decided that some courses have some 'college-level' substance, and for those we would allow partial credit.

In so many ways, though, the problem is a red herring. People keep screaming 'academic excellence' and 'college-level' as if those terms really meant something. In this business there are no absolutes.

Arthur Waldhorn (professor of English). We knew open admissions was coming. Many of us faced the decision years ago, and we had the chance to leave. When the crunch came, however, it was violent—more violent than we expected.

The problem is how to deal with the psychic needs of the students and maintain intellectual standards at the same time, and the answer is remediation. We've also got to struggle to continue attracting topflight students.

We have a 5-year crisis time in which to do battle with realities, and right now we're in a very depressing period, but I'm compelled to make myself take a long-range optimistic viewpoint. If you are old enough, you can look forward to retirement, but not everyone can do that, so it's a struggle.

I'm teaching a remedial course and

it's tough. I don't feel I've had results that are commensurate with the effort I've put in. Each of us has had an experience with inverted racism, where we are accused of failing a student because of race, and that, too, is depressing.

Just because we've said yes, we'll do the job, doesn't mean we have to sing a hallelujah chorus. Even if a faculty member lacks a social worker's commitment to change society, he should have an intellectual commitment.

Of course, we'd rather be our intellectual selves—as hollow as that might be (I prefer Bach to Offenbach)—but we have a job to do. Open admissions has a chance to work, and we have no choice but to give it that chance. The only other alternative is socioeconomic genocide.

* * * *

The responses vary, but seldom do they lack emotion. As for the future, CCNY's financial picture is unlikely to improve under the same Republican state legislature and state governor who cut back funds last year—particularly in the midst of a much-publicized, severe financial crunch for both the state and the city. Nor is the distribution of students among the CUNY campuses

likely to be altered soon by the Board of Higher Education, as many in the faculty and administration at CCNY wish. Seymour C. Hyman, deputy chancellor of CUNY, told *Science*, "If City College thinks they're overburdened, that's their perception." Hyman did indicate that the Board of Higher Education is "studying and restudying various allocation schemes." But most observers see little chance for substantive changes in the near future.

Yet even as things now stand, it is clear that at City College some students who would have had no opportunity 2 years ago are successfully obtaining a higher education, and that "quality education" is still available, as it always has been at City, for those who seek it. And despite all the attendant problems, it would seem that the future of American higher education is being hammered out less at some secluded, innovative, liberal arts college in the New England countryside than at old City College at 137th Street.—ROBERT J. BAZELL

Robert Bazell, a member of the news department who has been based in New York City, has left Science to join the New York Post.

AAAS Meeting: Pro Forma Protest and Constitutional Reform

Philadelphia is the home of constitutional change, and the AAAS at its meeting there last week took a major step toward democratizing its own rules of governance. The atmosphere of the City of Brotherly Love, however, seemed to have no particular effect on the tumult and shouting that have been a feature of AAAS meetings in recent years.

Press attention centered on two incidents created by activists, one involving Senator Hubert Humphrey and the other William P. Bundy, who was State Department assistant secretary in charge of East Asian affairs during the escalation of the Vietnam war. At a meeting on Monday, 27 December,

Humphrey was splattered when a thrown tomato scored a near miss, and his address was accompanied by heckling and the sailing of paper airplanes. The second incident occurred at a Thursday morning panel session, "Conflict Situations: Vietnam-Knowledge Gaps," which Bundy joined as a late addition. A wrangle over the agenda of the meeting and accusatory questioning of Bundy finally led the chairman to cut the session short. Despite these wellpublicized outbreaks, observers generally agreed that the level of intensity of the disruptions was lower than in recent years.

The Humphrey incident, however,

moved former White House aide Daniel Patrick Moynihan to cancel a scheduled speech at the meeting and to issue a statement critical both of the activists and of AAAS policies that he said condoned the disruptions. Moynihan, a Labor Department official in the Kennedy and Johnson administrations and until recently a key White House adviser on social policy, has been a AAAS section vice president this year and was recently elected to the AAAS board of directors.

Moynihan's statement went as fol-

As vice president of the American Association for the Advancement of Science, I would like officially and personally to offer my apologies to Senator Hubert H. Humphrey for the way he was treated at yesterday's meeting.

I have decided not to deliver my vicepresidential address scheduled for Wednesday. In circumstances where Hubert Humphrey is not allowed to speak, I chose not to speak.

Clearly the group involved in these now repeated demonstrations is a small minority of the Association membership. Their tactics are not for that reason any less a threat to free enquiry. I have re-

cently been elected to a 4-year term as a member of the board of directors of the Association. I would hope in that period we might address ourselves to the question of how a professional society defends itself against efforts to politicize and thereby destroy it.

