

THE 90TH CONFERENCE

MODERN CHEMISTRY: FROM FORMULA TO FUNCTION



**TWO YEAR COLLEGE CHEMISTRY CONFERENCE**  
**DIVISION OF CHEMICAL EDUCATION**  
**AMERICAN CHEMICAL SOCIETY**

Westchester Community College

Valhalla, New York

April 11 and 12, 1986

Please retain this  
book for the meeting  
in Chicago.

1986 EXECUTIVE COMMITTEE

CHAIRMAN

Onofrio Gaglione  
New York City  
Technical  
College  
300 Jay Street  
Brooklyn, NY  
11201  
(718) 643-3488  
Home (718)  
331-5780

IMMEDIATE  
PAST CHAIR

Jay Bardole  
Vincennes  
University  
Junior College  
Vincennes, IN  
47591-9986  
(812) 885-4372  
Home (812)  
882-5272

CHAIR-ELECT

Edith Bartley  
Tarrant County  
Junior College  
South Campus  
Ft. Worth, TX  
76119  
(817) 534-4861  
Home (817)  
498-2177

PAST CHAIRS

Marian Baker  
Tamar Susskind  
Douglas Bond  
Katherine Weissmann  
Paul Santiago  
John Mitchell  
William Griffin  
Curtis Dhonau

SECRETARY  
EDITOR

Ethelreda  
Laughlin  
6486 State  
Road # 12  
Parma, OH 44134  
Home (216)  
884-0546

TREASURER/  
COLLEGE SPONSOR

John Clevenger  
Truckee Meadows  
Community  
College  
7000 Dandini  
Blvd., Reno, NV  
89512  
(702) 673-7221

MEMBERSHIP  
CHAIR

Mike Knoll  
Vincennes  
University  
Junior College  
Vincennes, IN  
47591-9986  
(812) 885-4529

INDUSTRIAL  
SPONSORS CHAIR

Elliott Greenberg  
Prairie State  
College  
P. O. Box 487,  
Chicago Heights, IL  
(312) 756-3110

90TH 2YC3  
MODERN CHEMISTRY FROM FORMULA TO FUNCTION  
Westchester Community College  
Valhalla, NY  
April 11-12, 1986  
(in conjunction with NYSTYCCTA)

PROGRAM CHAIR

Patricia Flath, Paul Smith College, Paul Smith, N.Y., (518) 327-6866

LOCAL ARRANGEMENTS CHAIR

John Tobias, Westchester Community College, Valhalla, N.Y., (914) 285-6933

INDUSTRIAL SPONSOR CHAIR

Stephen Dreier, NYC Technical College, Brooklyn, N.Y., (718) 643-8242

Friday - April 11, 1986 - Science Building - Room 102

- 9:00 - 1:00 Registration, Exhibits, Trading Post\*
- 9:30 Committee on Chemistry in the Two Year College Meeting  
(Open to all interested)
- 10:45 Opening
- Onofrio Gaglione, Chair, 2YC3  
Joseph N. Hankin, President, Westchester Community College  
Cecelia Jorgensen, President, NYSTYCCTA
- 11:00 Introduction to Program  
Patricia Flath, Program Chair, Paul Smith's College
- 11:05 "What Students Should Know About Hazardous Chemical Waste  
Handling," Donald Drum, Columbia-Green Community College
- 11:30 "How Can I Teach Everything in Only 30 Weeks?!",  
Michael DeAngelo, Paul Smith's College
- 12:00 - 1:30 Lunch Breaks, Exhibits
- 1:30 "Public Understanding of Science," James Bradford, ACS,  
Two Year Office
- 2:00 "Trace Contamination," James Sheaffer, Mohawk Valley  
Community College
- 2:30 "Development of Experiments - Rate and Kinetic  
Investigations," H. A. Neidig, Leganon Valley College
- 3:00 - 3:15 Break
- 3:15 "DWI," Mark Amman, Alfred State College
- 3:45 "A Creative Search for a Sense of Rightness,"  
Dan Conlon, I2R
- 6:30 - 8:30 Banquet
- Speaker - IVAR GIAEVER, Nobel Laureate  
General Electric Company and RPI  
"Industrial Research"

Saturday - April 12, 1986 - Science Building - Room 102

7:30 - 8:30 Continental Breakfast and Business Meeting, NYSTYCCTA

8:45 "SERAPHIM - Where Are We Now," Pat Barker, SERAPHIM

9:15 "CAI in the Chemistry Laboratory - A New Approach,"  
Satya P. Gupta, Hudson Valley Community College

9:45 "Chemistry Laboratory Reports Using a Spreadsheet  
Computer Program," William Torop, West Chester University

10:15 Break

10:30 Panel Discussion

"Critical Issues in Two Year College Chemistry:  
Aftermath of the 85 Invitational Conference"

Uni Susskind, Oakland Community College and MCA  
Medalist, 1985, Moderator

Panel: Jim Bradford  
Harry Hajian  
Don Jones  
Bill Mooney  
Kathy Weissmann

Respondents: Dick Gaglione  
Margot Schumm  
Vince Sollimo

12:00 - 1:00 Lunch Break

1:00 "An Introduction to Computer Interfacing,"  
John M. Anderson, Alfred State College

1:30 "Interfacing Experiments," Jeanne McDermott, HRM Software

2:00 "A 'First Step' for Using Microcomputers to Teach Problem  
Solving - 'George'," Richard Cornelius, Lebanon Valley  
College

2:30 "A New Look at Some Old Laws," Paul Cauchon, Canterbury  
School

3:30 Wrap-up

\* The Trading Post will be a round-up of course outlines, problem sets, safety tips, concept illustrations, anecdotes, cartoons, puzzles, games and many more ideas for improving instruction--all on view for display for easy viewing. Photocopy machines will be available to reproduce items at a modest cost. Conference participants are encouraged to bring materials for sharing.

AGENDA

Committee on Chemistry in the Two-Year College

General Meeting

Friday, April 11, 1986  
Westchester Community College

- I. Introduction
- II. Approval of the Minutes, Reno meeting
- III. Reports
  - A. Chair - Dick Gaglione
  - B. Report of the Past Chair - Jay Bardole
  - C. New York Meeting Report - Pat Flath
  - D. Chicago Meeting Report - Bill Mooney and Duane Sell
  - E. Membership - Mike Knoll
  - F. Treasurer - John Clevenger
  - G. College Sponsors - John Clevenger
  - H. Industrial Sponsors - Elliott Greenberg
  - I. Publications - Ethelreda Laughlin
  - J. Meeting Sites - Dick Gaglione
  - K. Programs - Len Grotz
  - L. Workshops - Sam Crawford
  - M. ACS Two-Year College Program - Jim Bradford
- IV. Old Business
- V. New Business

2YC3 Executive Committee Meeting  
Peppermill Inn  
Reno, NV  
Thursday, Dec. 5, 1985  
7:20 PM

Present: Marion Baker, Jay Bardole, Doug Bond, Jim Bradford,  
John Clevenger, Curt Dhonau, Dick Gaglione, Elliott Greenberg,  
Mike Knoll, Ethelreda Laughlin

(1) Jay Bardole opened the meeting. He announced that the candidates for Chair-elect, Bill Wasserman and Ralph Burns, both met the qualifications as outlined in Policies and Procedures.

The procedures call for a first election to bring the number of candidates to two. Since there are just two candidates, the ballots will be mailed in December to be returned to the secretary. They will be opened at the first spring meeting.

(2) Budget: Dick Gaglione, John Clevenger and Jay Bardole worked out a budget in Memphis. Since a fifth meeting is scheduled in Bozeman, \$500 has been allocated for travel for the chair to Montana in July.

The only other change is an increase of meeting expenses to \$300 per meeting.

The budget includes \$2,000 from Div.Ched. There was a report of a statement by Mary Virginia Orner that the amount could be reduced by 20%. A discussion followed about expenses that could be lowered if the chair's college did not pay expenses of printing and postage. Mike spent \$250 this year.

Jay said he'd like to have the budget approved. Marion Baker moved that the budget be accepted as presented. Curt Dhonau seconded the motion.

Curt asked that the last two sentences in the print-out be deleted. Marion thought they should be retained. Curt moved that the deletion be made and Doug seconded. The amendment passed.

The vote was then taken on the motion and passed.

There was a discussion about showing interest on savings in the budget report. Since one-half the interest is used as income, it is included.

(3) Meetings. Dick Gaglione distributed a chart of future meetings showing changes from the conference booklet. Richard Jones (Datyton) sent a tentative program for Nov., 1986. Although Wendell Massey said he'd be both program and local arrangements chair, Dick said that the two jobs are too much for one person and a local arrangements chair should be named.

There is no program chair for the Toronto meeting. There is a question about the date for the Pittsburgh conference. Should it be in the fall or spring?

The theme for the Bozeman conference will be 2YC3 issues and answers through excellence.

(4) Jay distributed the roster for January, 1986. Dwain Eubanks, Division Chair, will send letters to committee members who are renewals.

Jay said that Bill Mooney suggested that the 2YC3 liason member to the task force should attend the executive meeting as a liason person. Anytime the Chair or Chair-elect can attend a SOCED meeting he/she is welcome.

Elliott suggested appointing John Mitchell as the liason person.

Curt said the job should be offered to John Mitchell. If he doesn't want it, Jay will be a back-up.

John Clevenger moved to use \$500/year for two years for expenses of attending the meetings. Dick seconded. The motion passed.

Jay will take another look at the budget to make the change.

Jay said that an error was made in announcing that Mike Knoll's term would be over at the end of 1986, since his appointment under the new policies and procedures was effective only when that document was official.

The question was asked about applications for the secretary's job. Uni Susskind has applied for the position. Jay asked Doug about his opinion about combining the secretary and chair-elect positions for one year. Doug saw no problem with the procedures.

(5) Jim Bradford said that the abstracts from papers of the Memphis meeting would be published in the next Distillate.

Ethelreda Laughlin  
Secretary/Editor

COMMITTEE ON CHEMISTRY IN THE TWO YEAR COLLEGE  
 PROPOSED BUDGET FOR 1986  
 NOVEMBER 1, 1986

INCOME	Members 84	actual 84	Members to date 85	Budget to date 85	Proj 86 members	Proj 86 budget
College Sponsor	135	\$1300.00	115	3225.00	122	3050.00
Industrial Sponsor	39	3550.00	21	2425.00	32	3200.00
Individual Member	488	936.00	489	2627.00	500	3000.00
DivChed		2000.00		2000.00		2000.00
Interest		406.42		1232.30		1200.00
Meeting and Misc		2431.91		658.07		0.00
<b>TOTAL</b>		<b>10764.33</b>		<b>12,167.37</b>		<b>12,450.00</b>

EXPENSES

Chair travel		1869.77		550.00		2,000.00
Chair travel Bozeman		0.0		0.0		500.00
Past chair travel		850.00		494.79		850.00
Chair elect travel		850.00		663.42		850.00
Secretary travel		850.00		850.00		850.00
Ind. Spon. travel		850.00		0.00		850.00
Treasure Travel		850.00		755.93		850.00
Membership Travel		850.00		400.06		850.00
Meetings		0.0		451.88		1500.00
Distillate		2140.00		0.00		2000.00
SocEd Invitational		0.00		0.00		1200.00
Postage, prntng, phone, etc				139.88		150.00

<b>TOTAL</b>		<b>11,159.61</b>		<b>4,305.96</b>		<b>12,450.00</b>
--------------	--	------------------	--	-----------------	--	------------------

** PRINTING		1124.54		0.00		1,000.00
** Postage		0.00		0.00		1,400.00
** Phone		0.00		0.00		300.00

\*\*It is not expected that these line items will be needed at this level in 1986 since colleges will take care of most of these expenses. We must remain aware that in some years we will have to pay these expenses. At the start of 1985 we had a balance of 3620.05 and will probably have as much at the end of 1985. Thus we will have enough in reserve to pay these expenses for one or two years if it becomes necessary.



Open Committee Meeting  
Truckee Meadows Community College  
Friday, December 6, 1985  
9:45 AM

Attendees:

Gilbert Albelo	Mt. Hood Comm. Coll., Gresham, Or
Marion Baker	Central Piedmont C.C., Charlotte, NC
Jay Bardole	Vincennes U. Jr. Coll., Vincennes, IN
Edith Bartley	Tarrant County Jr. Coll. So., Ft. Worth, TX
Helen Bell	Dyersburg, TN
Douglas Bond	Riverside, CA
Jim Bradford	A.C.S., Washinton, D.C.
Ralph A. Burns	St. Louis CC, Meramac, MO
John Clevenger	Truckee Meadows CC, Reno, NV
Jody Crook	Meridian, MS
Curt Dhonau	Vincennes U., Vincennes, IN
Onofrio Gaglione	N.Y.C. Tech. Coll., Brooklyn, NY
Elliott Greenberg	Prairie State Coll., Chicago Hts, IL
Boyd W. Guntry	Mid-Plains CC, North Platte, NE
Ed Heath	Southwest Texas Jr. Coll, Uvalde, TX
Jim Heibach	Prairie State Coll., Chicago Hts., IL
Art Hubscher	Ricks College, Reyburg, Idaho
M. Hugo	Shasta College, Redding
Cullen Johnson	Cuyahoga CC, Cleveland, OH
David A. Katz	Comm. Coll. of Phila, Philidelphia, PA
Dave Klein	Kansas City CC, Kansas City, KS
Michael Knoll	Vincennes U., Vincennes, IN
Frank Koch	Bismarck, Jr. Coll., Bismarck, ND
Arthur Last	Arthabascu,
Ethelreda Laughlin	Parma, OH
R.A. Lunnstrom	American River Coll., Sacramento, CA
Dave Mikolajczak	Milwaukee Area Tech. College
W.T. Mooney	El Camino Coll., Torrance, CA
Laura Morriss	Truckee Meadows CC, Reno, NV
Paul O'Brien	West Valley College, Saratoga, CA
Ed Ochoa	El Paso CC, El Paso, TX
Mary Peckinpaugh	ENMU, Roswell, NM
Ruth Sherman	Los Angeles City Coll., CA
Bill Wasserman	Seattle Central CC, Seattle, WA
Ross w. Westover	Canada College, Redwood City, CA

Jay Bardole, Chair, opened the meeting at 9:45 AM. He asked the participants to introduce themselves and then introduced the 2YC3 officers and past presidents.

Curt Dhonau moved that the minutes be approved and Mike Knoll gave the second.

Jay made a plea for more committee members from the west and south. The midwest and eastern areas of the country have their quota.

(1) New York Meeting:

Dick Gaglione said that New York has a dynamic meeting planned. There had been many problems with the meeting because of ACS date changes but John Tobias has worked hard and is ready.

Dick suggested trying to get a flight into the Westchester airport. La Guardia airport is second choice.

(2) Membership:

Mike Knoll reported that half of the former members have renewed and a second notice will be out in March. There are 14 new members. With paid registration for the Reno meeting, membership is automatic for 1986.

(3) College Sponsors and Treasurer's report:

The treasurers report is in the booklet.

There were eighty renewals of college sponsorship as of November. If your college is not already a sponsor, get a form and take it back to your school.

(4) Industrial sponsors:

Elliott Greenberg announced that there were 39 sponsors as of June with 22 paid presently. For \$100 a sponsor may exhibit at four meetings. He asked for help in recruiting sponsors.

There was a discussion about sponsors in general:

"Have you considered different levels of sponsorship, e.g. life members, sustaining members." "What about payment for two years?" "Should there be a registration fee for everyone?"

