



Gradual Change To Lectures Planned

Recitation classes that have been converted into large lecture sections are causing concern among engineering students.

The Alumni Association, at a meeting of the Technology Council, questioned the educational value and effects of these curricular changes on the engineering students.

Assistant Dean White of Curricular Guidance commented that there has been no sudden change toward a large lecture system, but that lecture classes are necessary because of the increasing quantity of students at the College.

In Dean White's department, Civil Engineering, students have a choice between lectures or recitations in such courses as CE110 and CE120. The lecture classes are usually taught by a more experienced man in the department so that the student can receive the "benefit of experience," while in recitation classes students may ask more questions. Surveys of the grade obtained by students in the lecture classes at first were higher than those in the recitation class, but this inequity has evened out through the years.

In Electrical Engineering most courses such as EE 104, 105, 107, 141, 143, 157 combine lectures with one or more recitation classes. According to Professor George Clemens (Chm. Electrical Engineering) lecture classes "benefit the students in the long run, they have less class hours,



Dean White

and instructors have more time to improve professionally."

Professor Henry Updegrove (Chm. Mechanical Engineering) stated that he "would not attempt to make any courses straight lectures." Most courses given by the M.E. department are a combination of lectures and laboratory periods which serve as recitation classes. The same instructor who lectures also answers questions during the laboratories to maintain a continuity of ideas.

Professor Alois Schmidt (Chm. Chemical Engineering) felt that some aspects of Chem. E. could be taught just as well in large lecture classes, even with T.V. monitors. Recent studies by educational institutions, commented Prof. Schmidt, have shown no advantage to either system of instruction. In the Chem. E. department there are no large lecture classes, all having less than forty students, but economy may force these classes to increase in size.

Harvard To Hold Conferences Here

Mr. Woodford L. Flowers, Director of College Relations for the Harvard University Business School, will visit our campus on Tuesday, April 19, 1966 to discuss admissions to their M.B.A. program. He will be interested in speaking to capable Juniors and Seniors enrolled in our various degree areas but, academic standing is not the sole requirement for consideration. Students who have demonstrated evidence of characteristics pointing toward leadership, such as maturity, responsibility, initiative, enthusiasm, creativeness, and integrity are encouraged to apply for admission to the Harvard University Graduate Business School.

Mr. Flowers will conduct a general meeting from 1:00 p.m. to 2:00 p.m. in Shepard Hall, Room 105. Private conferences with interested students will be held in Steinman Hall, Room 114, from 10:00 a.m. to 12:00 Noon and again at the conclusion of the general meeting (2:00 p.m.) Arrangements for these private interviews may be made by contacting Dean White in the Administration Building, Room 208.

Tech Sports To Return

As a result of an editorial in the last issue of TECH NEWS, the Tech Council has decided to revive the Slide Rule League. At the March 10th meeting the Council unanimously passed a resolution that created a committee to institute the now defunct league.

The Slide Rule League, an intramural group composed of the engineering fraternities, existed for a time in the early 1950's. Its principal activities were basketball and bowling tournaments.

Charles Davidson of Eta Kappa Nu was appointed Co-chairman. In the next week he will determine how the members of the various organizations of Tech Council feel about the League, and in what sports events they are interested.

First indications are that the League will meet with great success. A spirit of competition exists among the various enthusiastic groups. Michael Brownstein of the American Society of Civil Engineers openly challenged the other societies to athletic contests.

Tech Council Battles Over Tutoring

Tech Council is in an uproar over a tutorial program for the draft examination. The problem centers on the role which Tech Council can exercise in the program.

Up to the present time, the Council has only served to "coordinate" the tutoring programs already in existence as established by the honor and service societies. The Council can in no way force or initiate any new programs. This position was reaffirmed at the March 11th meeting of the Council.

A resolution presented by Charles Davidson of Eta Kappa Nu was passed unanimously, stating that no honor society would be required to take part in the draft tutoring, although individual members would be encouraged to participate.

Disagreement arose among the members of Tech Council over the misleading and contradictory wording of the motion to adopt this program. The motion stated that the Council would 1) establish a specific group of students to do the tutoring 2) make available the facilities of the previously established tutoring program.

