it ran 14 pages.
The CIEC meeting was held in Orlando, Florida on January 30 – February 4 as CIEC’s 25th Anniversary. Linda Krute from the University of Illinois served a second time as our Division Program Chair.

2000-2001

The Board met three times – on June 19 at the ASEE Annual Meeting in St. Louis, Missouri; October 24-26 in Tempe, Arizona; and February 2 at the CIEC Meeting in San Diego. Ed Borbely from the University of Michigan – Ann Arbor served as Division Chair. Helene Demont from the University of Wisconsin – Madison served as our ASEE Annual Meeting Division Program Chair. Ed asked the Board to focus on three primary areas: Leadership – Providers of CPD Opportunities, Awareness – Networking with Industry and Motivation – Working with other divisions. Two proposals for Research Projects were received. The Treasury stood at $40,824.74 in June. We received $2287 from the 2000 CIEC.

We published another Compendium on Uses of Distance Learning Technologies in Engineering Education with Joe Greenberg (LSU) and Mary Bonhomme – now at Florida Institute of Technology as Editors.

A survey of industry members was made but no results were available as of the end of the “record” year at the 2001 CIEC!

With Chuck Elliott retiring soon from Arizona State University, Helene Demont agreed to take on the job of Archivist. Chuck did agree to do the Division History after his retirement and then forward the Archives to Helene after “cleaning them up.”

Jim Bryant agreed to finish editing of the CPD Director’s Handbook.

The CIEC meeting was held on January 28 – February 4 in San Diego. Lynette Krenelka from the University of North Dakota served most ably as our Program Chair. The Proceedings were issued on CD-Rom for this meeting.

The Eighth World Conference was held in May in Toronto.

While this completes the History through February of 2001, it is worth noting the following:

2001 ASEE Annual Meeting Division Program Chair in Albuquerque, New Mexico – Helene Demont for another year!

2002 CIEC – Sarasota, Florida with Mary Bonhomme as our Program Chair.
SOME PERSONAL PERSPECTIVES

After “living” with the Archives for about 10 years now, and spending several months – off and on – during the last year and a half (while very much enjoying my early retirement!), it seems appropriate to add a few personal observations/perspectives.

There are way too many positive memories (and very few negative ones!) to cover everything but this is one person’s views –

- We have had many, many outstanding (not just good) leaders.
- The University of Wisconsin really stands out over many years.
- CONFER was a most interesting and useful tool as a forerunner of internet communications
- After all these years, John Klus and Bob Anderson, who preceded me in this organization, are still active in it!
- Morrie Nicholson made the Archives (and thus this publication) possible.
- SIG’s were a great sub-organization and it is sad to see their limited status today.
- Our Newsletter has long been a positive of our Division. The conversion to an Electronic one does not seem to be as useful. It always was the one way to directly reach each member regularly.
- We have had some really outstanding secretaries who took great meeting minutes and this has not been sufficiently recognized by any of us.
- Joe Biedenbach was the “greatest” as far as CPD was concerned. We will not see his like again regretfully.
- The Division has changed a lot especially in the last ten years - sadly not all for the best! We have very limited industry support; many deans and universities are not as supportive; we do not do enough research, publishing and scholarly work as we used to – thankfully IACEE around the world does more to help fill the void – though not in the USA; “What’s in it for me?” has really affected leadership positions – and even those who do it anyway do not get enough recognition from their peers or superiors at work; but we have made great strides in getting women – though not enough minorities – involved in our organization.
In closing, it has been a pleasure to perform this “labor of love” in your behalf and it is hoped that many will find some value in reviewing what has been a vital contributory, professional organization because there is no higher calling than serving others!
### Appendix A

#### Division Officers

<table>
<thead>
<tr>
<th>Year</th>
<th>Division Chair</th>
<th>VicPast Chair</th>
<th>Secretary-Treasurer</th>
<th>PrograPast Chair</th>
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Appendix A

Division Officers

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Appendix A

Division Officers

1975-76 Division Chair Israel Katz Northeastern University
Chair-Elect Ray Page General Motors Institute
Secretary-Director Dave Blythe University of Kentucky
Fred Burgardt Xerox
John Klus University of Wisconsin
William Knight Washington State University
Bill Ledgerwood Esso Corp
Don Miller IBM
George Maler University of Colorado

1975-76 Division Chair Joe Biedenbach RCA Corp.
Chair-Elect Ray Page General Motors Institute
Secretary Bill Ledgerwood Esso Corp
Treasurer Jim Cobb University of Pittsburgh
Don Miller IBM
John Klus University of Wisconsin
Chuck Sener Bell Systems Center for Technical Education
Monroe Kriegel Oklahoma State University
Richard Wiegand Georgia Tech

Note 2 Starting this year the position of Secretary/Treasurer was divided into separate positions.