John Clevenger said that sponsors sometimes take care of coffee and doughnuts without being asked. D.C. Health, for example provided fruit and doughnuts. Dick Gaglione said that he has received \$25 from each sponsor who'll exhibit at the N.Y. meeting.

Bill Mooney pointed out that, historically, people objected to two registration fees (for the national or regional meeting plus the 2YC3).

Marion Baker said that she'd like to keep members fees as low as possible unless there really is a need for more money.

(5) Meetings: Dick Gaglione gave corrections and up-dates. The Denver meeting will be held at Arapahoe. The Florida and the Nebraska dates have been switched.

Jay Bardole said that a decision had not yet been made as to the classification of the Purdue meeting. The Storrs meeting was

one of the regular meetings while Bozeman will not be. We will participate at the Bozeman meeting but without our usual 2YC3 format. The Purdue meeting may take either form.

Bill Mooney asked that the two-year colleges take more part in the ACS mainstream. He suggested keeping the four regional meetings but not the summer biennial since it sometimes interferes with summer teaching. He suggested an open house at the national meetings.

Cullen Johnson recommended a stronger association with the high schools and participation in the college section of the NSTA.

Ralph Burns asked for a program with the national meetings.

The northwest regional meeting in Portland will have a community college program. A suggestion was made to give a copy of the program to Dick for the next newsletter and to Jim Bradford for announcement in The Distillate.

Jay reminded members that scholarships for ACS short courses are available with a request on letterhead paper from one's college.

Dick Heath invited everyone to the Bozeman meeting. Bill Mooney said that there would be a report of the invitational conference at that session.

(6) Jim Bradford asked that everyone fill out the survey sent from the ACS office.

The December issue of The Distillate will have abstracts from the Memphis meeting.

Jim asked if anyone was not getting The Distillate. Sometimes it is sent to the department head if his office has no name to which the publication should be directed.

(7) 25th Anniversary Meeting:

Bill Mooney said that the anniversary meeting would follow the format of early 2YC3 sessions with authors of texts as speakers. The celebration will center around the banquet.

The Saturday sessions will consist of interaction of small groups.

The meeting adjourned at 11:35 AM.

Ethelreda Laughlin  
Secretary/Editor

1985 ANNUAL REPORT  
COMMITTEE ON CHEMISTRY IN THE TWO YEAR COLLEGE  
DIVISION OF CHEMICAL EDUCATION  
AMERICAN CHEMICAL SOCIETY

The Committee on Chemistry in the Two Year College had a good year in 1985. We operated for the first year under our new Policies and Procedures, and learned how to function more efficiently. We have worked hard to involve as many persons as possible in the operation. The committee has built on a good relationship with the Division of Chemical Education that has been developing over the past years.

We have been involved in two SOCED project during the past year. They have a committee developing guidelines for Two Year Colleges. The intention is to improve the quality of chemistry education at the Two Year Level. Some members of COCTYC were asked to review and comment on the guidelines, and then the committee made revisions. The second project of the SOCED committee was an invitational conference which focused on two year colleges. Three members of 2YC<sub>s</sub> were invited to participate. The committee asked a 2YC<sub>s</sub> to become a member of the committee as a liaison to 2YC<sub>s</sub>. COCTYC helped fund the invitational conference in the amount of \$2400, spread over two years. This is designated for distribution of the recommendations resulting from the conference.

We have enjoyed the benefit of an ACS staff person in the Office of Chemistry in the Two Year College. Jim Bradford has prepared agenda books for each meeting. He has also been at each of our meetings and helped us to be aware of what is going on in the ACS education office. Through this office the Distillate has been published. 2YC<sub>s</sub> has maintained a high profile to many two year college teachers through the Distillate. In order to help keep teachers current we are now publishing abstracts of each paper presented at the conferences in the Distillate. We currently help fund the Distillate in the amount of \$2000 per year.

Our other publication effort is through our own newsletter. This is circulated to each two year chemistry department and personal copies to each member of 2YC<sub>s</sub>, each department that is an institutional member and each industrial member. We send about 2000 newsletters four times a year. A special effort was made to include news items and opportunities that would be interesting to members. A new look was given to the Newsletter.

Extra attention was given to our committee nomination procedure. We worked with the Administrative Secretary of Division of Chemical Education, the Chair of The Division and the Chair of the Committee on Personnel and Nominations. We

now have a full complement of members from each region, each formally appointed by the Division Chair. An extra effort was made to involve more Two Year Teachers in other areas of the Division of Chemical Education activity.

Plans were made to participate in the 1988 Biennial Conference at Purdue. Doris Kolb will be the program chair for that meeting. There was considerable discussion whether to hold an additional Mid-West meeting that year. The general feeling was that it should be one of our four regular meetings, but a final decision will be made after the Bozeman meeting.

Plans for future meetings is going well with most meetings scheduled through 1989. We are currently planning a joint meeting with the two year Canada group (C<sub>3</sub>) in June of 1988, when the Spring National meeting is in Toronto.

The new Policies and Procedure has forced us to work well ahead of our old method in nominating and electing officers. In the past year Edith Bartley was elected Chair Elect for 1986. John Clevenger and Elliot Greenberg have been reelected to fill the positions of Treasure and Industrial Sponsors respectively. Ballots are currently being collected regarding the renomination of Mike Knoll as General Membership Chair. The Nominees for 1987 Chair elect are Ralph Burns and William Wasserman and these ballots are currently being collected.

The committee held four excellent conferences during the 1985 calendar year. The conference in the Southern region was at Miami-Dade South, in the Mid-West Waukesha County Community College was our host. The second South Meeting was held at State Technical Institute at Memphis and Truckee Meadows Community College hosted our Western Meeting. The lack of travel budget is a problem for people to get to meetings, still our attendance has been good this year. We had 337 persons attend meetings. The information on meetings:

MEETING	ATTENDANCE	PAPERS*	STATES REP	H.S TEACHERS
Miami	102	15 + 1	29	7
Waukesha	76	12 + 1	16	9
Memphis	55	11	16	4
Reno	104	18+2	24	4

\* the "+" numbers represent the number of workshops at the conference

Our total membership for 1985 was 530 individual members, 115 college members and 39 industrial members. These are each in increase over the year before.

We recognize that 2YC<sub>3</sub> does not operate in a vacuum. The Division of Chemical Education has provided both financial support and encouragement to us. We acknowledge Dwaine Eubanks who served as Division of Chemical Education during 1985, and showed concern and help for the job we are trying to do. There are many other friends who advise and help us in many way. To them we also say thank you.

Respectfully submitted,

Jay Bardole  
Chairman (1985)  
Committee on Chemistry in the  
Two-Year College

MEMBERSHIP REPORT

1985

383 renewals

176 new members

559 total

1986

344 renewals

90 new members

434 total

January 31, 1986  
 FINANCIAL REPORT FOR COCTYC  
 From: 1/1/85 To: 12/31/85

Credits

Balance forward		\$ 4322.05
College Sponsors		4700.00
Industrial Sponsors		3100.00
Individual Membership		4441.00
DIVCHED		2000.00
Interest		1674.07
C.D.'s	881.55	
Checking	792.52	
Meetings & Misc.		2919.07
Storrs booth	115.00	
Miami	138.00	
Waukesha	234.57	
Reno	2261.00	
Raffle, WI	44.50	
		\$ 23156.19

Debits

Travel		\$ 6187.56
Chair	1395.00	
Chair-elect	825.93	
Past Chair	660.70	
Secretary	850.00	
Ind. Sponsor	850.00	
Membership	850.00	
Treasurer	755.93	
Office Supplies		196.35
Postage		343.71
Printing		9.75
Phone		24.98
Meetings & Misc.		2473.57
Waukesha	200.00	
Reno	2273.57	
Distillate		2000.00
SocEd. Inv.		1200.00
		\$ 12435.92

Balance                   \$ 10720.27



COMMITTEE ON CHEMISTRY IN THE TWO YEAR COLLEGE  
 PROPOSED BUDGET FOR 1986  
 JANUARY 1, 1986

INCOME	Members 84	actual 84	Members to date 85	Actual 85	Proj 86 members	Proj 86 budget
College Sponsor	135	\$1300.00	115	4700.00	122	3050.00
Industrial Sponsor	39	3550.00	21	3100.00	32	3200.00
Individual Member	488	936.00	489	4441.00	500	3000.00
DivChed		2000.00		2000.00		2000.00
Interest		406.42		1674.07		1200.00
Meeting and Misc		2431.91		319.50		0.00
<b>TOTAL</b>		<b>10764.33</b>		<b>16,234.57</b>		<b>12,450.00</b>
EXPENSES						
Chair travel		1869.77		1395.00		2,000.00
Chair travel Bozeman		0.0		0.0		500.00
Past chair travel		850.00		660.70		850.00
Chair elect travel		850.00		825.93		850.00
Secretary travel		850.00		850.00		850.00
Ind. Spon. travel		850.00		850.00		850.00
Treasure Travel		850.00		755.93		850.00
Membership Travel		850.00		850.00		850.00
*Meetings		0.0		0.00		1000.00
SocEd Rep. Travel		0.0		0.00		500.00
Distillate		2140.00		2000.00		2000.00
SocEd Invitational		0.00		1200.00		1200.00
Postage, prntng, phone, etc				574.79		150.00
<b>TOTAL</b>		<b>11,159.61</b>		<b>9,962.35</b>		<b>12,450.00</b>
<b>** PRINTING</b>		<b>1124.54</b>		<b>0.00</b>		<b>1,000.00</b>
<b>** Postage</b>		<b>0.00</b>		<b>0.00</b>		<b>1,400.00</b>
<b>** Phone</b>		<b>0.00</b>		<b>0.00</b>		<b>300.00</b>

\* It is intended that if possible \$300 will be made available for use at each meeting in next years budget. This will be possible since we will only have 4 meetings in 1987.

\*\*It is not expected that these line items will be needed at this level in 1986 since colleges will take care of most of these expenses. We must remain aware that in some years we will have to pay these expenses.

FINANCIAL REPORT  
 89th 2YC<sub>3</sub>  
 Truckee Meadows Community College  
 Reno, NV  
 Dec. 6-7, 1885

	<u>CREDITS</u>	<u>DEBITS</u>
<u>Banquet</u>		
	<u>credits</u>	<u>debits</u>
80@14.50	1160.00	
80@14.50		1160.00
Room & AV		50.00
Balance		50.00
 <u>Refreshments</u>		
D.C. Heath	170.00	
P.F.L.	100.00	
orange juice		20.61
fruit		80.74
donuts&coffee		118.12
Balance	50.53	50.53
 <u>Workshop</u>		
20@10	200.00	
M.Lynn James		
Airfare		210.00
Room		68.48
Balance		78.48
 <u>New Members</u>		
47@6.00	282.00	
Balance	282.00	282.00
 <u>College Van shuttle</u>		
		65.62
Balance		65.62
 <u>T-shirts</u>		
50@ 5.00		250.00
sold	315.43	
Balance	65.43	65.43
	397.96	194.10
Balance		\$203.86

SUMMARY OF FUTURE MEETING SITES

- 
- 90TH CONFERENCE - IN CONJUNCTION WITH ACS NATIONAL  
4/11-12/86 - WESTCHESTER COMMUNITY COLLEGE, 76 GRASSLANDS AVE.,  
VALHALLA, N.Y. 10595
- PROGRAM CHAIR - PATRICIA FLATH, PAUL SMITH COLLEGE, PAUL SMITH, N.Y.  
(518) 327-6266
- LOCAL ARR. CHAIR - JOHN TOBIAS, WESTCHESTER COMMUNITY COLLEGE,  
(914) 285-6939
- IND. SPON. CHAIR - STEPHEN DREIER, NEW YORK CITY TECHNICAL COLLEGE,  
BROOKLYN, N.Y. (718) 643-8242
- 
- 91ST CONFERENCE  
4/25-26/86 - WILLIAM RAINEY HARPER COLLEGE, PALATINE, IL 60067
- PROGRAM CHAIR - WILLIAM T. MOONEY, JR., EL CAMINO COLLEGE,  
TORRANCE, CA 90506 (213) 532-3670, EXT. 679 OR 528
- LOCAL ARR. CHAIR - JOSEPH BAUER, W.R. HARPER COLLEGE, (312) 397-3000
- IND. SPON. CHAIR - DUANE SELL, W.R. HARPER COLLEGE, (312) 397-3000
- 
- 92ND CONFERENCE - IN CONJUNCTION WITH DIV. CHEM. ED. 9TH BIENNIAL  
7/27-31/86 - MONTANA STATE UNIVERSITY, BOZEMAN, MONTANA
- PROGRAM CHAIR - ED HEATH, SOUTHWEST TEXAS JUNIOR COLLEGE, UVALDE, TX  
78801, (512) 278-4401, EXT. 224
- 
- 93RD CONFERENCE  
10/3-4/86 - GREENVILLE TECHNICAL COLLEGE, BOX 5616, STATION B,  
GREENVILLE, S.C. 29606
- PROGRAM CHAIR - LEO KLING, TRI-COUNTIES TECHNICAL COLLEGE, PENDLETON,  
S.C. 29670, (803) 646-8361
- LOCAL ARR. CHAIR - ALAN DAY, GREENVILLE TECHNICAL COLLEGE
- IND. SPON. CHAIR -
- 
- 94TH CONFERENCE  
11/21-22/86 - SINCLAIR COMMUNITY COLLEGE, 444 WEST THIRD ST.  
DAYTON, OHIO 45402
- PROGRAM CHAIR - RICHARD JONES, SINCLAIR COMMUNITY COLLEGE,  
(513) 226-7907
- LOCAL ARR. CHAIR - ROGER PENN, (513) 226-2556; NOEL FARRIER,  
(513) 226-3058
- IND. SPON. CHAIR - JAMES JOHNSON, (513) 226-2557
- 
- 95TH CONFERENCE - IN CONJUNCTION WITH ACS NATIONAL  
4/3-4/87 - ARAPAHOE COMMUNITY COLLEGE, 5900 SOUTH SANTA FE DR  
LITTLETON, COLORADO 80120
- PROGRAM CHAIR -
- LOCAL ARR. CHAIR - AL GROHE, ARAPAHOE C.C., (303) 797-5939
- IND. SPON. CHAIR -
-

96TH CONFERENCE

5/23-24/87

PROGRAM CHAIR

LOCAL ARR. CHAIR

IND. SPON. CHAIR

- MONTGOMERY COMMUNITY COLLEGE, ROCKVILLE, MD. 20850
- MARGOT SCHUMM, MONTGOMERY COM. COLLEGE, (301) 279-512

97TH CONFERENCE

EARLY FALL 1987

PROGRAM CHAIR

IND. SPON. CHAIR

- Will try for Oct. 9, 10?*
- SOUTHEAST COMMUNITY COLLEGE, 8800 "O" ST., LINCOLN, NEBRASKA 68352
  - JOHN KENKEL, SOUTHEAST COMMUNITY COLLEGE, LINCOLN, NE., (402) 471-3333

98TH CONFERENCE

LATE FALL 1987

PROGRAM CHAIR

LOCAL ARR. CHAIR

IND. SPON. CHAIR

- Try for 11/20/87 or 12/4/87?*
- FLORIDA JUNIOR COLLEGE, NORTH CAMPUS, JACKSONVILLE, FLA. 32218
  - WENDELL MASSEY, FLORIDA JUNIOR COLLEGE, NORTH CAMPUS, JACKSONVILLE, FLA. (904) 757-6441