Members of the honor societies stated that they would not be connected with this new program. Some of the reasons given were that honor societies should not participate in any action that would subvert the intentions of the draft board. Other members felt that this new program would interfere with the existing tutoring program. Discussion centered upon the likelihood of a bearded liberal arts student entering the

(Continued on Page 4)

Independent Party Wins All Executive Posts In Election

In Thursday's and Friday's Student Government elections, the Independent Party swept every executive post for which they had a candidate.

Linda Lubar was elected Executive Vice President, succeeding Marty Kaufman who resigned last month.

Joseph Korn, who was endorsed by the Independent Party and Campus First, was named as Educational Affairs Vice President, Herman Berliner's old post.

Ellen Turkish was elected Community Affairs Vice President.

In the only executive post that was contested, Larry Yermack of the Independent Party defeated

Campus First candidate Dena Seiden by a vote of 449 to 337.

For Council Representative '67, Bob Furman (Ind.) defeated Jeff Weinberger (C.F.) and two other non-aligned students, Ben Fogel and Robert Lotus. In the Freshman elections Jeff Zuckerman of Campus First alone withstood the tide by defeating Ron McGuire of the Independent Party and Joseph Costantini, non-aligned.

Larry Yermack stated that the results of the election clearly showed the voters' "disdain for Weitzman." He and Bob Furman said that the Independent Party will attempt to get the Student Government moving again before the May elections, when all the posts will be contested.

Results

Executive Vice President	Linda Lubar (Ind.) Yes 567 No 214
Educational Affairs Vice President	Joseph Korn (Ind. & C.F.) Yes 527 No 183
Community Affairs Vice President	Ellen Turkish Yes 536 No 244
Treasurer	Larry Yermack (Ind.) 449 Dena Seiden (C.F.) 327
Council '69	Jeff Zuckerman (C.F.) 157 Ron McGuire (Ind.) 92 Joseph Costantini (unaligned) 21
Council '67	Bob Furman (Ind.) 157 Jeff Weinberger (C.F.) 68 Ben Fogel (unaligned) 34 Robert Lotus (unaligned) 11

Clarification

The following is a clarification of the curricular changes that appeared in the last issue.

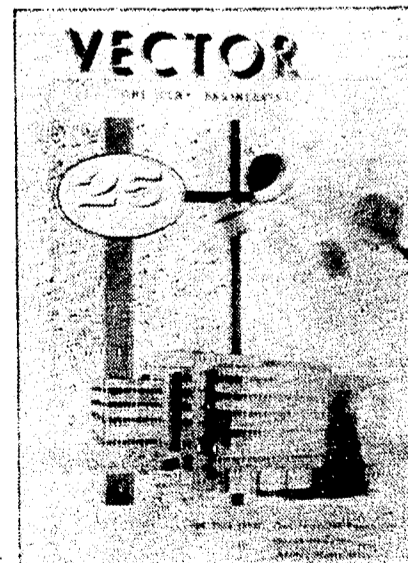
E. 100 cannot be applied to the required 6 credits of liberal arts electives.

Students who have taken Health Ed. 71 in or after their upper soph term can apply these 2 credits toward the liberal arts electives.

Students who have taken Health Ed. 71 before their upper soph term cannot use these credits for the required electives. They will not be charged for the extra 2 credits at graduation.

Arch. 2 and Arch. 3 are new courses which have been added.

Vector Review



25th Anniversary Issue Cover

There are times in the history of any institution when it transcends a state of mere excellence and becomes truly great. The March, 1966 issue, Vector's 30th anniversary issue, reaches that height.

The basic theme of the issue is Science in the Sixties, and the magazine adheres faithfully to it. Its editorials, articles, and features all focus on what has happened in various scientific fields in the past six years, and also considers the relationship between scientist and humanist.

Leading off the issue are three editorials, one by Dean Allan, one by Dr. Hickey, and one by the co-Editors-in-Chief of Vector, Steve Neuman and Al Newman. These three editorials epitomize the underlying theme of the issue: the people-orientated engineer and scientist.