In what became a sequence of press conference and counter press conference, a current board member, Barry Commoner, noted that Humphrey had in fact completed his address, and went on to defend the AAAS's general policy of allowing dissenters a hearing. Moynihan thereupon elaborated his remarks to reporters, and then AAAS president Mina Rees and chairman of the board Athelstan Spilhaus followed up by supporting Commoner and the AAAS policy.

The protesters have, in fact, become a familiar, almost institutionalized feature of AAAS meetings. Tables in the main registration area were manned by activists, a room was alloted to them in one of the meeting hotels, and access to a mimeograph machine was thrown in. The "Science for the People" movement, based on the Scientists and Engineers for Social and Political Action (SESPA) group, has been the dominant dissenting organization. Although SESPA makes genuine efforts to avoid distinctions between chiefs and indians, a dozen or so individuals, most of them from Cambridge, Chicago, and New York, are hardy perennials at the AAAS meetings and appear to act as the leading theoreticians and tacticians.

Members of SESPA are mainly graduate-student age or older, and many of them appeared to have gone to Philadelphia this year with the main idea of communicating to their "fellow scientific workers" the view that the present system deprives them of control over their work and lives, whether they be employed in industry, government, or the universities; the AAAS they view as essentially an extension of the system. Intensified U.S. air action over Vietnam during the week of the meeting swung attention back to the war, which has been the chief target of the activists in recent years, and much of their attention was directed to a street vigil and march on Independence Hall on Wednesday in support of a contingent of antiwar Vietnam veterans who were encamped at Valley Forge.

Activist tactics of sending flying squads around to AAAS sessions to enlist volunteers for the vigil and march drew mixed reactions. Interruptions en-

How Soon for Fusion?

In recent congressional hearings on the status and the future of controlled thermonuclear fusion, the Joint Committee on Atomic Energy heard a parade of optimistic scientists urge a rapid boost in funds for fusion research. They told the joint committee that money, not nature, was now the chief restraint on progress toward a practical fusion reactor. And among the scientists, Edward C. Creutz, the National Science Foundation's assistant director for research, advocated an accelerated program that could bring about the advent of electric power from controlled fusion by 1990, 10 years earlier than generally predicted. His eagerness collided with skepticism on the part of Representative Craig Hosmer (D-Calif.), who chided scientists for their proclivity to do what seems possible mainly because it seems possible. This slightly abridged dialogue followed:

HOSMER: I am asking whether it is worth while to make the trip in 20 years rather than in 30 years, considering the fact that we have a long time left after that.

CREUTZ: There are some smart people who want to do it and have ideas about what to do for it.

HOSMER: We have to leave some problems for the yet unborn.

CREUTZ: There may be some left. . . . We can't foresee all the problems of society now.

Hosmer: Doctor, if for some unforeseeable reason it turns out that we don't get [a practical fusion reactor] until the year 2010, is the sky going to fall in? Will everybody freeze? Is the world going to be different?

CREUTZ: I am sure it will be different. And I'm sure it will be a much less interesting place if we have not solved this exciting problem.

Hosmer: Exciting to whom? You will be dead and I will be dead by that time anyway.

CREUTZ: Not only to the scientists is it exciting but you talk to any of your constituents and I think you will find this is an exciting thing, if we can get energy from seawater.

Hosmer: We are not doing this thing for kicks, doctor, Ph.D. kicks or otherwise. This is something we have to evaluate on a scale of necessity to the world [and consider] every single bit of money, every single bit of effort and intelligence that goes into this. . . . Just because it makes people at Princeton and Oak Ridge and Livermore and places like that feel good to work on this thing is no sound reason to work on it at all, or to push it 10 years ahead. . . .

CREUTZ: It's not too bad a reason. . . . If it makes people feel good that is a pretty good reason. If we agree that energy is essential to our kind of civilization, if we agree there are only two major sources of energy—namely, fission and fusion—then fission is coming along quite well and fusion is ready to be pushed, and there are people ready to do it.

HOSMER: . . . Why don't we just have a two-year moratorium on any kind of experimental work at all and make these fellows go to their offices and their slide rules and blackboards and do some thinking about this problem so they are not wasting a lot of time bending tin, when they ought to be deciding what ought to be done before they are out doing it?

CREUTZ: This is not the way science and technology go. . . . During the last world war there was a great deal of theoretical work done in Japan on field theories and nuclear forces and most of it was wrong, not because the people were not extremely brilliant physicists, but because you can't carry out science and technology without experimental programs coupled with it. . . . You can't sit back and only think about nature. You have to get your hand on her, too.

HOSMER: Sometimes it looks like too many fingers in the pie. . . .

gendered sharp hostility in some meetings, while at other sessions they produced recruits and, later, even some bail money.