99TH CONFERENCE

SPRING 1988

PROGRAM CHAIR

LOCAL ARR. CHAIR

IND. SPON. CHAIR

- Try for late March?*
- AMERICAN RIVER COLLEGE, 4700 COLLEGE OAK DR., SACRAMENTO, CA. 95841
  - RICHARD LUNGSTROM, AMERICAN RIVER COLLEGE, (916) 484-8464

100TH CONFERENCE

6/5-11/88

CONTACT PERSON

101ST CONFERENCE

EARLY FALL 1988

PROGRAM CHAIR

LOCAL ARR. CHAIR

IND. SPON. CHAIR

- IN CONJUNCTION WITH ACS NATIONAL
- TORONTO, ONTARIO, CANADA
- SHAHID JALIL, JOHN ABBOT COLLEGE, C3 LIAISON TO 2YC3

*101st  
PURDUE BIENNIAL  
101st*

102ND CONFERENCE

LATE FALL 1988

PROGRAM CHAIR

LOCAL ARR. CHAIR

IND. SPON. CHAIR

- Try early - mid November*
- KANSAS CITY KANSAS COMMUNITY COLLEGE, 7250 STATE AVE, KANSAS CITY, KANSAS 66112
  - DAVE KLEIN, KANSAS CITY KANSAS C.C., (913) 334-1000

103RD CONFERENCE

APRIL 1989

- IN CONJUNCTION WITH ACS NATIONAL
- DALLAS, TEXAS AREA

104TH CONFERENCE

*by early June*  
LATE SPRING 1989 - RICKS COLLEGE, REXBURG, IDAHO 83440  
PROGRAM CHAIR - ARTHUR HUBSCHER, RICKS COLLEGE, (208) 356-1923  
LOCAL ARR. CHAIR -  
IND. SPON. CHAIR -

105TH CONFERENCE

SITE NOT DETERMINED - EARLY FALL 1989

106TH CONFERENCE

SITE NOT DETERMINED - LATE FALL 1989

107TH CONFERENCE

- IN CONJUNCTION WITH ACS NATIONAL  
APRIL 1990 - BOSTON MASS. AREA

108TH CONFERENCE

LATE MAY OR EARLY JUNE, 1990 - POSSIBLE SITE AT VANCOUVER, B.C. *Wash?*  
CONTACT PERSON - WILLIAM WASSERMAN, SEATTLE CENTRAL COMMUNITY COLLEGE,  
SEATTLE, WA., (206) 587-4080

January 1986

DIVISION OF CHEMICAL EDUCATION  
AMERICAN CHEMICAL SOCIETY  
1986 ROSTER OF COMMITTEE MEMBERS

Chair Onofrio Gaglione, New York City Technical College,  
300 Jay St., Brooklyn, NY 11201 (718)-643-3488 (1990)

Immediate Past Chair Jay Bardole, Vincennes University Junior College,  
Vincennes, IN 47591 (812-885-4372) (1990)

Chair Elect Edith Bartley, Tarrant County Junior College  
South Campus, Fort Worth TX 76119 (817-534-4861) (1991)

Secretary/  
Editor Ethelreda Laughlin  
6486 State Road #12, Parma, OH 44134 (216-884-0546)  
(First term expires 1986)

Treasurer/  
College Sponsors John Clevenger, Truckee Meadows Community College  
7000 Dandini Blvd. Reno, NV 89512 (702-673-7221)  
(Second term expires 1988)

General Membership  
Chair Mike Knoll, Vincennes University Junior College  
Vincennes, IN 47591 (812-885-4259)  
(First term expires 1986)

Industrial  
Sponsors Elliott Greenberg, Prairie State College  
P.O. Box 487, Chicago Heights, IL (312-756-3110)  
(Second term expires 1987)

Past Chair Members Marion Baker, Central Piedmont Community College  
P.O. Box 35009, Charlotte, NC 28235-5009  
(704-373-6462) (1989)  
Tamar Y. Susskind, Oakland Community College  
2900 Featherstone Road, Auburn Heights, MI 48507  
(313-853-4325) (1989)  
Douglas Bond, Riverside City College  
4800 Magnolia Ave., Riverside CA 92506  
(714-684-3240 ext. 358) (1988)  
Katherine E. Weissmann, C.S. Mott Community College  
1401 East Court Street, Flint, MI (313-762-0280) (1988)  
Paul Santiago, Harford Community College  
Bel Air, MD 21014 (301-836-4166) (1987)  
John P. Mitchell, Tarrant County Junior College  
Northeast Campus, Hurst, TX 76053 (817-281-7860) (1987)  
William W. Griffin, Hinds Junior College  
P.O. Box 70, Raymond, MS 39154 (1986)  
Curtis Dhonau, Vincennes University Junior College  
Vincennes, Indiana 47591 (812-885-4370) (1986)

Past Chairs Marion Baker, Tamar Susskind, Douglas Bond, Katherine  
Weissmann, Paul Santiago, John Mitchell, William Griffin,  
Curtis Dhonau, Douglas Bauer (deceased),  
Cecil Hammonds, Ethelreda Laughlin, William Mooney

Region I- Western States: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

---

Western Regional Program-Chairman 1985:(for Chicago meeting)

---

Mooney, William T. (1987) El Camino College  
via Torrance, CA 90506 (213-532-367)

---

Albelo, Gilbert (1987) Mt. Hood Community College  
Gresham, Oregon 97030  
(503-667-6422)

Berner, Victor (1987) New Mexico Junior College  
Lovington Highway, Hobbs, NM 88240  
(505-392-4510 ext 261)

Carolyn Collins (1988) Clark County Community College,  
3200 East Cheyenne Avenue, N. Las Vegas, NV 89030

Cunningham, Alan (1987) Monterey Peninsula College  
Monterey, CA 93940 (408-646-4154)

Hubbs, Robert R. (1988) DeAnza College  
Cupertino, CA 95014 (408-996-4774)

Lungstrum, Richard A. (1986) American River College  
Sacramento, CA 95841 (916-484-8464)

Sherman, Ruth (1986) Los Angeles City College  
855 N. Vermont Ave, Los Angeles, CA 90029  
(213-669-4223)

Scott, Peter (1986) Linn-Benton Community College  
6500 SW Pacific Blvd, Albany, OR 97321  
(503-928-2361)

Sterner, Wanda (1986) Cerritos College  
11110 E. Alondra Blvd., Norwalk, CA 90650  
(213-860-2451 ext 369)

Van Dyke, Martin (1987) Front Range Community College North Campus  
3645 W. 112th Ave., Westminster, CO 80030  
(303-466-8811)

Wasserman, William (1988) Seattle Central Community College  
1701 Broadway, Seattle, WA 98122  
(206-587-4080)

Region II Southern States: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas

---

Southern Regional Program-Chairman 1985:

Kling, Leo III (1986) Tri County Technical College  
Pendleton, SC 29670  
(803-646-3227 ext. 325)

---

Barber, Ms. Anne (1986) Manatee Junior College  
5840 26th Street W., Brandon, FL 33506  
(813-755-1511)

Paula Ballard (1986) Jefferson State Jr. College  
2601 Carson Rd.,  
Birmingham, AL 35215

Cheek, William E. (1988) Central Piedmont Community College  
PO Box 35009, Charlotte, NC 28235-5009  
(704-373-6968)

Darnall, David (1986) Shelby State Community College  
PO Box 40568, Memphis, TN 38104  
(901-528-6748)

James Graham, (1987) J.C. Calhoun Community College,  
Decatur, AL.

Inscho, F. Paul (1985) Hiwassee College,  
Box 65, Madisonville, TN 37354  
(305-442-2182)

Maier, Thomas L. (1986) Atlanta Junior College  
1630 Stewart Ave. SW, Atlanta, GA 30310  
(404-656-6365)

Wendell Massey Jr. (1986) Florida Junior College,  
North Campus,  
Jacksonville FL 32218 (904-757-6441)

Minter, Anne P. (1986) Roane State Community College  
Harriman, TN 37748 (615-354-3000)



Region III - Midwestern States: Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio South Dakota, Wisconsin

---

Midwest Regional Program-Chairman 1985:

Jones, Richard (1988) Sinclair Community College  
Dayton, OH 45402 (513-226-7907)

---

Ralph Burns (1986) St. Louis Community College at Meramec  
11333 Big Bend, St. Louis, MO 63122  
(314-966-7718)

Crawford, Sam (1987) Johnson County Community College  
College Boulevard at Quivira Road  
Overland Park, KS 66210 (913-888-8500)

Eidsness, Warren (1986) Normandale Community College  
9700 France Ave. S.  
Bloomington, MN 55431 (612-830-9300)

Elkins, I. Dean (1986) Henderson Community College  
University of Kentucky, Henderson, KY 42420  
(502-827-1867)

Johnson, Cullen (1987) Cuyahoga Community College, Western Campus  
Parma, OH 44130 (216-845-4000)

Leonard Grotz (1985) University of Wisconsin-Waukesha,  
1500 University Drive, Waukesha WI 53186  
(414-544-8743)

Kenkel, John (1988) Southeast Community College  
Lincoln Campus  
Lincoln, NE 68520 (402-471-3333)

Klein, Dave (1986) Kansas City Kansas Community College  
7250 State Ave.  
Kansas City, KS 66112 (913-334-1000)

Koch, Frank (1988) Bismarck Junior College  
Bismarck, ND 58501 (701-224-5423)

Kolb, Doris (1988) Illinois Central Community College  
East Peoria, IL 61635 (309-694-5011)

Kreiger, Albert (1988) Jackson Community College  
Jackson, MI 49201 (517-787-0800)

Redmore, Fred (1987) Highland Community College  
Freeport, IL 61032 (815-235-6121 ext 331)

Sell, Duane (1987) Wm. Rainey Harper College  
Palatine, IL 60067 (312-397-3000)

John Winklemann (1987) Illinois Valley Community College  
Rural Route, Oglesby, IL 61348 (815-224-2720)

Region IV - Eastern States: Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Virginia, Vermont, West Virginia

---

Eastern Regional Program-Chairman 1985:

Flath, Patricia (1986) Paul Smith's College  
Paul Smith's NY 12970 (518-327-6266)

---

Burge, Robert (1987) Suffolk Community College  
533 College Road, Serden, NY 11784  
(516-451-4110)

Cherim, Stanley (1988) Delaware County Community College  
Media, PA 19063 (215-353-5400)

Cucci, Myron w. (1987) Monroe Community College  
Rochester, NY 14623 (716-424-5200)

Feldsine, John Jr. (1988) Broome Community College  
Binghamton, NY 13902 (607-771-5000)

Hajian, Harry G. (1987) Community College of Rhode Island  
400 East Ave.  
Warwick, RI 02886 (401-825-2258)

Kanter, Muriel (1987) Roxbury Community College  
625 Hunginton Ave, Boston MA 62115  
(617-734-1960)

Katz, David (1987) Community College of Philadelphia  
1700 Spring Garden Street  
Philadelphia, PA 19130  
(215-751-8000)

Rainard, Barbara (1988) Community College of Allegheny  
Allegheny Campus  
808 Ridge Ave, Pittsburg, PA 15212  
(412-237-2525)

Schumm, Margot K. (1986) Montgomery College, Rockville, MD 20850  
(301-279-5129)

Sollimo, Vincent (1988) Burlington County College  
Pemberton, NJ 08068 (609-894-9311)

Vlassis, C. G. (1988) Keystone Junior College  
LaPlume, PA 18440 (717-945-5141)

Zoranski, Edmund J. (1986) Atlantic Community College  
Mays Landing NJ 08330 (609-625-1111)

2YC<sub>3</sub> SUBCOMMITTEES

PROGRAM: Leonard Grotz (Chair), Carolyn Collins, Cullen Johnson

WORKSHOPS: Sam Crowford (Chair), Stanley Cherim, Peter Scott

PUBLICATIONS: Ethelreda Laughlin (Chair), Myron Cucci, F. Paul Inscho,  
Richard Jones, Wanda Sterner

INDUSTRIAL SPONSORS: Elliott Greenberg (Chair),

MEMBERSHIP: Mike Knoll (Chair), Edmund Zoranski

CONFERENCE SITES: Edith Bartley (Chair) William Cheek, John Clevenger, Cecil Hammonds, Paul  
Santiago

TEACHING STANDARDS: Uni Susskind (Chair) Jay Bardole, Pat Flath, John Feldsine

Report to the National Science Board  
Committee on Undergraduate Science and Engineering Education

In November of this year, the American Chemical Society sponsored an Invitational Education Conference entitled "Critical Issues in Two-Year College Chemistry." The goals of this conference were to identify the issues facing the chemistry teachers in two-year colleges and to make recommendations to the organizations capable of addressing these issues.

During the conference, it was discovered that many of the issues in two-year college chemistry teaching were also issues in the teaching of biology, physics, geology, and mathematics. The conference participants also realized that many of the issues confronting two-year colleges also confront small four-year colleges and universities.

It is the purpose of this document to convey to the National Science Board the recommendations of the conference participants relevant to the mission and objectives of the National Science Foundation. Additional recommendations will be made to other groups when the final conference report is produced in 1986.

The Two-Year College Role in Undergraduate Science and Engineering Education

Two-year colleges make a substantial contribution to undergraduate science and engineering education in the United States. The magnitude of this contribution is undeniable. For example, 55 percent of all freshmen entering college are enrolling in two-year colleges. Of all students enrolled in higher education, 33 percent are enrolled in two-year colleges. The nation's community colleges enroll 42 percent of all Black college students, 54 percent of all Hispanic college students, and 43 percent of all Asian college students. During the 1982-83 academic year, 21 percent of the University of California System graduates, 50 percent of the California State University System graduates, and 50 percent of the University of South Florida graduates had previously attended a

two-year college. California and Florida may not be typical of current trends in community college transfers to senior institutions because these two states certainly have the most highly developed two-year college systems. However, because these states are in the vanguard of higher education, these trends will soon become national trends.

### Recommendations

Some of the issues facing two-year colleges and other providers of undergraduate science and engineering education are of such magnitude that only the federal government, acting through the NSF and its role as the leader in science research and education, can affect the needed changes.

The participants in the 1985 Invitational Education Conference of the American Chemical Society (please see attached list) recommend that the National Science Foundation take the following actions.

#### Professional Growth for Faculty

- o Vigorously support professional growth and development for two-year college science teachers, at a minimum of personal expense, by
  - 1) providing updated versions of summer conferences and institutes, Chautauqua Courses, regionally-oriented College Science Improvement Programs, and faculty fellowships;
  - 2) supporting an extension of the Institute for Chemical Education that would serve as a training mechanism for two-year college science teachers; and
  - 3) supporting the development and dissemination of materials that would provide in-service training to science faculty who are unable to attend conferences and institutes.

#### Scientific and Instructional Equipment

- o Modify the College Science Instrumentation Program so that two-year

- colleges are eligible for funds. This program should also help two-year colleges purchase the equipment necessary to offer training programs in the emerging sciences and science-related technologies.
- o Establish a new program that provides funds to help two-year colleges purchase instruments costing less than \$2,000. This program should use professional scientific societies or state two-year college agencies to administer a large fund and make smaller disbursements to individual colleges submitting proposals.
  - o Support cooperative instrument repair services similar to the regionally based CHEMS program at the Georgia Institute of Technology. This program consists of a mobile instrument repair service that is utilized by a number of academic institutions in the Georgia Tech area.
  - o Continue support for existing programs in the new instructional technologies, such as Project Seraphim, so that these programs remain at the cutting edge. The National Science Foundation should also establish new programs to initiate projects in the new instructional technologies utilizing compact disks, video disks, and teleconferencing. These programs should provide a delivery system to bring enhanced learning to students as well as to bring additional professional development opportunities to faculty members.
  - o Establish a program that funds a number of regionally located and well-equipped science instructional laboratories to serve as models of excellence.