Continuing through the magazine we come to a special pictorial article showing the progress various sciences have made since 1960,

not solved by the scientist and engineer, all the phenomenal achievements of this decade have been accomplished in vain.

The five feature articles, highlighted by color, consider the advances made in the Sixties in various scientific and engineering disciplines, and present in all but one case the applications of these sciences to the everyday world and humanity.

Al Newman's article, "Twentieth Century Building Art," one of two articles on architecture, is concerned with architecture as an art, adapted by the engineer to meet human needs. He points out that the architect fails to meet the human need when he fails to make full use of the new engineering techniques developed in the 1960's, thus obstructing the artistic sensibility found in all men. Mr. Newman is especially critical of the standard type of construction used in the high rise buildings and private homes

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appropriately called "Science in the Sixties." Every scientific endeavor is shown here, from lasers to rockets, and again the basic theme is one of concern for humanity's basic problems. The article states that if basic problems such as famine and disease are



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DuBois Club

The university has always existed in Western society in a free state; that is, whereas other institutions might be silenced, free speech and free ideas would continue to exist and flourish on the university's domain. When this basic tenet of academic freedom has been abrogated, the result has been destruction of that society's basic foundations.

Whether the DuBois Club is or is not subversive is not the question. Many people do not agree with its basic motives or ideas, but on the university grounds, it has the right and privilege to exist and to speak freely. That this college's administration has refused to be stampeded by the placing of DuBois National on the subversive list is a credit to it and the entire school.

However, while many on this campus who consider themselves liberal have defended the right of DuBois Club to speak freely, and have decried the "baiting" of the National DuBois organization, they have either forgotten or have chosen to forget similar "baiting" tactics now being used by various people on such rightwing organizations as the John Birch Society.

The managing board of this newspaper disagrees with both organizations on fundamental policy and methods of achieving these policies, but we feel that college students should uphold the tradition of free Academia, and not support the "baiting" of any organization, be it right, left, up, or down.

Pandora

Observation Post's recent editorial on "Pandora's Chatterbox," the Greek Letter gossip column, is very noteworthy. They said Miss Pat Luchak should exhibit "a little more sensibility," "a little less concern for sensationalism," and "a dose of good taste."

We find this to be much like the pot calling the kettle black.

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Tech Trivia

By JEFF GROSSMAN

No, guess again, this is not TECH NEWS' attempt to take over the venerable game of Trivia (with apologies to Columbia University). And you will not find questions such as "Which City College B. Arch. designed the collapsible towers in 'Zorba the Greek'?" (What you have just read is a figment of your imagination, as I have clearly stated, that you will not see such things in this column.) You will find the most exciting (?) and interesting (?) bits of information in general, not to mention the latest flashes from Tech schools across the country. The latest flashes? (The editors told me not to mention the latest flashes.)

Big Contest

"Holy expletives, Batman; it's just like Tom Swifties." Cal Tech's NEWS is sponsoring a Robinism contest, the winner being the one who "devises the most devious and dastardly Robinism." A Robinism, for those of you who are too busy studying to tune in the boob-tube, is a statement made by Robin, the Boy Wonder, which follows the form, "Holy . . . , Batman; . . ." (For example, "Holy genes, Batman; no wonder he's a mutant.") Some of the contending entries so far are: "Holy perspective, Batman; if we knew his vanishing point, we could converge on him." and, "Holy hollow spheres, Batman; 'E's not inside." (By the way, Robin got an "A" in Physics 8.)

And how many of you celebrated the three billionth rising of the sun last month? The Worcester Poly Institute TECH NEWS reported that a group of Connecticut high school students did just that. They met before dawn at the Hammonasset State Park beach in Madison to pay homage to Old Sol's three billionth anniversary.

I think, (even though the editors don't believe it), that all Tech students should jump on the Stanford University bandwagon and support their SSRF. That's the newly formed "Stanford Sexual Rights Forum." Following in the footsteps of many who died for the cause, the group wants to liberalize campus mores. Last month at registration, they distributed buttons with their motto: "If it moves, fondle it."