1977-78 Division Chair Ray Page General Motors Institute
Chair-Elect Peter Chapman Shell Oil
Secretary Bill Ledgerwood Esso Corp
Treasurer Lois Greenfield University of Wisconsin
Bob Anderson Purdue University
Al Cassell Livermore Labs
John Klus University of Wisconsin
Don Miller IBM
Chuck Sener Bell Systems Center for Technical Education

1978-79 Division Chair Peter Chapman Shell Oil
Chair-Elect Dean Griffith Oklahoma State University
Secretary Bill Ledgerwood Esso Corp
Treasurer Lois Greenfield University of Wisconsin
Chuck Sener Bell Systems Center for Technical Education
Charles Elliott Wayne State University
Neal Jefferies
Dave Leamon ASQC
Bob Anderson Purdue University
Al Cassell Livermore Labs

1979-80 Division Chair Dean Griffith Oklahoma State University
Chair-Elect Chuck Sener Bell Systems Center for Technical Education
Secretary Jay Gilbert Empire State College
Treasurer Lois Greenfield University of Wisconsin
Chuck Elliott Purdue University
Dave Leamon ASQC
Tony Rigas University of Idaho
Ray Morrison Los Alamos Labs
Lindy Saline General Electric
Al Cassell Livermore Labs
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<th>Year</th>
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# Appendix A

## Division Officers

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123
### Appendix A

#### Division Officers

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1991-92

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1992-93

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1993-94

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## Appendix A

### Division Officers

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<td>Sandia Labs</td>
<td>University of Tulsa</td>
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<td>Drew Barrett</td>
<td>Pat Hall</td>
<td>Karen Fornaciari</td>
<td>Pam Albin, Ed Borbely, Joe Digregorio, Harry Greenleaf, Bill Pedler, Tom Roberts</td>
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<td>Mike Jackson</td>
<td>Karen Fornaciari</td>
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<td>Oklahoma State</td>
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<td>1997-98</td>
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### Appendix A

**Division Officers**

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Appendix A

Division Officers

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NOTE 3: Bylaws changed to reflect terms of office beginning at CIEC.
Appendix B

AWARDS PROGRAM

The Honors and Awards Program is intended to recognize and honor those members of the Continuing Professional Development Division of ASEE who not only have been significant contributors to the Division but also who have made important contributions through their activities to the professional development of engineers. The awards are presented at the annual CIEC meeting held in January or February each year.

The Honors and Awards Committee has the responsibility to identify and recognize these individuals. Each year the Committee solicits the Division members to nominate candidates for these awards.

The Division gives three major awards. They are the Joseph M. Biedenbach Distinguished Service Award, the Certificate of Merit and the Outstanding Paper Award.

JOSEPH M. BIEDENBACH DISTINGUISHED SERVICE AWARD

The Joseph M. Biedenbach Distinguished Service Award is the highest award presented by the Division. A plaque and $1000 is given to a member of the American Society of Engineering Education who has rendered noteworthy leadership and service within the Division and in recognition of outstanding service in the field of continuing professional development of engineers.

CERTIFICATE OF MERIT

The Certificate of Merit is a framed certificate presented to a member of the CPD Division for outstanding and noteworthy contribution to the Division. This could include innovative leadership over a period of several years or a single unique contribution of major significance.

OUTSTANDING PAPER AWARD

The Outstanding Paper Award is a framed certificate presented to the author(s) of the most significant book or paper on the subject of continuing engineering education published during the pervious year. Under exceptional circumstances papers published in prior years may be considered.

CERTIFICATE OF APPRECIATION

In addition to the above awards, the Division also awards Certificates of Appreciation. Nominations for this certificate are not solicited from the membership. Candidates for this certificate are determined by the Honors and Awards Committee with input from the
CPD Division Board for approval. The Certificate of Appreciation is a framed Certificate presented in recognition of leadership of service rendered to the Division.

PREVIOUS AWARD WINNERS

PIioneer Award

In 1977, ten Pioneer Awards were given to honor the founders of the Continuing Engineering Studies Division. (This Division later changed its name to the Continuing Professional Development Division.)

Albert K. Ackoff
John F. Conners
Israel Katz
Monroe W. Kriegel
Julius O. Luck
Russell R. O’Neill
Raymond J. Page
Marion L. Smith
John R. Van Horn
Cornelius Wandmacher
DISTINGUISED SERVICE AWARD

1975-76
John P. Klus
University of Wisconsin

Joseph M. Biedenbach
University of South Carolina

1976-77
Monroe W. Kriegel
Oklahoma State University

1977-78
Howard Shelton
Sandia Laboratories

1978-79
Lionel V. Baldwin
Colorado State University

1979-80
No Award

1980-81
Morris E. Nicholson
University of Minnesota

1981-82
Peter F. Chapman
Shell Oil Company

Donald B. Miller
IBM Corporation

Lindon E. Saline
General Electric
RENAMED IN 1982 AS THE J. M. BIEDENBACH DISTINGUISHED SERVICE AWARD

1982-83
Charles J. Sener
Bell System Center for Technical Education

1983-84
Charles S. Elliott
Purdue University

1984-85
L. W. (Bill) Ledgerwood, Jr.
Exxon Production Research Co.