#### Programs for Students

- o Establish a program to support the improvement of undergraduate science education for students not specializing in science. Projects funded under this program should emphasize firsthand

- experience with science at a level that prepares individuals for responsible citizenship in an increasingly technological society. These projects should focus on laboratory exercises, demonstrations, and other activities that hold students' interest. The existing NSF-supported CHEMCOM (Chemistry in the Community) project is an example of what is needed. This existing project could be adapted to the needs of the first two years of undergraduate education.
- o Modify the existing Undergraduate Research Participation Program, or establish a new program, to encourage student-oriented research directed by two-year college faculty. A program such as this could provide an early positive experience in science for students, especially for minority and economically disadvantaged students.
  - o Establish a loan program, similar to the National Defense Education Act Loan Program, to help economically disadvantaged students earn a degree in science or engineering. These loans should be available to both two- and four-year college students.

#### Articulation and Cooperation

- o Establish and support a body to coordinate, on both national and local levels, articulation among the sciences at the lower-division level. This body could be similar in structure and mission to the Triangle Coalition that now serves precollege education. Once established, this body could operate a study center to collect and disseminate information, and to provide guidance to the federal government in adapting programs to better serve science and engineering education at the lower-division level.
- o Establish and support a body to encourage, on both regional and national levels, articulation of two-year college science programs

with secondary schools, four-year schools, and industry. Cooperation of schools in close proximity is needed especially in the areas of assessment, placement, and remediation. Cooperation with local industry is needed to ensure that college programs are providing graduates that meet the industrial needs of the community.

- o Establish a program that supports consulting activities that bring the expertise of nationally known scientists to the colleges that need this service most. These consultant services could provide guidance for all types of articulation as well as serve as an external evaluating mechanism to enhance the quality of education in science and engineering programs.

#### Concluding Remarks

The community colleges are clearly serving a vital role in the preparation of America's next generation of scientists and engineers. We call upon the National Science Foundation to recognize the tremendous contribution two-year colleges are making in the national interest and to establish and support programs for lower-division science and engineering education at a level consistent with the task.

Respectfully submitted,

The Participants in the  
1985 Invitational Education Conference  
of the American Chemical Society

Dr. E. James Bradford, Staff Liaison  
Office of Two-Year Colleges  
American Chemical Society  
1155 Sixteenth Street, N.W.  
Washington, DC 20036  
(202) 872-4587



1985 INVITATIONAL EDUCATION CONFERENCE

List of Participants

Allen, A. David (representing American Association of Physics Teachers)  
Department of Physics and Mathematics  
Ricks College  
Rexburg, ID 83440  
(208) 356-1926

Bardole, Jay (representing DivCHED Committee on Two-Year Colleges)  
Department of Chemistry  
Vincennes University Junior College  
Vincennes, IN 47591  
(812) 885-4372

Bartholomew, Roger (representing ACS Committee on Technician Activities)  
Corning Glass Works  
Sullivan Park, FR-3  
Corning, NY 14831  
(607) 974-3181

Boese, Janet (representing the American Chemical Society)  
Office of College Chemistry  
American Chemical Society  
1155 Sixteenth Street, N.W.  
Washington, DC 20036  
(292) 872-4517

Bradford, Jim (representing the American Chemical Society)  
Office of Two-Year Colleges  
American Chemical Society  
1155 Sixteenth Street, N.W.  
Washington, DC 20036  
(202) 872-4587

Chapman, Ken (representing the American Chemical Society)  
Department of Educational Research and Development  
American Chemical Society  
1155 Sixteenth Street, N.W.  
Washington, DC 20036  
(202) 872-8734

Cochran, Edward (representing Community College local boards)  
Applied Physics Laboratory  
Johns Hopkins University  
Johns Hopkins Road  
Laurel, MD 20707  
(301) 953-5225

Cook, William (representing ACS College Chemistry Consultants Service)  
Department of Chemistry  
Colorado State University  
Fort Collins, CO 80523  
(303) 484-6177

Cunningham, Alice (representing ACS Committee on Professional Training)  
Department of Chemistry  
Agnes Scott College  
Decatur, GA 30030  
(404) 373-2571 x229

Davis, Jefferson (representing four-year college articulation)  
Department of Chemistry  
University of South Florida  
Tampa, FL 33620  
(813) 974-2373

Dorner, George (representing community college divisional administrators)  
Technology, Mathematics, and Physical Sciences Division  
William Rainey Harper College  
Palatine, IL 60067  
(312) 397-3000

Emmeluth, Donald (representing National Association of Biology Teachers)  
Department of Biology  
Fulton-Montgomery Community College  
Johnstown, NY 12095  
(518) 762-4651 x341

Eubanks, I. Dwaine (representing Division of Chemical Education, Inc.)  
University Center for Effective Instruction  
Oklahoma State University  
Stillwater, OK 74078  
(405) 624-6802

Free, Helen (representing ACS Board of Directors)  
Miles Laboratories Inc.-Ames Division  
P.O. Box 70  
Elkhart, IN 46516  
(219) 264-8662

Gaglione, Dick (representing DivCHED Committee on Two-Year Colleges)  
Department of Chemistry and Chemical Technology  
New York City Technical College  
Brooklyn, NY 11201  
(212) 643-8242

Gallagher, Barbara (representing ACS Committee on Professional Training)  
Office of Professional Training  
American Chemical Society  
1155 Sixteenth Street, N.W.  
Washington, DC 20036  
(202) 872-4589

Livermore, Arthur (representing the Triangle Coalition for Science Education)  
National Science Teachers' Association  
1742 Connecticut Avenue, N.W.  
Washington, DC 20009  
(202) 328-5800

McClelland, Alan (representing ACS Society Committee on Education)  
Central Research and Development Department  
E. I. duPont de Nemours & Co.  
10th and Market Streets  
Wilmington, DE 19899  
(302) 774-5413

Mitchell, John (representing DivCHED Committee on Two-Year Colleges)  
Department of Chemistry  
Tarrant County Junior College-Northeast Campus  
Hurst, TX 76053  
(817) 281-7860

Mooney, William (representing ACS Task Force on Two-Year Colleges)  
Department of Chemistry  
El Camino College  
Torrance, CA 90506  
(213) 532-3670 x528

Moore, McDonald (representing southern states community colleges)  
Division of Natural Science and Mathematics  
Bishop State Junior College  
Mobile, AL 36603  
(205) 690-6427

Ochoa, Edward (representing southwestern states community colleges)  
Department of Chemistry  
El Paso Community College-Transmountain Campus  
El Paso, TX 79989  
(915) 757-5078

Passer, Moses (representing ACS Education Division)  
Education Division  
American Chemical Society  
1155 Sixteenth Street, N.W.  
Washington, DC 20036  
(202) 872-4381

Piland, Joseph (representing community college presidents)  
Highland Community College  
Pearl City Road  
Freeport, IL 61032  
(815) 235-6121

Hajian, Harry (representing ACS Task Force on Two-Year Colleges)  
Department of Chemistry  
Community College of Rhode Island-Knight Campus  
400 East Street  
Warwick, RI 02886  
(401) 825-2331

Hallman, John (representing American Institute of Chemical Engineers)  
Associate Dean of Academic Affairs  
Spring Garden College  
7500 Germantown Avenue  
Philadelphia, PA 19119  
(215) 248-7900

Harrell, Robert (representing Virginia State Board for Community Colleges)  
P.O. Box 667  
Suffolk, VA 23434  
(804) 539-2447

Hauben, Myra (representing remedial education in chemistry)  
Department of Chemistry  
College of Staten Island  
Staten Island, NY 10301  
(212) 390-7975

Jones, Donald (representing ACS Task Force on Two-Year Colleges)  
Department of Chemistry  
Western Maryland College  
Westminster, MD 21157  
(301) 848-7000 x493

Kirschner, Stanley (representing ACS Society Committee on Education)  
Department of Chemistry  
Wayne State University  
247 Life Sciences Building  
Detroit, MI 48202  
(313) 577-2571

Koch, Bill (representing part-time chemistry instructors)  
National Bureau of Standards  
Chemistry A-225  
Gaithersburg, MD 20899  
(301) 921-2883

Kolb, Doris (representing ACS Society Committee on Education)  
Physical Science Department  
Illinois Central College  
Peoria, IL 61635  
(309) 694-5380

Pryde, Lucy (representing Division of Chemical Education, Inc.)  
Chemistry Department  
Southwestern College  
900 Otay Lakes Road  
Chula Vista, CA 92010  
(619) 421-6700 x528

Schermerhorn, Karen (representing the American Federation of Teachers)  
Community College of Philadelphia  
Home address: 2011 Moravian Street  
Philadelphia, PA 19103  
(215) 568-7599

Schunn, Robert (representing ACS Task Force on Two-Year Colleges)  
Central Research Department  
Experimental Station  
E. I. duPont de Nemours & Co.  
Wilmington, DE 19898  
(302) 772-4272

Spurlock, Langley (representing Chemical Manufacturers' Association)  
Chemical Manufacturers' Association  
2501 M Street, N.W.  
Washington, DC 20036  
(202) 887-1187

Stermer, Philip (representing ACS Committee on Technician Activities)  
GTE Products Corporation  
Hawes Street  
Towanda, PA 18848  
(717) 265-2121

Susskind, Tamar (representing ACS Task Force on Two-Year Colleges)  
Science/Health Education Department  
Oakland Community College  
2900 Featherstone Road  
Auburn Hills, MI 48057  
(313) 853-4325

Sutton-Odems, Connie (representing American Association of Community and  
Junior Colleges)

AACJC  
One Dupont Circle, N.W.  
Washington, DC 20036  
(202) 293-7050

Swenson, Robert (representing Council on Postsecondary Accreditation)  
Accrediting Commission for Community and Junior Colleges  
Western Association of Schools and Colleges  
P.O. Box 70  
Aptos, CA 95001  
(408) 688-7575

Ware, Sylvia (representing ACS Department of Educational Services)  
Department of Educational Services  
American Chemical Society  
1155 Sixteenth Street, N.W.  
Washington, DC 20036  
(202) 872-4388

Watson, Robert (representing the National Science Foundation)  
Suite 545  
National Science Foundation  
1800 G Street, N.W.  
Washington, DC 20550  
(202) 357-9644

Weissmann, Katherine (representing ACS Task Force on Two-Year Colleges)  
Division of Science and Mathematics  
Charles Stewart Mott Community College  
Flint, MI 48508  
(313) 762-0277



AL FOCUS

March 4, 1986 - No. 181

**SEMINAR PARTICIPANTS** target Congress on three priorities, p. 3.

**"ON THE TABLE"**. U.S. Senate Majority Leader Robert J. Dole, R-KS, assured the National Legislative Seminar audience this week that "everything in the federal budget is on the bargaining table to achieve deficit control -- including Social Security and defense." He repeatedly stressed that "everything will be on the table...excluding only the interest on the debt, which has to be paid." His warmly applauded keynote echoed the comments of a previous speaker, Robert H. Atwell, President of the American Council on Education, who said the higher education community would bear its share of the budget sacrifices "provided everything is on the table."

President Atwell bluntly rejected Education Secretary William J. Bennett's assertions that federal support accounted for only 7% of the nation's investment in education and that no American would be denied "a good college education" by the Reagan budget cuts that would eliminate aid to at least 1.4 million students. President Atwell said the federal government covers "at least 20%" of the annual \$100 million cost of higher education and "provides 75% of the student aid which makes it possible for 5 million Americans to go to college."

While calling upon the higher education community to meet adversity with unity, he said, "we in education should say that despite the fact that we have taken more than our fair share of cuts over the last five years, when student aid has lost 20% of its purchasing power and excessive loans are being substituted for inadequately funded grants -- despite that, we ought to be prepared to take our lumps if everything is on the table."

Among other Congressional leaders that the Seminar featured, Rep. Augustus F. Hawkins, D-CA, Chairman of the Committee on Education and Labor, emphasized that cuts in education and social services have been used in the Reagan years to fuel the military buildup, adding that education is the "most important investment we make as a nation."

**CHANCELLORS TESTIFY.** The Washington week that started with ACCT National Seminar participants swarming about Congress to tell the community college story was climaxed by House and Senate hearings that featured three community college witnesses. Highlights of their appearances:

Michael E. Crawford, Chairman of the AACJC-ACCT Joint Commission on Federal Relations, and Chancellor of the Eastern Iowa Community College District, testified before the Senate Subcommittee on Employment and Productivity. He expressed the Joint Commission's support for the concept of combining fragmented federal job training programs into a unified strategy on employment and vocational/technical education, noting that "community colleges applaud the idea of a cohesive national strategy on human resources."

## Opportunity With Excellence

NATIONAL CENTER FOR HIGHER EDUCATION (continued on p. 2)

ONE DUPONT CIRCLE, N.W., SUITE 410, WASHINGTON, D.C. 20036

CHANCELLORS TESTIFY (continued)

He went on to point out: "We encourage any federal effort to increase private sector involvement in this area. In the last 20 years, the private sector's utilization of community colleges has grown dramatically. Over all, we support efforts that focus attention on...the skill base the national must have to meet the challenges of global, economic, technological and cultural change. We challenge the Congress to take better advantage of community colleges."

Andreas A. Paloumpis, President of Hillsborough Community College, Tampa, FL, stressed the pressing need for National Science Foundation support both in community college faculty development and "in developing partnerships with industry to meet the needs of new and advanced technology. It is vital that these partnerships be increased...if we are to meet the needs of business, industry and our nation in the next century," he told the House Subcommittee on Science, Research and Technology, chaired by Rep. Doug Walgren, D-PA.

"There is no question in any of our minds that we are again facing a crisis in mathematics and science education. This time, though, the problem is more pervasive because we are not dealing only with the upgrading of baccalaureate and graduate education, but also with the need to educate highly skilled technicians at the associate degree level." He concluded with three recommendations:

1. Enact and fund for the Walgren Community College Bill -- the program that will help community colleges to develop and expand partnerships with business and industry.
2. Establish a program of upgrading community college faculty in the sciences and technologies.
3. Support a program that will assist the community colleges in acquiring state-of-the-art equipment.

Joshua L. Smith, Chancellor of the California Community College System, and Chair of the AACJC Board, was the lead-off witness at the House Postsecondary Education Subcommittee's hearings on FY'87 budget priorities. He told the Ford Subcommittee: "The Administration's 'reform' proposal to restrict aid eligibility to students who have a high school diploma or equivalency would profoundly affect the ability of our colleges to meet our commitment to access. We currently enroll approximately 48,000 students who are admitted without a diploma under the 'ability to benefit' designation... In many instances, these 'ability to benefit' students come from low-income families, or are the first in their family to consider a college education. ...California community colleges have taken the lead in providing training and employment services. Our campuses offer over 4,000 occupational programs at the certificate and associate degree level, and over 400,000 students are currently enrolled in vocational education programs. ...The heart of our mission is to provide educational opportunity to all students, including those considered to be 'high-risk' and those requiring remediation or other skills necessary to cope with a college curriculum," said Dr. Smith.