New President

On the home front, CUNY can be proud of two new college presidents. On April 24, Joseph P. McMurray will be inaugurated as the fourth president of Queens College. He succeeds Dr. Harold Stoke as head of the Flushing institution. McMurray, who was president of Queensborough Community College from 1959 to 1961, has already done much at Queens. One of his first projects was to ban slacks for girls on campus. This action was greeted by a protest which saw 2000 girls come to school in pants on Thursday and Friday. The boys got into the act by coming in suits and jackets as the opposite extreme in the student government-led demonstration. From this side of the East River, it looks as though it's the girls who are wearing the pants at Queens College.

A little reminder from St. John's DOWNTOWNER, concerning the still continuing water shortage in the city: "Save Water! Take a Bath With a Friend!"

Camp Columbia

Is Camp Columbia really "camp"? Yes, says the Committee
(Continued on Page 3)



TECH LIFE

By LENNY SOLOMON

There has been a trend in recent years towards the expansion of graduate schools. There are many reasons for this but the fundamental reason is that the universities need the money. This might seem a little confusing, because one can ask, how can a university make money, if it spends millions on expansion? It is all really very simple. By spending these millions, top names in the various fields of study are attracted to the institution. These great intellects do research and publish their findings. All of this brings great prestige to the schools. As a school builds up a reputation, it starts to receive grants from both foundations and alumni.

The idea is that the graduate school should subsidize the undergraduate school. The philosophy behind the idea is fine but in practice, there are some very serious faults. They are quite evident when one views the different undergraduate engineering schools around the city. For example, in universities like Columbia and N.Y.U., the undergraduate program has greatly suffered.

The undergraduate schools decay, because the top professors teach in the graduate schools or just do research. The undergraduate teaching load is taken up by graduate school students. An argument can be made that most undergraduate courses do not require doctors to teach them. This may be true for the basic courses, but even in those, if one has a professor who knows what is beyond the elementary, the course is much more interesting. The student realizes that if he has some tough questions to ask, his professor will be able to answer them. This makes the student have the desire to learn and to expand his horizons.

I have brought up this subject because I fear that a situation like the aforementioned can happen here in the school of engineering. Even now, many of the professors are on reduced teaching schedules. I just hope that the administration realizes that a prestige name is no substitute for a quality undergraduate education.

We are now approaching Easter, and the student engineer starts to think of spring, the birds and the bees, and field trips. A.S.M.E. is sponsoring a field trip to Avco, Lycoming Division, in Stratford, Connecticut, on Monday, April 4th. The A.S.M.E. plant is always the high spot on the social calendar for mechanical engineers. It affords him the opportunity of arising at six in the morning, and dragging himself to school, so that he can be on time to board the bus at eight o'clock. Once on board, fifty students learn the true feeling of togetherness aboard their specially equipped Volkswagen bus.

In all seriousness, these plant trips are very useful. One learns about the physical set-up of these companies and this greatly helps to bridge the gap between school and industry.

A.S.C.E. decided to think big and will therefore sponsor a three-day field trip to Niagara Falls on April 5th, 6th, and 7th. The purpose of the trip is to view the Niagara Falls Power Project, but the general feeling is that some time will be found for sightseeing. Let us just hope that the members of A.S.C.E. were far-sighted enough to arrange this. Something tells me I think they were.

On Friday evening, April 1st, at 8:00 P.M., A.I.Ch.E. will hold its Spring smoker, and all interested parties are urged to attend.

On April 14th in T 123, from 12:00 to 2:00, A.S.C.E. will continue its tradition of having non-controversial guest lecturers, at which time Commissioner of Traffic, Henry Barnes will speak on, well you know. I'm sure it will be both interesting and enlightening, so I urge everyone to attend. If there is a question and answer period at the conclusion of the talk, will someone please ask the commissioner what he thinks of Moses and other biblical characters. I hear that is one of his favorite subjects.

I.E.E.E. has announced that on March 24, at 12:15 P.M., in room T 123, a Dr. Seely will lecture on the Krom Universal Machine. All of you out there interested in the Krom Universal Machine are invited to attend.