1985-86
Robert M. Anderson
General Electric

1986-87
George J. Maler
University of Colorado

1987-88
Wallace D. Decker
Lawrence Livermore Laboratory

1988-89
Frank E. Burris
UCLA Extension

1989-90
Glen L. Martin
CH2M Hill

1990-91
Patsy O. Sherman
3M Company

1991-92
Bill L. Cooper
Oklahoma State University

1992-93
Own D. Osborne
Oregon State University

1993-94
Mary Gail Biebel
Carwile, Biebel Consulting, Inc.

1994-95
Eileen Moree
National Technological University

1995-96
John P. Klus
University of Wisconsin

1996-97
Jacklyn M. (Price) Swain
Oklahoma State University (Retired)

1997-98
Henry G. Oppenheimer
The MGI Management Institute

1998-99
Patricia F. Chance
Lawrence Livermore Laboratory

1999-00
Patricia E. Hall
The University of Tulsa

2000-01
Karen Fornaciari
Livermore Labs

2001-2002
Joe Greenberg
University of Louisiana

2002-2003
Mary Bonhomme
Florida Tech
CERTIFICATE OF MERIT

1976-77
James T. Cobb, Jr.
University of Pittsburgh

Robert M. Anderson
Purdue University

1977-78
Alfred H. Cassell
Lawrence Livermore Laboratory

Dean E. Griffith
University of Texas, Austin
Leroy Ledgerwood, Jr.
Exxon Production Research

1978-79
Charles S. Elliott
Wayne State University

1979-80
Raymond E. Carroll
University of Michigan

1980-81
Lois B. Greenfield
University of Wisconsin

1981-82
H. O. Holt
(Retired)

1982-83
George J. Maler
University of Colorado

Morris E. Nicholson
University of Minnesota

1983-84
Lawrence P. Grayson
National Institute of Education

1984-85
Howard Hendrickson
University of Texas

IEEE
New York, NY

1985-86
Donald B. Miller
Management Consultant

1986-87
Fred C. Rex
University of Florida

John F. Wilhelm
IEEE-Piscataway

1987-88
James R. Wilbanks
Auburn University

1988-89
Glen L. Martin
CH2M Hill

1989-90
Johnna L. Howell
Lawrence Livermore Laboratory

Henry N. Oppenheimer
The MGI Management Institute

Fred C. Rex
University of Florida

Mary Gail Biebel
Carwile Biebel Consulting, Inc.
1991-92
Phillip H. Swain
Purdue University

1992-93
Mary S. Bonhomme
Purdue University

1993-94
Anthony S. Rigas
University of Idaho

1994-95
Lionel V. Baldwin
National Technological University
John P. Klus
University of Wisconsin
Morris E. Nicholson
University of Minnesota

1995-96
Tom C. Roberts
Kansas State University

1996-97
Louk A.G.M. Fennis
Netherlands Institute for CPD
Anders Hagstrom
IACEE

1997-98
Markku A. Markkula
Helsinki University of Technology
Karen Fornaciari
Lawrence Livermore Laboratory

1998-99
Frank E. Burris
UCLA Extension
Charles J. Sener
Professional Communication Consultants

1999-00
Joe Greenberg
Louisiana State University
Joe DeGregorio
Georgia Institute of Technology

2000-01
Bill Cooper
Oklahoma State University

2001-2002
Helene Demont
University of Wisconsin-Madison
OUTSTANDING PAPER AWARD

1965-76
Mary H. McCaulley
University of Florida

1976-77
No Award

1977-78
Alden M. Jones
General Electric Company

1978-79
No Award

1979-80
Harold G. Kaufman
Polytechnic Insititute of N. Y.

1980-81 (Co-Authors)
Judy Ann Jones
University of Wisconsin

John P. Klus
University of Wisconsin

1981-82
No Award

1983-84
Bill Barfield
David Blyth
Henry Cole
Frank Gohs
Warren Lacefield
Judson Moss
University of Kentucky

1984-85
No Award

1985-86
No Award

1986-87
Robert M. Anderson
Neil A. Love
General Electric Co.

1987-88
Wilfred J. Bartz
Technische Akademie Esslingen

1988-89
No Award

1989-90
Mary Gail Biebel
Carwile Biebel Consulting, Inc.

1989-90
Johnna L. Howell
Lawrence Livermore Laboratory

1989-90
Philip H. Swain
Purdue University

1990-91
No Award

1991-92
No Award

1992-93
No Award

1993-94
No Award

1994-95
Fifth World IACCE Conference
Proceedings

1995-96
Mary L. Walshok
1996-97
Mary S. Bonhomme
Purdue University

Joseph S. Greenberg
Louisiana State University

1997-98
Marlene Brennan
Paul J. Edelson
Jan O’Brien
SUNY-Stoney Brook

1998-99
7th World Conference on Continuing
Engineering Education Proceedings

1990-00
Riitta Suurla
Markku Markkula
IACEE Publication

2000-01
Mary S. Bonhomme
Florida Institute of Technology

Joseph S. Greenberg
Louisiana State University

2001-2002

2002-2003