POSTAL RATES. The Postal Rate Commission will hold March and April hearings at seven sites across the country on the special rates for non-profit users -- beginning March 12 in Washington. Colleges and other non-profit organizations that want to supply witnesses to defend non-profit second class, third class, and in-county rates for libraries and publications at the later hearings in New York, Atlanta, Chicago, Denver, Dallas and Los Angeles, should



contact Charles L. Clapp, Secretary, Postal Rate Commission, Washington, DC 20268, (202) 789-6840. Comments on the institutional hardships of rate increases also can be made in writing to Mr. Clapp.

**TOP TARGETS.** National Seminar participants were asked to target their Congressional visits on three priorities, leaving the one-page summary below with each contact. The Joint Commission on Federal Relations sifted out these three as the issues on which "most visits would have the sharpest impact at this point in the Congressional year."

The Joint Commission urges that colleges copy this list and distribute it to faculty and student leaders -- who in turn should be asked to pick one priority and "personalize" it in hand-written letters to their own Representative or Senators.

### THE NATIONAL PROMISE OF ACCESS -- TOP PRIORITY FOR COMMUNITY COLLEGES

**PELL GRANTS.** College access will remain a right for all Americans only if Congress maintains a strong Pell Grant program. Pell Grants are the bedrock of access for needy students. Institutions (not the federal government) should continue to set and enforce standards of student progress, encompassing "ability to benefit." More than 800,000 will lose their Pell Grants under the President's plan, according to his own data. While community colleges support reform of the Higher Education Act that the House adopted, they prefer the formula for Pell Grants in S. 1965, which is the formula supported by the general higher education community. It allows \$2,400 for both the maximum grant and the cost-of-attendance allowance in the first year. Please support early passage of H.R. 3700, which will continue the present program of eligibility.

**NEW GI BILL.** The New GI Bill, which the President's FY'87 budget seeks to repeal, opens doors to advanced training that will give the nation greater national security and a stronger workforce. Community colleges support the New GI Bill; they oppose its repeal. The American skill base faces global challenges of unprecedented scale. The talent serving industry, business and the military is the core of national security, and since it became law eight months ago the New GI Bill has made a strong start at strengthening this base. More than 80,000 regular military enlistees already are investing in their future education under this program. More than 15,000 National Guard and Reserve members are using it for immediate college work to enhance their skills. Please oppose repeal of the New GI Bill.

**EMPLOYEE EDUCATIONAL ASSISTANCE.** For seven years, employee educational assistance has been making a vital contribution to the skill needs that enable the U.S. to lead global competition, under the provisions of Section 127 of the tax code. The community colleges, whose programs serve the majority of employers that offer Section 127 benefits, strongly support the permanent renewal of Section 127, which allows employees to improve job skills at employer expense without paying personal income tax on the training cost. Though more than 2 million Americans are using Section 127 benefits to enhance job skills, surveys show that there would be heavy withdrawals of both employers and employees from such education if Section 127 (which expired Dec. 31) is not renewed. The House tax bill, H.R. 3838, extends it only two years. Please make Section 127 permanent law -- support S. 558.

**SECTION 127.** House Ways and Means Committee is still wrestling with an "extender" bill that would reinstate key tax provisions that expired Dec. 31 but were covered in the omnibus tax reforms that cleared the House in December. Employee Educational Assistance (Section 127) tops the list of the expired provisions that such a bill would maintain until the Senate catches up with the House on the omnibus tax package. Other expired clauses whose fate hinges on the "extender" include: group legal services, R&D tax credits, targeted job tax credit, faculty housing, energy credits, and R&D expenditures between U.S. and foreign source income.

"BEST" QUOTES. Perhaps the loudest laughter of the 1986 National Legislative Seminar was provoked by these two comments:

Chairman G.V. (Sonny) Montgomery, of the House Veterans Affairs Committee -- "We made a mistake when we did the New GI Bill. We should have put some armorplate on it, a little gunpowder in it, a nose-cone on it. It would have flown through the Senate... The Senators never met a new weapon they didn't love."

Chairman William D. Ford of the Postsecondary Education Subcommittee -- "When we rattle our sabers and tell the Russians that we have bigger and better weapons than they do, do you think they react by throwing people out of college?" (Reference to the Reagan budget again calling for more weapons spending and less student aid.)

Federal Focus by: Frank Mensel, Vice President for Federal Relations, AACJC; Director of Federal Relations, ACCT

AACJC LETTER is an award-winning newsletter published weekly by the American Association of Community and Junior Colleges, National Center for Higher Education, One Dupont Circle, N.W., Suite 410, Washington, D.C. 20036. Available as a membership service (\$72 of Institutional, International, Educational, Foundation, and Corporate membership dues pay for one annual subscription to the AACJC Letter) or by subscription: \$72 for 50 issues or \$36 each subscription ordered in groups of 10 or more. Second-class postage paid at Washington, D.C., and additional mailing offices (ISSN 0745-0435). Postmaster: Send address changes to AACJC Publication Sales, 80 S. Early Street, Alexandria, Virginia 22304.

This newsletter is prepared on DECmate II's word processors from Digital Equipment Corporation.



**AACJC LETTER**

AMERICAN ASSOCIATION OF COMMUNITY AND JUNIOR COLLEGES

ONE DUPONT CIRCLE, N.W. WASHINGTON, D.C. 20036

NEWSPAPER HANDLING

Second-Class Postage  
Paid at Washington D.C.  
and Additional Entry  
(ISSN 0745-0435)

Return Postage Guaranteed

1  
LIBRARY  
AMERICAN CHEMICAL SOCIETY  
1155 SIXTEENTH ST NW RM 502 5TH FL  
WASHINGTON DC 20036

**WALGREN HEARINGS.** Buoyed by his initial hearing in Pittsburgh on the National Advanced Technician Training Act, Rep. Doug Walgren, D-PA, Chairman of the House Subcommittee on Science, Research, and Technology, has scheduled the first Washington hearing on NATTA November 19. The schedule of witnesses again will draw heavily from community colleges as did the Pittsburgh hearing.

Among witnesses representing business, labor, students, and handicapped at the Pittsburgh hearing, Joseph L. Hines, Vice Chair of the governing board of the Community College of Allegheny County, testified in behalf of the college. He emphasized the commitment of community colleges to "closing the technician gap." Citing the already widespread growth of partnerships between employers and the community colleges, Hines said the "partnership process could be expanded and accelerated far beyond its present level" by passage of NATTA (H.R. 2353).

**TRAINING COORDINATION.** Sen. Dan Quayle, R-IN, is looking for ways to better coordinate federal programs that support workforce education and training. The Subcommittee on Employment and Productivity, which he chairs, will open hearings soon, seeking especially the views that state and local program directors have on achieving such coordination. His staff is drafting legislation for comment and analysis. College occupational specialists that wish to offer ideas or comments should direct them to the Office of Federal Relations, AACJC or ACCT; or to Renee Coe, Subcommittee on Employment and Productivity, Committee on Labor and Human Resources, Washington, DC 20510.

Federal Focus by: Frank Mensel, Vice President for Federal Relations, AACJC; Director of Federal Relations, ACCT

AACJC LETTER is an award-winning newsletter published weekly by the American Association of Community and Junior Colleges, National Center for Higher Education, One Dupont Circle, N.W., Suite 410, Washington, D.C. 20036. Available as a membership service or by subscription: \$60 for 52 issues or \$30 each subscription ordered in groups of 10 or more. Second-class postage paid at Washington, D.C., and additional mailing offices (ISSN 0745-0435). Postmaster: Send address changes to AACJC Publication Sales, 80 S. Early Street, Alexandria, Virginia 22304

This newsletter is prepared on DECmate II's word processors from Digital Equipment Corporation



**AACJC LETTER**

AMERICAN ASSOCIATION OF COMMUNITY AND JUNIOR COLLEGES

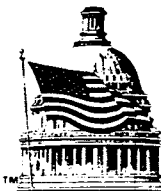
ONE DUPONT CIRCLE, N.W. WASHINGTON, D.C. 20036

**NEWSPAPER HANDLING**

Second-Class Postage  
Paid at Washington, D.C.  
and Additional Entry  
(ISSN 0745-0435)

Return Postage Guaranteed

1  
LIBRARY  
AMERICAN CHEMICAL SOCIETY  
1155 SIXTEENTH ST NW RM 502 5TH FL  
WASHINGTON DC 20036



# AACJC LETTER

AMERICAN ASSOCIATION OF COMMUNITY AND JUNIOR COLLEGES

An award-winning national newsletter for community, technical, and junior colleges.  
Dale Parnell, Editor      Sue Friedman, Associate Editor

AACJC  
DEC

FYI pp 2

FEDERAL FOCUS

December 3, 1985 - No. 170

FIVE COMMUNITY COLLEGE LEADERS testify at Walgren hearing p. 2.

PONITZ, ARNS testify on New GI Bill progress, p. 3.

QUAYLE AT SEMINAR. Sen. Dan Quayle, R-IN, who is leading an attempt to orchestrate various federal vocational education and training programs into one cohesive national strategy for human resource development, has accepted ACCT's invitation to address the 1986 National Legislative Seminar in Washington. Senator Quayle chairs the Senate Subcommittee on Employment and Productivity. Correction: The last Federal Focus incorrectly identified the Chairman of the House Budget Committee as William H. Clay III. The Chairman is Rep. William H. Gray III, D-PA, who will also be a featured speaker at the National Seminar February 23-25 at the J.W. Marriott Hotel.

"HEA" TO HOUSE FLOOR. H.R. 3700, the new Higher Education Act that cleared the House Committee on Education and Labor by a 28-2 vote, will move to the House floor Tuesday, December 3. House passage is expected within the week. All Education-Labor Committee members are now cosponsoring the bill, except four Republicans -- Rep. Steve Bartlett, TX, Chairman of the House Republican Task Force on Education; Rep. Thomas E. Petri, WI; Rep. Richard K. Armey, TX, and Rep. Harris W. Fawell, IL. Representatives Bartlett and Fawell were the two dissenting votes on Committee approval of the bill.

While the bill that emerged from Subcommittee required colleges to spend two-thirds of their Supplemental Educational Opportunity Grants (SEOG) on "first generation" students, this was supplanted in full Committee with a provision that colleges spend three-fourths of their SEOG's on Pell Grant recipients. H.R. 3700 also specifies that students must document their financial need in order to obtain Guaranteed Student Loans (GSL) -- a step aimed at curbing the soaring costs of the GSL program.

Upon House passage of the bill, Federal Focus will provide a more complete summary of its major provisions.

TAX REFORM. The monumental tax reform bill that has emerged from the House Ways and Means Committee protects most of the benefits that help colleges and students and includes a two-year renewal of employee educational assistance (Section 127 of the tax code). If the House can complete floor action now scheduled on the bill the week of December 9, Congress could meet its December 13 target for adjournment.

Since business coalitions are sharply divided on the bill, the outcome in the House is likely to hinge on how badly President Reagan still wants tax reform. Its defeat in the House would virtually end hopes for what the President has termed the "highest goal" of his second term. If it clears the House, Sen. Bob Packwood, R-OR, Chairman of the Senate Finance Committee, has said he will push his Committee to start markup almost as soon as Congress returns from the holidays.

(continued on p. 2)

## Opportunity With Excellence

NATIONAL CENTER FOR HIGHER EDUCATION

ONE DUPONT CIRCLE, N.W., SUITE 410, WASHINGTON, D.C. 20036

202/293-7050

TAX REFORM (continued)

Maintaining employee educational assistance has been the highest priority of the ACCT-AACJC Joint Commission on Federal Relations. The waves of letters from community colleges undoubtedly helped keep it in the House bill. But winning permanent expression will require a much heavier barrage of letters to Senate Finance Committee members. Here's how the Joint Commission's other top tax preferences fared in the House bill:

1. Federal deduction for state and local taxes ... full deductibility is maintained.
2. Charitable contributions by non-itemizers ... only gifts of \$100 or more will be deductible (on top of the standard deduction). Ultimately, this change could work to the advantage of community college alumni groups and foundations, if they can "popularize" the \$100 minimum gift.
3. Employee health insurance ... the bill leaves this benefit untaxed.

The bill's treatment of revenue bonds, income deferred to pensions, and R & D tax credit on equipment gifts will be covered in the next Focus.

★ **WALGREN WITNESSES.** A new page in community college history was made last week, when a community college trustee, three presidents and a vice president testified before the House Subcommittee on Science, Research and Technology in support of the National Advanced Technician Training Act -- the Walgren "community College Bill," H.R. 2353. Equally significant was the appearance of Pat Choate, TRW's Washington-based economist, who told the Subcommittee:

Most of us are increasingly aware that work has never been more unpredictable. We are seeing massive turbulence within our labor markets . . . Over the past five years, we have seen two million people a year displaced from their jobs simply because their jobs have permanently disappeared. . . . there is the necessity to improve and ensure that our educational institutions can offer state-of-the-art training.

Dr. Choate went on to stress "compelling reasons" why NSF would be the "logical" agency to undertake the H.R. 2353 program. "First, it's an agency with high visibility . . . the challenge we face is a challenge that requires high visibility, that of modernizing our institutions that deal with technical training." Programs assigned to NSF bear an aura of national priority, he said, and "this challenge of ensuring that we have a state-of-the-art technical training system must be a national priority."

Although the National Science Foundation gave testimony opposing the bill, both Republicans and Democrats on the Subcommittee were blunt in saying they want NSF to do more with community colleges, Sheila M. Korhammer, a past President of ACCT and a Northampton County Area Community College (PA) board member, told the Subcommittee:

The Walgren bill is designed to stimulate the more rapid growth of partnerships. If our country is going to continue to lead the world in new technology, if the fruits that go with continued global leadership in technology are going to be enjoyed by both the U.S. economy and the workforce, a strong supply of highly trained technicians will be as important as the technology itself.

A very symbiotic relationship is at work in these programs. They often entail two-way learning reaching well beyond the course content itself.

Students and faculty reap the practical rewards of hands-on experience in advancing technology and state-of-the-art systems. A more tangible payoff for the employer is not unusual. It takes the form of higher productivity and increased profits, growing out of the creative input that faculty and students infuse into the employer's business systems and production processes as they use them. More than a few college presidents whose institutions are strong in employer-specific offerings have told me, "We are helping industry and business change. We are helping industries perfect their technology."

The hearing was capped by a witness panel that included H. James Owen, President of the National Council for Occupational Education and President of Tri-Cities State Technical Institute, Blountville, TN; Richard T. Anderson, District Director of Waukesha County Technical Institute, Pewaukee, WI; Michael I. Schafer, President of Mohawk Valley Community College, Utica, NY, and Andrew Korim, Vice President of the Community College of Allegheny County (PA) and Chairman of NCOE's legislative committee.

**BILL "GAP."** The New GI Bill is suffering an "enormous information gap," which threatens to erode the receptivity and high expectations that greeted the program's passage by Congress, a House subcommittee has been told by two community college witnesses. The first hearings to check on the progress of the New GI bill revealed that, although it became law nearly five months ago, precise information and official application forms are not yet available on campuses or in National Guard, Reserve, or recruiting office hands. Kathleen Arns, Provost of College of Lake County, Grayslake, IL, told the House Veterans Affairs Committee's Subcommittee on Education, Training and Employment:

Certainly, Mr. Chairman, the colleges don't need the excessive regulations and excessive paperwork that go with the administration of the GI Bill programs. The excessive regulations simply lead to inefficiency at every level. The benefits surely would reach more veterans if there were less bureaucracy, and they would be more happily served by the colleges, if there were less paperwork and fewer audit abuses. Your Committee should take a long look at the lack of due process in the VA's behavior on audits. The audit claims the VA makes against colleges are often arbitrary and shakily documented, yet the typical college administrator would rather pay a \$25,000 claim than run the risks of huge investments of staff time and costly lawyer bills in fighting an audit.