THE VIETNAM WAR

Speakers:

M. S. ARNONI — MARVIN GETTLEMAN — WILLIAM HALL
JOSEPH JOHNSON — FELIX MCGOWAN
Finley Grand Ballroom — Thursday, March 24, 12-2

Yes, Virginia, There Are Girl Engineers

By RACHEL OSTROWITZ

When Mr. Jones entered the architect's office he did not expect to see a young lady sitting behind the drafting table. Mr. Jones, like many Americans and many students at C.C.N.Y., was confused.

It would be peculiar to see a woman driving a truck or helping in the construction of a building. Any thought, should it be astonishing to see a woman designing a house or doing research on laser beams?

The Engineering and Architecture careers are not physically taxing, so even the "weak sex" can handle them if they have the technical skill. An engineer sees situations not so much as they are but as they could be. His thoughts are valuable instruments of action. Architecture is more than a profession — it is a way of life; it is designing for the world we live in.

The girls in the school of Engineering and Architecture have different reasons for belonging to it, but they all agree that a woman does have a place in the school and profession and can definitely succeed. Lynn Cohen, a senior architect, wants to study City Planning because she feels that buildings have to relate to one another and to have something in common in order to make a city unique. Lynn did not know much about Architecture when she entered City College, but the more she learned the more she enjoyed it. "It is difficult when you have to stay in school Saturday nights to work on a design but there is satisfaction at the end," Judith Einhorn likes Chemistry. "There is nothing in Chemical Engineering that would make girls shy away from it," she says. Margaret Cohen likes Architecture because it is so creative. It is a combination of sciences and art.

Carol Allen was born into a family of architects. Ever since she can remember she designed houses. The boys kid Christine Rothermund, a Civil Engineering major, that the only reason she studies it is to wear a helmet and give orders to the construction workers. The truth is she wants to take over her father's company. Her job is assured already.

One "problem" girls encounter is being a minority in a class full of boys. Patty Leiman, who majors in Mechanical Engineering, says the boys enjoy having girls in their classes. "It's cool," she states. Although girls are in constant competition with boys, Patty feels that getting a job is no problem because the need for Engineers is so great. Prejudices against women should not exist, says Helen Kontogianis, a senior with the highest index in the school of Architecture. In Greece, where Helen was born, many women undertake careers in Engineering and have equal opportunities as men.

Because Engineering is difficult it seems that girls would not find time for extra-curricular activities. Cathy Colonnese, an Electrical Engineer, can prove this notion is wrong. Although she is carrying 20.5 credits she still can find time for speed and roller skating, basketball playing with the college team, swimming, and many other activities. Cathy has won many trophies in athletic competition. She is a meticulous person and chose E.E. for its exactness. E.E. is a challenge to her



Girl engineers Carole Allen and Margaret Cohen.

just as trying to win a race is a challenge.

Do girls in E&A lose their femininity? Linda Curtone, a Civil Engineer, still maintains cooking as one of her hobbies, while handling a T-square with the same facility.

We hope that now when Mr. Jones enters a woman architect's office he won't have such an astonished expression on his face.

Tech Trivia . . .

(Continued from Page 2)

on Educational Policy at Columbia University. Attendance at the Camp is compulsory for the degree in the School of Engineering. All Columbia Tech students must spend five to six weeks at the Camp during the summer between their sophomore and junior years. Dean Wesley Hennessy announced that the Committee is in favor of discontinuing the Camp, and this position was backed up in an editorial in PULSE, the Tech paper at Columbia. It was pointed out that although the Camp is an "interesting and picturesque institution" which holds "pleasant and nostalgic memories for many students who have camped there," its objectives are obtained at the expense of other experiences possibly of more value to the student. This, of course, refers to summer employment and other student activities.

But whichever way the Committee decides, we must always ask, "Is Pat Luchak going with Josh Mills?"



"How do I love thee? Let me count the ways . . . !"

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Evening Session

ChE Non-Existent

There has been much concern generated by the cancellation this term of the four Chemical Engineering courses offered by the undergraduate School of General Studies (evening session), due to insufficient enrollment. In fact this term no one registered for these classes: Chem. E. 128, 161, 129, and 141.

