OCTOBER SENATE MEETING

Joe Glaser

After some discussion of last month’s minutes (the Academic Affairs report was somehow omitted, while Ed Dorman’s remarks on the Newsletter appeared under "Academic Affairs"), Alan Yungbluth rose to report that Patricia Pearson and Sylvia Pulliam had been elected new senators from Ogden and Ruth Meridith likewise from Education.

Faculty Status and Welfare

Bart White called Art Shindhelm to the podium to explain the committee’s notably efficient production of this year’s Faculty Salary Survey (now in the hands of all departmental and at-large senators). Art noted that the format is largely carried over from previous years’ reports and that Barry Brunsen, the previous years’ reporter, had helped him substantially in compiling this one. Art cautioned readers to recognize that some contract salaries are for twelve months and had to be factored down to obtain nine-month equivalents. He also asked anyone who spots an error to let him know (5141).

Next, Bart returned to point out that President Meridith has already accepted last month’s recommendation from the Senate that a member of the Status and Welfare Committee be named to the University Insurance Committee and that a system of open meetings be instituted to keep faculty abreast of insurance changes. Our new insurance representative will be Gene Gallegos, who has had experience dealing with group insurance issues in Denver.

Bart and his committee plan to find out why the recent premium hike was necessary and what can still be done. In particular, they will look into the possibility of a cafeteria plan, under which individuals could opt out of coverage they do not want.

If you have comments on these matters, contact Bart or another member of Status and Welfare. The committee would also like to hear from you concerning sick leave policy and other benefits issues. Moreover, for another report they are planning, they want hard data on faculty who have left Western because they were dissatisfied with salaries, benefits, or working conditions here. If you have such data, please pass it on to them.

Bart closed on a foreboding note. Jim Tomes recently informed Fred Murphy that the 5% raises we were expecting on the basis of the current biennial budget are very likely to be zapped by another health care insurance adjustment. When we see those raises in 1989-90, they are likely to total only 2% to 3%.

Professional Responsibilities and Concerns

Jim Wesolowski (5882) said his door is open. Anyone with a professional
Concern or something to contribute toward PRC's current agenda should contact Jim or one of his colleagues on the committee. They're planning to discuss the Purdue student evaluation of faculty, Western's use of part-time faculty, and the status of the Harrison ad hoc committee's now grizzled report on elected and appointed department heads.

Presidential Remarks

President Meridith, due to appear in Franklin at 4:15, stood up to address the senate at this point. He has put 2300 miles on his odometer in the last month meeting local groups to publicize Western's non-athletic strengths. This hectic schedule will continue for at least a while. In the meantime, Meridith had several points to make and situations to report on to the senate.

1) He will maintain contact with the senate through Fred Murphy and the Executive Committee but prefers not to attend all senate meetings. Under the presidential eye, senators might not speak as freely as they should, cramping their deliberations.

2) He will find out what's affecting our insurance rates and see to it we get the best plan we can for our money.

3) His administration will emphasize fiscal responsibility. A review is now underway to determine whether the current distribution of funds is appropriate and discuss possible adjustments. Raises are still the first priority.

4) He has received a report on last year's journalism flap but has not yet acted on it. Eventually the report and the administration's reactions will be made public, but this is not a pressing priority with the president just now. He has also met with local and Louisville journalists and established what he considers a working relationship with the area press.

5) Western's internal NCAA investigation continues and will be reported out in due season.

6) He has not had a chance to fill himself in on the background to the Heads/Chairs issue and so has nothing to say on the matter now. It may be a while before he is girded to enter the fray, but the topic will not be neglected.

7) Western is once more in a "planning mode." Executive officers and Meridith are working toward setting the direction for institutional planning. Part of this effort will be to update the 20-year-old campus masterplan in an effort to make the campus more efficient and somehow improve its physical visibility and coherence.

8) Western needs a new dorm or two. We held down our enrollment somewhat this semester because there was not room on campus for all the students who wanted to come. And we need to prepare now for a large increase in 18-year-olds to be expected around 1993. We also need the proposed health and activities center, which will bring yet more students in and function for the faculty like a "health club on campus." From this facility will flow more benefits than we imagine.
9) We'll work on recruitment and retention, partly through our own community college(s) and partly by becoming more attractive to junior transfers from other community colleges. To this end we will establish "2+2 programs" with area jucoos, guaranteeing that certain courses and sequences will be accepted at Western and blend seamlessly into degree programs here.

10) We're not doing very well at academic advising and our failures here have compromised our caring reputation.

11) Faculty senators must represent their areas. Across the country, faculty senates are regarded as outside the mainstream of faculty opinion. Senators and their constituents must combat this perception by consulting freely with one another and making sure everyone is heard.

By the time these comments were ended it was already apparent that the rotarians of Franklin would have to wait for the president, but he paused briefly anyway for questions from the floor. The first concerned building priorities, which Meridith listed in this order: 1) renovating of dorms, some of which have furniture dating back to the 40's; 2) a new 300-bed dorm to ease the current housing crunch; 3) the student health and activities center. Western already has bonding authority for the first two projects, and the state will pay for 96% of the third if the university produces the remaining money up front.

Jim Brown asked about fix-up projects on campus. Things, says Jim, are falling apart. Meridith replied that no money is available for additional maintenance, although he freely acknowledged that some was needed. This is an area, he thought, for private money, which we should be able to raise, given time.