David Ponitz, President of Sinclair Community College, Dayton, OH, urged the Subcommittee to make the tuition assistance concept embodied in the Skilled Enlisted Reserve Training Act (the Bennett-Thurmond bill) a new incentive, or "kicker," in the education benefits for Reserve and National Guard members. Said President Ponitz:

We think of the New GI Bill as an "up front GI Bill," and see it as a policy breakthrough that could yield other great benefits to the country. If higher education actively supports it, which surely is the intention of the community colleges, it could significantly reduce the competition among colleges, employers, and the military, for the diminished flow of graduates now completing high school.

In this vein, we urge that this Committee give serious consideration to Representative Charles E. Bennett's bill, H.R. 40, the Skilled Enlisted Reserve Training Act, which could further reduce competition among

BILL "GAP" (continued)

colleges, industry, and the military for high school graduates. Added to the "kicker," or special incentives in the New GI bill, the Bennett concept would entice National Guard and Reserve members to pursue the critical skills needed by the units in which they serve, thus further enhancing the benefit of the concurrent training to overall military preparedness.

**LIABILITY MANUAL.** With the New GI Bill likely to increase college enrollments, and with federal audits being intensified, colleges may want to arm themselves with the newly published NAVPA Manual on Institutional Liability. It can be ordered for \$20, including postage, directly from the President of the National Association of Veterans Program Administrators (NAVPA) -- Ms. Bertie Rowland, Veterans Affairs Director, California State University, Chico, Ca. 95929-0711.

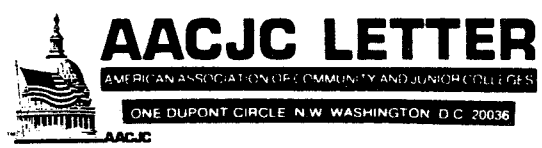
**LOST MAIL.** The Alliance of Nonprofit Mailers, the coalition defending third-class postal rates for the bulletins, class schedules and library materials that colleges move by mail, is asking for reports on lost mail. Five letter carriers in Yonkers, NY, arrested in late October, were charged with dumping large quantities of third-class mail. Although such losses apparently are rare and are vigorously prosecuted when they occur, the Alliance urges colleges to report them immediately to both the Postal Inspection Service and the Alliance. If colleges will send details/data on such cases to the ACCT or AACJC Office of Federal Relations, staff will put them in the hands of the Alliance.

**REPORT DEADLINE.** Colleges are reminded that they have only until Dec. 31, 1985, to file 1984-85 Student Aid Report Documents with the Education Department. Student Aid Reports and Student Eligibility Reports for years prior to 1984-85 also must be filed by that date. After that date, colleges will not be allowed to amend their Pell Grant accounts for 1984-85 or any prior award year, except under special exceptions.

Federal Focus by: Frank Mensel, Vice President for Federal Relations, AACJC; Director of Federal Relations, ACCT

AACJC LETTER is an award-winning newsletter published weekly by the American Association of Community and Junior Colleges, National Center for Higher Education, One Dupont Circle, N.W., Suite 410, Washington, D.C. 20036 Available as a membership service or by subscription: \$60 for 52 issues or \$30 each subscription ordered in groups of 10 or more. Second-class postage paid at Washington, D.C., and additional mailing offices (ISSN 0745-0435) Postmaster: Send address changes to AACJC Publication Sales, 80 S Early Street, Alexandria, Virginia 22304

This newsletter is prepared on DECmate II's word processors from Digital Equipment Corporation



NEWSPAPER HANDLING

Second-Class Postage Paid at Washington D C and Additional Entry (ISSN 0745-0435)

Return Postage Guaranteed

LIBRARY  
UNIVERSITY OF CALIFORNIA  
500 UNIVERSITY AVENUE  
LOS ANGELES, CALIF. 90024

- Check with your state insurance director or commissioner for assistance on coverage or hard-to-write risks.
- Since risk management has become such a specialty, appoint someone to be your college risk manager...someone who will know a lot about this subject. Dollars can be saved by someone who knows the risk management business.

David  
Versus  
Goliath

The trial lawyers across the country are opposing all tort reform efforts and are reported to be spending \$25 million on advertising and political lobbying. Our efforts at tort reform remind us of the David-against-Goliath story...but we think we are already winning the public debate. Don't fear to tell your story at the local level. Catch the ear of your state legislator. Let them know about our national tort reform efforts and how the liability insurance crisis affects your college.

- For more information on the American Tort Reform Association, contact: ATRA, 1015 15th St., N.W., Suite 802, Washington, D.C. 20005, 202/347-7474.
- For AACJC information on risk management and tort reform, contact: Jim Gollattscheck, Executive Vice President, 202/293-7050.
- For more information on individual liability insurance coverage, contact: Dr. Gale Bartow, Forrest T. Jones & Company, P.O. Box 131, Kansas City, MO 64141, 1-800-821-7303. For information on institutional liability protection, contact: Jan Pacey at the same address and number.

#### ENROLLMENT FOR FALL TERM LOOKS GOOD

Preliminary  
Enrollment  
Figures  
Look  
Good!

While it is still too early to say for certain, the preliminary 1985 fall term college credit enrollment figures collected by AACJC's office of data collection and policy analysis (Jim Mahoney, director) indicate that community, technical, and junior college enrollment held its own. The fall 1984 credit enrollment was 4,687,637 compared to the fall 1985 college credit enrollment count of 4,675,952. North Carolina community colleges lead the enrollment increase list with a 14 percent 1985 increase over 1984. Ed Wilson, executive director of the North Carolina State Department of Community Colleges, indicates that the increase is largely due to some great marketing efforts with the high schools and to the encouragement of retraining.

Here is a state-by-state review of the fall 1984 (some 1984 figures have changed due to recent receipt of more accurate and complete data) and fall 1985 credit enrollment figures:

State	1984 Fall Enrollment	1985 Fall Enrollment*	State	1984 Fall Enrollment	1985 Fall Enrollment*
Alabama	303,734	308,105	Montana	4,437	4,396
Alaska	16,846	17,847	Nebraska	21,723	24,930
Arizona	114,373	122,540	Nevada	23,534	24,028
Arkansas	12,869	12,218	New Hampshire	5,495	5,599
California	1,008,809	1,010,000	New Jersey	112,950	109,893
Colorado	50,445	49,200	New Mexico	27,646	25,711
Connecticut	43,117	40,936	New York	279,515	275,963
Delaware	7,867	7,573	North Carolina	117,728	132,300
Florida	211,373	220,920	North Dakota	7,848	7,754
Georgia	42,744	36,200	Ohio	151,524	156,554
Hawaii	21,185	21,588	Oklahoma	57,761	61,031
Idaho	10,394	11,864	Oregon	67,374	66,487
Illinois	344,317	330,463	Pennsylvania	99,178	97,600
Indiana	34,863	29,950	Rhode Island	12,317	12,617
Iowa	40,720	40,848	South Carolina	39,742	39,879



Kansas	44,850	45,637	South Dakota	1,354	1,269
Kentucky	26,833	26,886	Tennessee	50,341	48,002
Louisiana	13,908	15,033	Texas	333,404	319,050
Maine	9,514	8,058	Utah	18,679	19,216
Maryland	99,315	94,843	Vermont	5,067	5,373
Massachusetts	86,542	88,937	Virginia	108,839	108,797
Michigan	204,321	203,733	Washington	124,077	123,827
Minnesota	43,315	45,189	West Virginia	17,993	18,976
Mississippi	40,279	39,162	Wisconsin	94,959	87,938
Missouri	58,578	57,582	Wyoming	13,014	13,450

\* The fall 1985 enrollment figures are preliminary based on the initial data collected to date via the AACJC 1986 directory questionnaire. About ten percent of the colleges have still not replied to our October directory questionnaire.

**MORE FACTS AND FIGURES OVER THE PAST DECADE**

Unless otherwise noted, the National Center for Education Statistics provided the historical figures while AACJC provided the preliminary figures (those with asterisk \*) based on data received to date.

Associate Degree Preferred

- The number of associate degrees awarded has consistently increased
- | 1974-75 | 1982-83 | 1984-85* |
|---------|---------|----------|
| 360,171 | 456,214 | 460,000  |

Ethnic Minority Enrollment

- Minority enrollment in our colleges has shown about a three percent decrease during the past five years after a significant increase in the late 1970's.

1976	1980	1985*
761,000	894,000	863,974

Cutting The High Cost Of Higher Education

- Do you want to cut the high cost of higher education? Then attend a community, technical, or junior college for two years. While tuition and fees charges have increased more than 100 percent over the last decade, community, technical and junior colleges still remain more than 50 percent below the average annual \$1,278 tuition and fees charged at a public, four-year college or university.

1974-75	1984-85	1985-86*
\$277	\$510	\$648

Faculty

- The number of faculty grew by nearly 50 percent during the past decade with 1985-86 preliminary figures showing a slight decrease.

1974-75	1984-85	1985-86*
163,775	242,458	241,000

Send Survey

- If you have not completed the 1986 AACJC directory questionnaire survey, please do so TODAY and return it to Jim Mahoney at AACJC.

Three Directories In 1986

The first of three AACJC directories, the "AACJC Membership Directory," was mailed to each member college last week as a membership service. The second one, "Who's Who in American Community, Technical, and Junior Colleges," lists approximately 14 administrators at more than 970 colleges and will be available in April at a cost of \$35 each. The final directory, "Community, Technical, and Junior College Directory: A Statistical Analysis," is scheduled for release in June at a cost of \$25.

- To order additional copies of the AACJC Membership Directory (\$35) or copies of the other two directories, contact: AACJC Publications, 80 S. Early St., Alexandria, VA 22304.

→ Dr  
Bradford

NEA

# Higher Education Advocate

For  
NEA Members  
in Higher  
Education

March 18, 1986

Vol. III, No. 8

## Community Colleges Address What Makes a Learner

A panel of state education officials in Iowa recently completed a comprehensive review of the state's higher education institutions. A key finding: The emphasis on increased standards by the education reform movement has "created a need for more, rather than less, remedial work" in higher education.

The panel's report, released in January, reflects the growing priority two-year institutions are giving to what educators now call "developmental education." The report asserts that the state's two-year colleges should do a better job of evaluating students' needs for remedial work at the time of admission, and that these institutions should be the main providers of remedial education.

"Two-year colleges have been accused of focusing on subject matter expertise without giving enough attention to what makes a learner," says Dale Parnell, president of the American Association of Community and Junior Colleges. "But we're getting more concerned with how you educate students to be lifelong learners—and developmental education may need to be the first step."

Today's community colleges offer courses in everything from test taking to memory skills to analytical thinking. At some institutions, Parnell points out, developmental reading and writing labs stay open from 7:30 in the morning to 10:00 p.m..

"You won't find one community college in the nation that's not doing something related to developmental education," Parnell asserts. "It's a way of adjusting to the demographics of our enrollments."

### Changing Demographics

Community college demographics have changed considerably since the community college movement first gained momentum three decades ago. The schools' initial emphasis on providing transfer credits for recent high school graduates shifted focus during the 1970s when nontraditional students—returning Vietnam veterans, Southeast Asian refugees, displaced homemakers, and workers displaced by plant dislocations—began attending community colleges in greater and greater numbers.

These unconventional learners have made their mark, in part with the rise of developmental education departments. Some 37 percent of students attending the Quinsigamond Community College in Worcester, Massachusetts, for instance, now get some form of remedial instruction.

With the increasing emphasis on these courses, there's been a quiet revolution in instructional methodology that Jim Rice, president of the 15-college NEA-affiliated Massachusetts Community

College Council, finds "exciting." The emphasis: flexibility in how, where, and by whom teaching is provided. Community college courses, Rice notes, have been transported to low-income neighborhoods, and two-year colleges have also pioneered alternate forms of self-paced learning and made wide use of peer tutors.

These flexible learning approaches are proving not only exciting but efficient. At Central Piedmont Community College in Charlotte, N.C., students have improved by 50 percent on the traditional 50-hour tutorial assistance program. They are advancing by as much as one grade level in reading and math for every 25-30 hours of combined computer-assisted and tutorial instruction.

Nellie Thorogood, deputy commissioner for the community colleges and technical institutes coordinating board in the Texas College and University System, likens the role of community colleges in remedial education to an intensive care ward in higher education.

NEA's new Operation Rescue, a program launched by last July's NEA Representative Assembly, will be providing new resources to aid the struggle to provide that care. Over the next two years, over \$700,000 in grants will be awarded to NEA local Associations for faculty-designed projects that advance literacy and help keep students in school—and learning.

Stats to  
Ware  
Chapman  
Daniel  
Boese  
Bradford  
Lang

Thought this was an interesting article - also thought you might like to read it. June/Harpers am

# WHY JOHNNY CAN'T THINK

The politics of bad schooling  
By Walter Karp

The following books are discussed in this essay:

- A Place Called School*, by John I. Goodlad. 396 pages. McGraw-Hill. \$9.95
- The Good High School*, by Sara Lawrence Lightfoot. 399 pages. Basic Books. \$19.95.
- Horace's Compromise: The Dilemma of the American High School*, by Theodore R.Sizer. 241 pages. Houghton Mifflin. \$16.95.
- High School: A Report on Secondary Education in America*, by Ernest L. Boyer and the Carnegie Foundation for the Advancement of Teaching. 363 pages. Harper & Row. \$16.95.
- A Nation at Risk: The Imperative for Educational Reform*, by the National Commission on Excellence in Education. 65 pages. U.S. Government Printing Office. \$4.50.
- The Great School Debate: Which Way for American Education?*, edited by Beatrice and Ronald Cross. 481 pages. Simon & Schuster. \$17.45.
- The Challenge to American Schools*, edited by John Bunzel. 256 pages. Oxford University Press. \$19.95.
- The Troubled Crusade: American Education 1945-1980*, by Diane Ravitch. 384 pages. Basic Books. \$19.95.

Until very recently, remarkably little was known about what actually goes on in America's public schools. There were no reliable answers to even the most obvious questions. How many children are taught to read in overcrowded classrooms? How prevalent is rote learning and how common are classroom discussions? Do most schools set off gongs to mark the change of "periods"? Is it a common practice to bark commands over public address systems in the manner of army camps, prisons, and banana republics? Public schooling provides the only intense experience of a public realm that most Americans will ever know. Are school buildings designed with the dignity appropriate to a great republican institution, or are most of them as crummy looking as one's own?

The darkness enveloping America's public schools is truly extraordinary considering that 38.9 million students attend them, that we spend nearly \$134 billion a year on them, and that foundations ladle out generous sums for the study of everything about schooling—except

Walter Karp is a contributing editor of Harper's and the author of *The Politics of War*. He is at work on a book about the Korean War, *The Empire and the Mob*.

what really occurs in the schools. John I. Goodlad's eight-year investigation of a mere thirty-eight of America's 80,000 public schools—the result of which, *A Place Called School*, was published last year—is the most comprehensive such study ever undertaken. Hailed as a "landmark in American educational research," it was financed with great difficulty. The darkness, it seems, has its guardians.