Mrs. O'Brien, of the evening session registrars office, believes that this situation bears no relation to the general slackening in the last two terms, of evening school registrants. With rare exceptions, these engineering classes have always been cancelled. Last term fewer than five students had enrolled in them. Mrs. O'Brien suggested that "Chemical Engineering has always been a 'day session program,' and that since the entire sequences has never been available in the evening, students were deterred from taking the few courses that are offered. In addition, non-matriculated evening division students who need the Chem. E. courses are usually given permission to take them in the day session.

Relative to the general decrease in attendance of the evening session, Mrs. O'Brien advanced the following probable reasons. First, the recent advent of tuition free community colleges has given these institutions, besides a fiscal attraction, greater prestige. They offer more courses and convenient day programming. They also offer pre-engineering courses and students with the necessary indexes are admitted to the City College day session upon receiving their two year degree.

Entrance requirements for the C.C.N.Y. evening division have also been made more stringent. New students must now have the same high school average as those applying for the Community Colleges, and the records of transferees are more closely examined.

Perhaps the main reason for waning registration is the increased draft call. Those who feel, as non-matriculants, that induction is imminent, will not bother to register for classes, preferring to enlist, or work and wait. This incidentally seems to have been the experience of all the C.U.N.Y. evening divisions over the last two terms.

Paradoxically, this same draft situation is resulting in a greater registration by the fewer students, who are attempting to secure the minimal twelve credits required for deferred classifications. This accounts for the very few course cancellations over-all.

Intimate Theatre

The Intimate Theatre of the Speech Department will present two One Act Plays during the week of March 21. They are "The Stronger" by August Strindberg and "A Marriage Has Been Arranged" by Alfred Sutro. Appearing in the two plays are Sheri Altman, Liz Guerdan and Ken Aaron.

A limited number of free tickets are available in Shep 219A for the performances which will be held in Shep. 218. The performances will be Tuesday, March 22 at 6 and 7 PM; Wednesday, March 23 at 5 PM; Thursday, March 24 at 9 AM; Thursday, March 24 at 12:30 PM.

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## Vector Review...

(Continued from Page 1)

found in urban and suburban centers, and praises the unusual building.

"Maintaining the Food Balance," by Dave Zinamon, is particularly interested with the greatest problem facing all mankind: overpopulation. Mr. Zinamon stresses the need for the scientist's and engineer's knowledge to help solve this problem created in a large way by modern science. Especially pertinent to all New Yorkers are his points about the lack of water in the world, and the various methods used by engineers to help solve this problem.

The second article on architecture is Bob Hong's "Campus Planning." Again, the major point of the article is one of disciplining scientific and engineering thought into channels helpful to general humanity. Mr. Hong shows how poor campus planning weakens the university, and to some extent the educational process itself, while well planned campuses strengthen the school.

The last of the articles is Steve Neuman's "Microelectronics." Mr. Neuman first explains the newest advances in the field, and then goes into the various applications of these tiny instruments. Although somewhat technical in nature, the article is easily understandable, even to the Liberal Arts student, and concludes with the statement that these instruments will have a major effect on the world of the future.

In this issue a new feature is being introduced to the Vector reader. A book review section, under the title "Vector Reviews," presents in its initial outing a happy mixture of the strictly technical tome and the humanistic-engineer volume. The reviews are excellent and one can only hope they will continue to be so in future issues.

The issue closes with some cartoons and the usual Vector features, with a new twist in the Vector Volts.

Altogether the finest issue ever produced by the Vector staff.

## Registration To Be Computerized?

The Technology Council has created a committee to collect information on the current proposals to automate the procedures connected with registration.

The committee was formed at the suggestion of Ken Flaxman, Recording Secretary of the Technology Council. "I don't like running from desk to desk, waiting on line, and risking being closed out of a needed section," he said. The committee was originally envisioned for the purpose of making a study of the registration procedure at the College, and comparing it with the procedures of other schools of comparable size. Mike Gershman, Corresponding Secretary of Technology Council, suggested that the committee also act as a watchdog on registration changes — that is, the committee should be aware of changes in registration, and evaluate their impact. For example, with greater use of the Computation Center it will be possible to check each course for which a

student has registered, in order to ascertain the fulfillment of prerequisites. According to College's regulations, a student may be dropped from a course for which he has not completed the prerequisites. Currently, checking of records is too complex a chore to be done by humans, use of the Computational Center will make it a simple task.