At the Thursday meeting at which Bundy was scheduled to speak, the activists went furthest in pressing for their version of free speech. They arrived about an hour early and rearranged the chairs in the conventionally set up meeting room into concentric circles. They then insisted that the plan of the meeting be changed so that a representative of the Vietnam veterans be permitted to deliver an opening statement and that Bundy be required to answer a series of prepared questions before he and Leslie Gelb, who had a principal role in the preparation of the Pentagon Papers, make their prepared remarks.

The meeting was delayed by the non-arrival of the veterans' spokesman, and then new ground rules for the meeting were set after a general vote of those attending went heavily in favor of the activists' proposals. Panel chairman Morton H. Halperin of the Brookings Institution said that after about an hour of the Bundy answer and question period the original agenda of the meeting would be resumed and a further question period would follow.

"Considerable Mistakes"

What ensued was a session in a theater-in-the-round atmosphere, with readily identifiable plainclothesmen and hotel security men hovering on the fringes. During the course of the session, Bundy was subjected to heavy and hostile questioning. He did concede that on the "question of candor, very considerable mistakes were made" by the Administration. Discussing the Tonkin Gulf incidents that led directly to the buildup of American forces in Vietnam, Bundy insisted that, in the light of intelligence reports available at the time, "Congress was not in any material respect deceived," though he noted that later evidence raised "doubts."

When Halperin sought to return to the original panel format, he met strong opposition, including an incipient struggle for the microphone, and he ended the session.

One question raised by the session was why it was attended by relatively few people—perhaps 200, averaging the ebb and flow. Allowing for the fact that Thursday was the last day of the meeting and departures had begun, the panel was certainly one of the potentially most interesting. What the activists and AAAS officials might ponder is whether

or not people are simply avoiding sessions where a conflict scenario is predictable.

The AAAS business sessions on the final day of the meeting were devoted mainly to discussion of the draft of a proposed new constitution. The task of fashioning the new document was handled by a joint committee made up of members of the board of directors and of the committee on council affairs and headed by Leonard Rieser of Dartmouth, a member of the board of directors and new president-elect of the AAAS.

The AAAS council approved with few changes the draft for a constitution but deferred action until the next meeting on proposed new bylaws, where most of the more difficult and controversial questions lurk. The committee has been asked to come up with detailed proposals for action at the next council meeting.

The council itself is a major object of the proposed changes. The existing structure and functions of the council and the fact that AAAS officers were not elected directly by the membership have been principal criticisms with which the committee had to deal (see *Science* 30 April, 7 May, and 14 May 1971).

The council, which is the chief policy-making body of the AAAS and now elects its general officers, has a composite membership that reflects the pellmell growth of science and of the AAAS. Voting members of the council include officers of the AAAS and of its disciplinary sections and regional offshoots, as well as representatives of the "affiliated organizations," which have grown to a number exceeding 300. The total number of council members tops 500. Critics have noted that attendance at the single annual meeting of the council is spotty and that affiliated organizations often designate as their representatives members who happen to live in an area where the AAAS annual meeting is being held. In addition, there has always been a question of whether council members should act as instructed delegates of their societies or vote according to their own views.

The new constitution provides for the election of AAAS officers directly by the membership and for a council drastically reduced in size—probably to about 100 members.

It seemed to be generally acknowledged that the main job of the committee was to devise for the council a form which would insure that it would be

representative of the membership and be able to act responsibly on issues confronting the AAAS, particularly on those with public policy implications.

The solution put forward by the Rieser committee, and the major innovative device in the proposals they came up with, was the concept of "electorates." In the words of the draft constitution, "The Association shall be apportioned into no less than five and no more than 10 Electorates for the purpose of electing members of the Council and of the Committee on Nominations."

The committee's basic conception seems to be that the membership will be grouped into electorates for voting purposes and will continue to belong to disciplinary sections for scientific purposes. Sections were thought to be ultimately unsuitable as electoral units because they vary so greatly in size and because many AAAS members belong to more than one section. There also is acknowledged to be great differences in the efficiency with which AAAS sections are run.

Under the proposed bylaws, sections would be grouped into eight electorates, and seats on the council would be allocated on the basis of proportional representation. The committee, however, has been given notice by the council that there is strong sentiment for the sections to be given a bigger electoral role and, at the same time, that ways should be found to make the sections more effective. So it is now up to the committee to further refine its ideas on electorates.

Expeditious Handling

The action on the new constitution, incidentally, provided a model of expeditious, old-style handling of a full agenda, with retiring president Mina Rees proving herself a stylish parliamentarian.

In its only major expression of general political sentiment, the council, in a toned-down motion, asked the board of directors to let the federal government know that the AAAS approved of government action to discontinue herbicide use in Southeast Asia but expressed serious concern about air action in the area. The precise wording was left to the board.

Perhaps it is also worth a footnote that, while the council was discussing changes in the structure and operations of the AAAS, the radicals, who are by definition concerned with getting to the root of things, were not at all in evidence.—John Walsh