Happily, the example of Goodlad, a former dean of UCLA's Graduate School of Education, has proven contagious. A flurry of new books sheds considerable light on the practice of public education in America. In *The Good High School*, Sara Lawrence Lightfoot offers vivid "portraits" of six distinctive American secondary schools. In *Horace's Compromise*, Theodore R. Sizer, a former dean of Harvard's Graduate School of Education, reports on his two-year odyssey through public high schools around the country. Even *High School*, a white paper issued by Ernest L. Boyer and the Carnegie Foundation for the Advancement of Teaching, is supported by a close investigation of the institutional life of a number of schools. Of the books under review, only *A Nation at Risk*, the

Overcrowded  
classrooms  
inevitably  
debase  
instruction, yet  
they are the rule  
in America's  
public schools

report of the Reagan Administration's National Commission on Excellence in Education, adheres to the established practice of crass special pleading in the dark.

Thanks to Goodlad et al., it is now clear what the great educational darkness has so long concealed: the depth and pervasiveness of political hypocrisy in the common schools of the country. The great ambition professed by public school managers is, of course, education for citizenship and self-government, which harks back to Jefferson's historic call for "general education to enable every man to judge for himself what will secure or endanger his freedom." What the public schools practice with remorseless proficiency, however, is the prevention of citizenship and the stifling of self-government. When 58 percent of the thirteen-year-olds tested by the National Assessment for Educational Progress think it is against the law to start a third party in America, we are dealing not with a sad educational failure but with a remarkably subtle success.

Consider how effectively America's future citizens are trained not to judge for themselves about anything. From the first grade to the twelfth, from one coast to the other, instruction in America's classrooms is almost entirely dogmatic. Answers are "right" and answers are "wrong," but mostly answers are short. "At all levels, [teacher-made] tests called almost exclusively for short answers and recall of information," reports Goodlad. In more than 1,000 classrooms visited by his researchers, "only rarely" was there "evidence to suggest instruction likely to go much beyond mere possession of information to a level of understanding its implications." Goodlad goes on to note that "the intellectual terrain is laid out by the teacher. The paths for walking through it are largely predetermined by the teacher." The give-and-take of genuine discussion is conspicuously absent. "Not even 1%" of instructional time, he found, was devoted to discussions that "required some kind of open response involving reasoning or perhaps an opinion from students. . . . The extraordinary degree of student passivity stands out."

Sizer's research substantiates Goodlad's. "No more important finding has emerged from the inquiries of our study than that the American high school student, *as student*, is all too often docile, compliant, and without initiative." There is good reason for this. On the one hand, notes Sizer, "there are too few rewards for being inquisitive." On the other, the heavy emphasis on "the right answer . . . smothers the student's efforts to become an effective intuitive thinker."

Yet smothered minds are looked on with the utmost complacency by the educational establishment—by the Reagan Department of Education, state boards of regents, university education departments, local administrators, and even many so-called educational reformers. Teachers are neither urged to combat the tyranny of the short right answer nor trained to do so. "Most teachers simply do not know how to teach for higher levels of thinking," says Goodlad. Indeed, they are actively discouraged from trying to do so.

The discouragement can be quite subtle. In their orientation talks to new, inexperienced teachers, for example, school administrators often indicate that they do not much care what happens in class so long as no noise can be heard in the hallway. This thinly veiled threat virtually ensures the prevalence of short-answer drills, workbook exercises, and the copying of long extracts from the blackboard. These may smother young minds, but they keep the classroom quiet.

Discouragement even calls itself reform. Consider the current cry for greater use of standardized student tests to judge the "merit" of teachers and raise "academic standards." If this fake reform is foisted on the schools, dogma and docility will become even more prevalent. This point is well made by Linda Darling-Hammond of the Rand Corporation in an essay in *The Great School Debate*. Where "important decisions are based on test scores," she notes, "teachers are more likely to teach to the tests" and less likely to bother with "nontested activities, such as writing, speaking, problem-solving or real reading of real books." The most influential promoter of standardized tests is the "excellence" brigade in the Department of Education; so clearly one important meaning of "educational excellence" is greater proficiency in smothering students' efforts to think for themselves.

Probably the greatest single discouragement to better instruction is the overcrowded classroom. The Carnegie report points out that English teachers cannot teach their students how to write when they must read and criticize the papers of as many as 175 students. As Sizer observes, genuine discussion is possible only in small seminars. In crowded classrooms, teachers have difficulty imparting even the most basic intellectual skills, since they have no time to give students personal attention. The overcrowded classroom inevitably debases instruction, yet it is the rule in America's public schools. In the first three grades of elementary school, Goodlad notes, the average class has twenty-seven students. High school classes range from twenty-five to forty students, according to the Carnegie report.

What makes these conditions appalling is

Public-address systems teach the huge student mass to respect the rule of remote and invisible agencies

that they are quite unnecessary. The public schools are top heavy with administrators and rife with sinecures. Large numbers of teachers scarcely ever set foot in a classroom, being occupied instead as grade advisers, career counselors, "coordinators," and supervisors. "Schools, if simply organized," Sizer writes, "can have well-paid faculty and fewer than eighty students per teacher [16 students per class] without increasing current per-pupil expenditure." Yet no serious effort is being made to reduce class size. As Sizer notes, "Reducing teacher load is, when all the negotiating is over, a low agenda item for the unions and school boards." Overcrowded classrooms virtually guarantee smothered minds, yet the subject is not even mentioned in *A Nation at Risk*, for all its well-publicized braying about a "rising tide of mediocrity."

Do the nation's educators really want to teach almost 40 million students how to "think critically," in the Carnegie report's phrase, and "how to judge for themselves," in Jefferson's? The answer is, if you can believe that you will believe anything. The educational establishment is not even content to produce passive minds. It seeks passive spirits as well. One effective agency for producing these is the overly populous school. The larger schools are, the more prison-like they tend to be. In such schools, guards man the stairwells and exits. ID cards and "passes" are examined at checkpoints. Bells set off spasms of anarchy and bells quell the student mob. PA systems interrupt regularly with trivial fiats and frivolous announcements. This "malevolent intruder," in Sizer's apt phrase, is truly ill willed, for the PA system is actually an educational tool. It teaches the huge student mass to respect the authority of disembodied voices and the rule of remote and invisible agencies. Sixty-three percent of all high school students in America attend schools with enrollments of 5,000 or more. The common excuse for these mobbed schools is economy, but in fact they cannot be shown to save taxpayers a penny. Large schools "tend to create passive and compliant students," notes Robert B. Hawkins Jr. in an essay in *The Challenge to American Schools*. That is their chief reason for being.

"How can the relatively passive and docile roles of students prepare them to participate as informed, active and questioning citizens?" asks the Carnegie report, in discussing the "hidden curriculum" of passivity in the schools. The answer is, they were not meant to. Public schools introduce future citizens to the public world, but no introduction could be more disheartening. Architecturally, public school buildings range from drab to repellent. They are often disfigured by demoralizing neglect—"cracked sidewalks, a

shabby lawn, and peeling paint on every window sash," to quote the Carnegie report. Many big-city elementary schools have numbers instead of names, making them as coldly dispiriting as possible.

Public schools stamp out republican sentiment by habituating their students to unfairness, inequality, and special privilege. These arise inevitably from the educational establishment's longstanding policy (well described by Diane Ravitch in *The Troubled Crusade*) of maintaining "the correlation between social class and educational achievement." In order to preserve that factitious "correlation," public schooling is rigged to favor middle-class students and to ensure that working-class students do poorly enough to convince them that they fully merit the lowly station that will one day be theirs. "Our goal is to get these kids to be like their parents," one teacher, more candid than most, remarked to a Carnegie researcher.

For more than three decades, elementary schools across the country practiced a "progressive," non-phonetic method of teaching reading that had nothing much to recommend it save its inherent social bias. According to Ravitch, this method favored "children who were already motivated and prepared to begin reading" before entering school, while making learning to read more difficult for precisely those children whose parents were ill read or ignorant. The advantages enjoyed by the well-bred were thus artificially multiplied tenfold, and 23 million adult Americans are today "functional illiterates." America's educators, notes Ravitch, have "never actually accepted full responsibility for making all children literate."

That describes a malicious intent a trifle too mildly. Reading is the key to everything else in school. Children who struggle with it in the first grade will be "grouped" with the slow readers in the second grade and will fall hopelessly behind in all subjects by the sixth. The schools hasten this process of falling behind, report Goodlad and others, by giving the best students the best teachers and struggling students the worst ones. "It is ironic," observes the Carnegie report, "that those who need the most help get the least." Such students are commonly diagnosed as "culturally deprived" and so are blamed for the failures inflicted on them. Thus, they are taught to despise themselves even as they are inured to their inferior station.

The whole system of unfairness, inequality, and privilege comes to fruition in high school. There, some 15.7 million youngsters are formally divided into the favored few and the ill-favored many by the practice of "tracking."

About 35 percent of America's public secondary-school students are enrolled in academic programs (often subdivided into "gifted" and "non-gifted" tracks); the rest are relegated to some variety of non-academic schooling. Thus the tracking system, as intended, reproduces the divisions of the class system. "The honors programs," notes Sizer, "serve the wealthier youngsters, and the general tracks (whatever their titles) serve the working class. Vocational programs are often a cruel social dumping ground." The bottom-dogs are trained for jobs as auto mechanics, cosmeticians, and institutional cooks, but they rarely get the jobs they are trained for. Pumping gasoline, according to the Carnegie report, is as close as an auto-mechanics major is likely to get to repairing a car. "Vocational education in the schools is virtually irrelevant to job fate," asserts Goodlad. It is merely the final hoax that the school bureaucracy plays on the neediest, one that the federal government has been promoting for seventy years.

The tracking system makes privilege and inequality blatantly visible to everyone. It creates under one roof "two worlds of schooling," to quote Goodlad. Students in academic programs read Shakespeare's plays. The commonality, notes the Carnegie report, are allowed virtually no contact with serious literature. In their English classes they practice filling out job applications. "Gifted" students alone are encouraged to think for themselves. The rest are subjected to sanctimonious wind, chiefly about "work habits" and "career opportunities."

"If you are the child of low-income parents," reports Sizer, "the chances are good that you will receive limited and often careless attention from adults in your high school. If you are the child of upper-middle-income parents, the chances are good that you will receive substantial and careful attention." In Brookline High School in Massachusetts, one of Lightfoot's "good" schools, a few fortunate students enjoy special treatment in their Advanced Placement classes. Meanwhile, students tracked into "career education" learn about "institutional cooking and clean-up" in a four-term Food Service course that requires them to mop up after their betters in the school cafeteria.

This wretched arrangement expresses the true spirit of public education in America and discloses the real aim of its hidden curriculum. A favored few, pampered and smiled upon, are taught to cherish privilege and despise the disfavored. The favorless many, who have majored in failure for years, are taught to think ill of themselves. Youthful spirits are broken to the world and every impulse of citizenship is effectively stifled. John Goodlad's judgment is se-

vere but just: "There is in the gap between our highly idealistic goals for schooling in our society and the differentiated opportunities conditioned and supported in schools a monstrous hypocrisy."

**T**he public schools of America have not been corrupted for trivial reasons. Much would be different in a republic composed of citizens who could judge for themselves what secured or endangered their freedom. Every wielder of illicit or undemocratic power, every possessor of undue influence, every beneficiary of corrupt special privilege would find his position and tenure at hazard. Republican education is a menace to powerful, privileged, and influential people, and they in turn are a menace to republican education. That is why the generation that founded the public schools took care to place them under the suffrage of local communities, and that is why the corrupters of public education have virtually destroyed that suffrage. In 1932 there were 127,531 school districts in America. Today there are approximately 15,840 and they are virtually impotent, their proper role having been usurped by state and federal authorities. Curriculum and textbooks, methods of instruction, the procedures of the classroom, the organization of the school day, the cant, the pettifogging, and the corruption are almost uniform from coast to coast. To put down the menace of republican education its shield of local self-government had to be smashed, and smashed it was.

The public schools we have today are what the powerful and the considerable have made of them. They will not be redeemed by trifling reforms. Merit pay, a longer school year, more homework, special schools for "the gifted," and more standardized tests will not even begin to turn our public schools into nurseries of "informed, active and questioning citizens." They are not meant to. When the authors of *A Nation at Risk* call upon the schools to create an "educated work force," they are merely sanctioning the prevailing corruption, which consists precisely in the reduction of citizens to credulous workers. The education of a free people will not come from federal bureaucrats crying up "excellence" for "economic growth," any more than it came from their predecessors who cried up schooling as a means to "get a better job."

Only ordinary citizens can rescue the schools from their stifling corruption, for nobody else wants ordinary children to become questioning citizens at all. If we wait for the mighty to teach America's youth what secures or endangers their freedom, we will wait until the crack of doom. ■

*The education of a free people will not come from federal bureaucrats crying up 'excellence' for 'economic growth'*

THE NINETY-FIRST TWO YEAR COLLEGE CHEMISTRY CONFERENCE  
TWENTY-FIFTH ANNIVERSARY MEETING  
APRIL 25-26, 1986  
William Rainey Harper College  
Palatine, IL 60067

CONFERENCE THEME; YESTERDAY, TODAY AND TOMORROW

Program Chair

William T. Mooney, Jr., El Camino College, Torrance, CA 90506, (213) 532-3670, ext 679 or 528 (messages) or (213) 321-9342 (late afternoons, evenings, weekends)

Local Arrangements Chair

Joseph Bauer, William Rainey Harper College, Palatine, IL 60067 (312) 397-3000

Industrial Sponsor Chair

Duane Sell, William Rainey Harper College, Palatine, IL 60067 (312) 397-3000

FRIDAY, APRIL 25, 1986

- 9:00 - 3:30 Registration, Exhibits, Coffee and Rolls (A Building, Main Floor)
- 9:00 - 1:00 Software Center. (D Building, Room 131)
- 9:30 - 10:30 Committee on Chemistry in the Two Year Colleges. (E Building, Room 106). Onofrio Gaglione, New York City Technical College, Brooklyn, NY 11201, Chairman, COCTYC, presiding

This meeting is open to all interested persons

10:45 - 12:00 FIRST GENERAL SESSION (E BUILDING, ROOM 106)  
(Onofrio Gaglione, presiding)

- 10:45 Opening remarks for the Conference.  
Onofrio Gaglione
- 10:50 Welcome to Harper College  
James McGrath, President, William Rainey Harper College
- 10:55 Introduction to Conference Program.  
William T. Mooney, Jr., El Camino College, Torrance, CA 90506

91st Two Year College Chemistry Conference Program (Preliminary)

- 11:05 Conference Keynote Address. From Concept to Classroom: A History of the Development and Teaching of the VSEPR Theory  
Ronald Gillespie, McMaster University, Hamilton, Ontario, Canada
- 11:45 Discussion
- 12:00 - 1:30 LUNCH BREAK - EXHIBITS
- 1:30 - 5:00 SECOND GENERAL SESSION (E BUILDING, ROOM 106)

SYMPOSIUM ON GENERAL CHEMISTRY FOR SCIENCE & ENGINEERING  
(William T. Mooney, Jr., presiding)

- 1:30 Introduction to the Symposium  
William T. Mooney, Jr.
- 1:40 A Philosophy for Teaching General Chemistry  
James E. Brady, St. John's University, Jamaica, NY 11439
- 2:10 A Philosophy for Teaching General Chemistry  
Darrell D. Ebbing, Wayne State University, Detroit, MI 48202
- 2:40 Reaction to Professor Brady's presentation  
(To be announced)
- 2:50 Discussion
- 3:00 Break
- 3:30 A Philosophy for Teaching General Chemistry  
Steven S. Zumdahl, University of Illinois at Urbana-Champaign, Urbana, IL 61801
- 4:00 Interfacing General Chemistry and Organic Chemistry  
Seyhan Ege, University of Michigan, Ann Arbor, MI 48109
- 4:30 Reaction to Professor Zumdahl's presentation  
Duane Sells, William Rainey Harper College, Palatine, IL 60067
- 4:35 Reaction to Professor Ege's presentation  
(To be announced)
- 4:40 Discussion



91st Two Year College Chemistry Conference Program (Preliminary)

5:30 - 7:45 SOCIAL EVENTS (A BUILDING, MAIN FLOOR)  
(Katherine Weissman, C. S. Mott Community College, Flint,  
MI 48503, presiding)

Social Hour

Banquet at the College

25th Anniversary Recognitions

8:00 - 9:00 THIRD GENERAL SESSION (E BUILDING, ROOM 106)  
Cecil Hammonds, Penn Valley Community College, Kansas  
City, MO 64111, presiding

8:00 The Early Days of the Two Year College Chemistry  
Conferences, William T. Mooney, Jr.