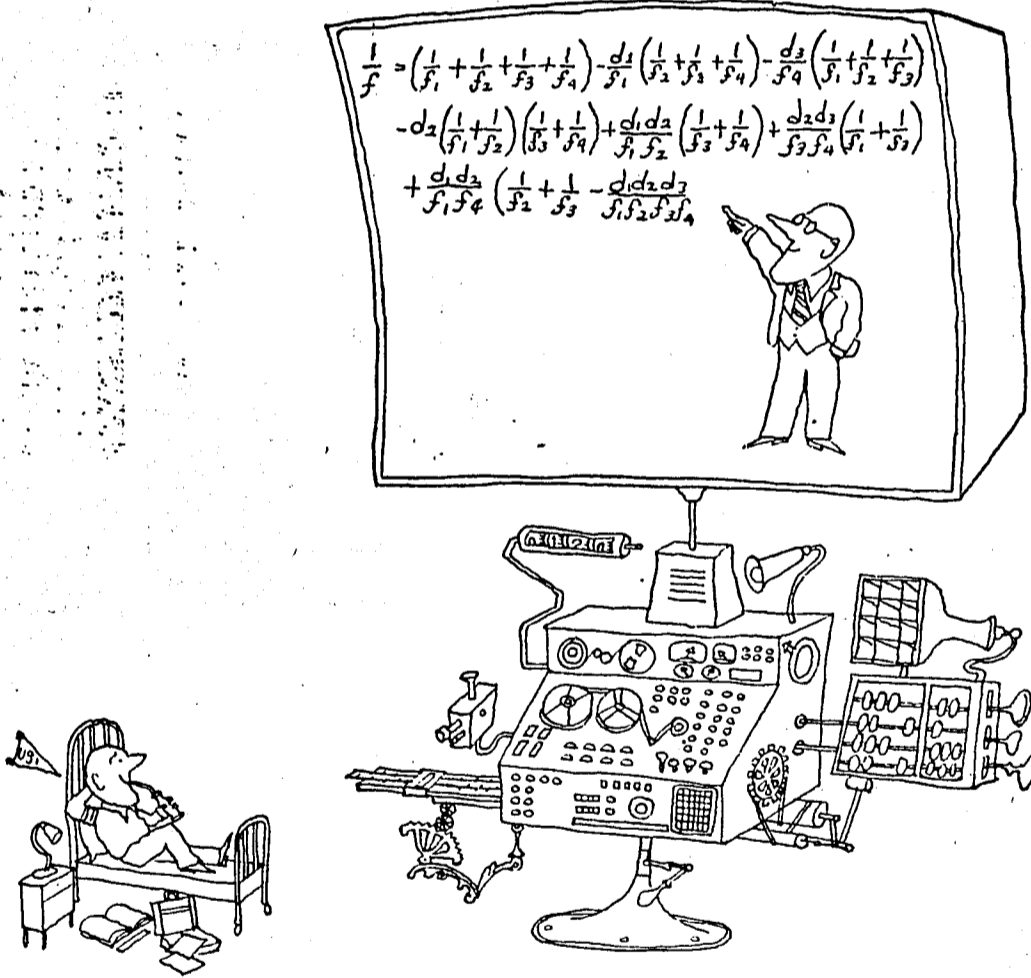
The committee, consisting of Flaxman and Gershman, is presently collecting the information and expects to report back to Technology Council by the end of April.

## Tutoring...

(Continued from Page 1) room for tutoring. "We would kick him out of the room" was the answer of one of the participating honor societies.

Debate was finally ended when the resolution was passed not to involve the honor societies in draft tutoring.

At present there are twenty-eight volunteers that have been recruited on an individual basis for the tutoring.



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Right now, many students can dial from their dormitories to a language lab. Soon a student will be able to dial into a computer thousands of miles away to get information for his courses.

Depending on the nature of the information, he might get his answer back audibly, printed on a teletypewriter, as a video image, or a facsimile print.

Some of these services are available now. Others are being tested.

For the next week or so, better get a move on.

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