8:15 The Next 25 Years in Chemistry and Chemical Education  
Mary Good, President, Signal Research Corp;  
President-elect, American Chemical Society

8:45 Discussion

SATURDAY, APRIL 25, 1986

8:30 - 1:00 Registration, Exhibits, Coffee, Rolls (A Building, Main  
Floor)

9:00 - 4:30 MICROCOMPUTER WORKSHOP: The Software Jungle (D Building  
Room 131)  
M. Lynn James, University of Northern Colorado, Greeley,  
CO 80631

Limited to 30 participants, \$10.00 fee. This will be  
hands on exercises oriented to using and evaluating  
samples of both chemistry (tutorials, simulations, etc.)  
and to applications (word processing, spreadsheet, etc.)  
software of interest to Chemistry Faculty. Some hardware  
and programming considerations will be covered. No  
programming experience assumed.

91st Two Year College Chemistry Conference Program (Preliminary)

9:00 - 10:30 FOURTH GENERAL SESSION (E BUILDING, ROOM 106)

KEYNOTE SPEECHES FOR THE DISCUSSION GROUPS

- 9:00 Introduction to the Saturday Program and Announcements  
(To be announced)
- 9:10 Philosophy of Teaching a Preparatory Course  
Ed I. Peters, West Valley College, Saratoga, CA 95070
- 9:30 Philosophy of Teaching the Allied Health Chemistry Course  
John R. Holum, Augsburg College, Minneapolis, MN 55454
- 9:50 CHEMCOM - Chemistry in the Community: A New Program for  
Non-Science and Non-Technology Students  
W. Thomas Lippincott, Institute for Chemical Education,  
University of Wisconsin, Madison, WI 53706
- 10:10 How Two Year College Chemistry Faculty Can Help  
Elementary School Science Teachers  
Alice Moses, Leadership Activities for Pre-College  
Teachers Program, National Science Foundation, Washington,  
D. C. 20050  
(Past President, National Science Teachers Association)

10:30 - 11:00 Break

11:00 - 12:00 DISCUSSION GROUPS (Rooms to be announced)

The keynote speakers will be present in each of the discussion groups to extend their remarks from the earlier session and to answer questions as well as discuss areas of mutual interest with the attendees.

GROUP 1 THE PREPARATORY COURSE

Paul J. Santiago, Hartford Junior College,  
Bel Air, MD 21014, presiding

GROUP 2 THE ALLIED HEALTH COURSE

Ethelreda Laughlin, Cuyahoga Community College  
Western Campus, Parma, OH 44130, presiding

91st Two Year College Chemistry Conference Program (Preliminary)

- GROUP 3 CHEMCOM & THE NON-SCIENCE MAJORS COURSE  
Jay Bardole, Vincennes University Junior  
College, Vincennes, IN 47591, presiding
- GROUP 4 COMMUNITY COLLEGE CHEMISTRY FACULTY AND THE  
ELEMENTARY SCHOOL FACULTY  
(To be announced)
- GROUP 5 CHEMICAL LABORATORY TECHNOLOGY PROGRAMS  
Donna Friedman, St. Louis Community College at  
Florissant Valley, St. Louis, MO 63135, presiding

Discussion of various aspects of chemical  
technology of interest to the attendees

12:00 - 1:00 LUNCH

1:00 - 3:00 SIMULTANEOUS SESSIONS (Rooms to be Announced)

SESSION A - ISSUES IN TWO YEAR COLLEGE CHEMISTRY: REPORT  
OF THE ACS INVITATIONAL EDUCATION CONFERENCE  
AND THE GUIDELINES FOR TWO YEAR COLLEGE  
CHEMISTRY PROJECT

Panel Presentation of Recommendations from the  
ACS Invitational Education Conference on  
Critical Issues in Two Year College Chemistry  
(Panel members to be announced)

Reaction to Panel Presentation  
(Reactors to be announced)

Discussion

SESSION B - CHEMCOM LABORATORY WORKSHOP  
W. Thomas Lippincott, presiding  
(CHEMCOM teachers and staff to be announced)

SESSION C - ADVANCED PLACEMENT CHEMISTRY FOR THE HIGH  
SCHOOL STUDENT  
Sotor Kokalis, William Rainey Harper College,  
Palatine, IL 60067, presiding

## Why Don't I Teach in a "Good" School

John Clevenger

Truckee Meadows Community College, Reno, NV 89512

This is my 14th year of teaching in two community colleges. The first was in rural Virginia with about 1200 students. The present one is in Nevada; it has almost 9000 students and is still growing. Although very different in size and location, these schools have much in common with each other and all community colleges.

As I've talked with other community college faculty, it has become apparent that we share many things. We share enjoyments and frustrations and a strong belief in the value of what we do; but we often feel misunderstood. I'd like to describe why I've chosen this particular career, why it is the most exciting work I can imagine, and why I believe community colleges are the true vanguard of higher education.

I didn't get a PhD in chemistry so that I could teach in a community college; I wasn't that far-sighted. I got my degree because doing chemistry was about the most fun I could have—at least in public. My first job was in industry because I thought I might do interesting work and earn a reasonable amount of money. Both of these assumptions were true, but I rapidly decided industry wasn't for me, partly because of regulations denying us such things as sharp-pointed scissors "because we might hurt ourselves". In my present job, chemistry is still fun and my work is amazingly interesting, but I have trouble earning a "reasonable" amount of money. I spend 18 to 20 hours a week in the classroom, 5 to 6 hours with individual students, 20 to 30 hours making and grading tests, homework, labs and quizzes, additional time setting up labs and attending the never-ending committee meetings, and I sometimes wonder if we should be allowed sharp-pointed scissors.

The title of this paper came to me in 1971. I had resigned my industrial job, had decided I wanted to be in higher education, and realized that if I *really* wanted to teach, the place was in community colleges. One of the people I asked to write a letter of recommendation said, "Yes, you'll be a great teacher, but why don't you apply to a 'good' school?" Since that time I've been asked some version of that question at least once each semester. My colleagues report that they've been asked similar questions and students often express the same feelings.

According to a recent ACS survey of two-year colleges (1), 39.6% of chemistry instructors in two-year colleges hold doctorates. In some quarters there has been a reluctance to hire these people. In 1971 the problem was described in *Community College Review* as the "Trojan Horse Phenomenon" (2). More than 10 years later, the argument was still being made (3) that PhD's from traditional disciplines would become

unhappy and frustrated in community colleges and try to bring about changes harmful to the two-year school. Questions such as "With your background, will you be happy here?" or "Are you just using this as a stepping-stone to another college or a university?" seem to reflect not only an effort to get excellent instructors but a feeling of being an inferior institution.

Reflecting upon my own choices and career in this context, there are several points I would like to make.

- 1) The community college and its students are unique.
- 2) Teaching in such a school has benefits that should be sought by many (including PhD's) and acknowledged by all.
- 3) The outstanding faculty member in the community college has qualities that should be sought by *all* educational institutions.
- 4) That perhaps instead of "stepping up" from a community college to a university, a natural progression in a talented teacher's career might be the reverse.

Let's consider the first point: why is a community college unique?

It accepts students without regard to academic rank in high school or test scores.

It adapts and adjusts its programs to community needs.

It is comprehensive, maintaining a wide range of programs to meet diverse community needs.

It provides a lifelong learning experience for all, from post high school age to the elderly.

A recent essay contrasting a university and a community college likened a university to a beautiful Ming vase and a community college to a well-designed kitchen utensil. The "typical" community college students are older, working, goal-oriented, and are upgrading or changing skills. They often lack the background necessary for college work as well as confidence in their ability to learn. In many cases they're the first of their family to go past high school. The "typical" community college student is about as atypical as you can get. These students *are* able to relate what they are studying to other experiences or jobs. They often interact with their teachers not only as students but as friends. When they see evidence that they can achieve at a high level, their subsequent achievement and self-confidence increase dramatically.

Regarding my second point, what are the benefits that should attract a talented teacher? The community college and its students offer an almost endless challenge. As I read recently, "Open almost any door . . . a door to an industry, a business, a school, a government agency, a home . . . and you

Excerpted from a talk given at the Eighth Biennial Conference on Chemical Education, 2YC<sub>3</sub> Symposium: "Teaching Chemistry in Two-Year Colleges: Is It Unique?", Storrs, CT, August, 1984.

will find a need for further education and training. It is at community colleges that the most advanced teaching strategies are implemented, not just investigated and compared" (5). I wanted the challenge of conveying some of the usefulness, beauty, and wonder of chemistry to students with widely different motivations and abilities. To do this has taken an appreciation of diverse and changing educational goals, use of a great deal of curricular variety and innovation, skill in guidance, tact, and patience.

My third point is that an outstanding faculty member in such a school has unique qualities. Let's consider some of these. Part of the joy I get every day comes not from coping with content, but *how to get it across*. "Too many college and university teachers confuse talking with teaching" (6). In a community college chemistry classroom, you simply cannot do that. We must avoid the old definition of professor: "Professors are people who talk in other people's sleep" (6).

Another question I'm often asked is about research. Do I do any? If not, do I miss it? How can I stay "current" without it? A recent article stated (6),

Research and knowledge of the state of one's art alone has no direct relationship to good teaching. The two must be tied together by scholarship. The good teacher is able to translate those voluminous truths he has gleaned by remaining current. In every sense, the good teacher is engaged in "scholarship" as described by W. H. Cowley of Stanford University: "Scholarship is the organization, criticism, and interpretation of facts and thoughts about facts." Almost anyone can learn to teach, but to do it exceptionally well, one must also be a scholar.

This is as true in a community college as it is in any other educational institution. We all must be scholars. Good teachers make it a point to be current.

My fourth point gets to the core of why I enjoy teaching at

a community college. To convey current knowledge to a well-prepared student is relatively easy, but to teach successfully the same concept to a student with perhaps limited background is a real joy. Such challenges make it possible to think of community colleges as the elite schools that would attract a master teacher and a scholar—places to strive for in your career development.

To return to the title of this paper, the question really has two parts: First, why do I teach? I teach because I enjoy it. It's hard work, but there's sheer pleasure in teaching people things they didn't know or couldn't do before they came to my course. And I always learn something from each new class.

Do I teach in a "good" school? If you mean do we have high entrance requirements and accept only those students who are better prepared, who have more money and less pressure from family life and a job, who've already shown that they learn well, the answer is no. If you mean do we have a stimulating, creative environment where flexibility and responsiveness to innovations and the needs of the students are possible, a place where beginning students who *really* need and actively seek your help come to improve themselves, where interaction on an individual basis is possible, and where students who may lack background and confidence can, with good teaching, succeed sometimes beyond even *your* wildest dreams, a place where your best talents are really needed, the answer is definitely *yes*.

#### Literature cited

- (1) Scheinman, L. *2YC Distillate* 1983, 1 (Summer/Fall), 1.
- (2) Burnett, C. W. "The Trojan Horse Phenomenon"; in *The Two-Year Institution in American Higher Education*; Burnett, Collins W. Ed.; College of Education, University of Kentucky: Lexington, KY, 1971; 7-12.
- (3) Burnett, C. W. *Community Coll. Rev.* 1982, 10 (1), 18.
- (4) Gollattscheck, J. F. *Linkages* 1983/1984, 6 (6), 2.
- (5) Pekara, G. C. *Community Junior Coll. J.* 1984, (Feb.), 51.
- (6) Conger, G. R. *Community Junior Coll. J.* 1983/1984, (Dec./Jan.), 22.

### Journal Offprints Available

Offprints of special series of articles published in the JOURNAL OF CHEMICAL EDUCATION are available. These offprints are useful as resources for personal and classroom use; classroom quantities (10 or more of a particular offprint) may be purchased at a 20% discount from the single copy price. In order to keep processing costs at a minimum, full payment must accompany all orders. Indicate number of copies, identify offprint by full title, and send with check or money order to: Subscription and Book Order Department, Journal of Chemical Education, 20th and Northampton Streets, Easton, PA 18042. Foreign remittances must be made by international money order, bank draft payable at a U.S. bank, or UNESCO coupons.

	U.S.	Foreign
<i>State-of-the Art Symposia</i>		
Solid State (62 pages)	\$5.90	\$6.40
Radiation Chemistry (96 pages)	6.90	7.40
Lasers from the Ground Up (64 pages)	5.90	6.40
Counting Molecules—Approaching the Limits of Chemical Analysis (46 pages)	5.50	5.90
Electrochemistry (84 pages)	6.90	7.40
Inorganic Photochemistry (106 pages)	7.90	8.40
Chemistry of the Food Cycle (100 pages)	7.90	8.40
Bioinorganic Chemistry (86 pages)	8.70	9.20
<i>Other Special Issues</i>		
Chemistry of Art (28 pages)	3.90	4.40
Chemistry of Art—A Sequel (44 pages)	5.50	5.90

Please Pre-Register

HARPER COLLEGE  
2YC<sub>3</sub> 91st CONFERENCE  
April 25 & 26, 1986

In order to ensure the success of the program and events we are planning, it is urgently requested that you pre-register. Duplicate for multiple registrants.

Date \_\_\_\_\_

CONFERENCE PRE-REGISTRATION FORM

Name \_\_\_\_\_ School \_\_\_\_\_

School Address \_\_\_\_\_  
Street City State Zip

1986 MEMBERSHIP

\_\_\_\_\_ 2YC<sub>3</sub>    \_\_\_\_\_ C<sub>3</sub>    \_\_\_\_\_ H.S. Teacher

\_\_\_\_\_ ACS    \_\_\_\_\_ DIVCHED

\*Registration Fee \$6.00 \$ \_\_\_\_\_

Friday Evening Banquet  
Reservation(s) @ \$10.00 ea \$ \_\_\_\_\_

TOTAL \$ \_\_\_\_\_

\*Purchases a membership in 2YC<sub>3</sub> (not required of current paid-up members)

Please make checks payable to  
HARPER COLLEGE  
and mail as soon as possible to:



Joseph Bauer  
Department of Chemistry  
W. R. Harper College  
Algonquin & Roselle Roads  
Palatine, IL 60067

**The 91st  
Two-Year College  
Chemistry Conference**

---

**YESTERDAY, TODAY AND  
TOMORROW**



**25th Anniversary Meeting  
April 25-26, 1986**

---

**WILLIAM RAINEY HARPER COLLEGE  
PALATINE, IL 60067**