Dorsey Grice was concerned about his and his colleague's respiratory systems, which it seems are daily ravaged by air-borne spores wafting through the corroded air conditioning system and corridors of leaky Tate Page Hall. Tate Page, Meridith conceded, was "mostly a disaster when it comes to construction," but he didn't have all the facts. The university will fix what's wrong down there, and without waiting on private contributions, but cannot start until both problems and costs are more clearly identified.

Georg Bluhm put in a plea in behalf of students on academic probation, some of whom have no mathematical chance of ever graduating and yet are encouraged to persist in school. They ought rather to be put to some useful work. Meridith promised to look into this with Vice President Haynes, then took his leave of the senate, receiving a round of friendly applause.

Institutional Goals and Planning

Karlene Ball said her group was following up on last year's study of university services. They will be meeting persons responsible for various areas--starting with computer services--to relay to them what faculty said about each of their operations and to find out from them exactly what services are available, so that this information can be passed back to the faculty. The committee would like to hear from anyone with something to add to last year's survey results and will welcome any interested parties to its meetings with purveyors of university services. Karlene's number: 2094.
Ad Hoc Committee on Constitutional Revision

Paul Campbell's committee requests copies of other schools' faculty senate constitutions (especially ones from out of state) or local constitutional comments still yearning for expression. Paul can be reached at 4134.

New Business

Told that Western needs another delegate to fill its complement of five representatives to COSFL, the state-wide organization of faculty senates and leaders, the senate elected Sylvia Pulliam by acclamation.

Announcements

Ed Dorman has extended the deadline for solving his puzzle (see September's Newsletter) to November 4. Those eligible for the $200 prize now include administrators and staff, and the winner will be whoever gets the highest number of items right. That is, it is no longer necessary to solve every item correctly to win.

The meeting adjourned at 4:35.

FORMULA FUNDING

Joe Glaser

Inspired by the recent hearings on campus, some of us obtained a copy of The Formula (The Kentucky Appropriation Recommendation Formula), and in view of President Meridith's plan to re-examine the distribution of money at Western, it may be a good thing we did. It's an interesting document. The idea of a funding formula is to put university income from the state on a rational footing. Funding of the same activities at the same rate across the system helps minimize political clout, so that whatever it does about construction or contracts or other plums, the state funds three hours of lower division math, for instance, the same way at Murray as at Morehead or UK.

Add to these state appropriations the university's income from other sources and you have the Council's estimate of what it takes to keep the school running. More than that, you can deduce where and in what proportions the Council thinks the money should be spent. The state doesn't demand that the great bulk of the money it appropriates for Western or other schools be spent in a certain way, but does base appropriations on estimates of what is needed in specific areas. The money then comes in as a lump sum to which are added tuition and investment gains to form the school's "educational and general" income. This expanded total is then distributed around campus according to internal priorities, which may differ from the Council's ideas on how the money will be spent.

Kentucky's funding formula is a relatively sophisticated document. In addition to money for academic departments, the formula provides for such overhead or ancillary items as agriculture experiment stations, hospitals, adult education, centers of excellence, libraries, community service, operation and maintenance, student aid, and administration. This is an important point. According to the formula, dollars intended for departmental teaching, research
and service are not a gross amount from which all these indirect costs must be
subtracted. Instead, most non-classroom expenses are provided for by separate
accounts over and above the amount provided for teaching, research, and
service.

At Western in 1987/88, the Council recommended $32.6 million for academic
departments, where it should have been used for instruction, departmentally
supported research and service, and answering the phone. Another $9 million
was recommended for maintenance and operation of the campus. University
student services had its own $3.5 million line. There was $5.8 million for
central administration, $2.3 million for debt service, and so on. The $32.6
million for academic departments was barely 55% of what the Council projected
as a $59 million total budget.

Of course, these numbers were merely recommendations and projections. The
legislature funded Western only partially, at 94% of the Council's figure. On
the other hand, local revenues were up that year, partly because enrollments
increased, so that Western's total "E&G" income was $65 million, or more than
the Council had foreseen. But the categories under which the Council arrived
at its recommendations were not altered. According to Council estimates,
academic departments might have expected 55% of the university's "E&G" income-
fifty-five percent of $65 million, or $35.75 million.

What did the University spend on academic departments in 1987/88? As usual,
it's hard to tell without a Ph.D. in accounting, but judging by the
university's 1988 Fact Book, expenditures for instruction, research, and
public service ran about $30.7 million--$2 million short of the Council's
original estimate and, more significantly, $5 million short of the Council's
55% of education and general revenues. Five million would have funded a lot of
the teaching positions we have left unfilled over the past two years. The
money could also have been used to moderate our growing dependence on part-
time teachers or to sweeten raises or reduce class sizes or teaching loads.

Where did the money go? Take about $1.5 million off the top to fund our annual
athletic deficit (costs minus sales plus Student Athletic Fees). Neither the
Council nor the state allows us a cent for athletic deficits. The rest is
harder to trace—largely because universities hate uniform reporting
categories and terminology. Comparing Council recommendations and Fact Book
figures for 1987, we seem to have overspent about $1.25 million for student
services and by several million for student financial aid, though the student
aid picture is particularly murky, at least to me. Some of the difference was
made up by underspending on operation and maintenance of plant—the other area
along with academic operations slighted in recent budgets.

Now, everything I have said needs to be taken with a shaker of salt. I have no
qualifications to analyze financial statements, especially financial
statements set up in ways that make analysis difficult. Although I have
probably muffed some details, however, it does seem to me that academics at
Western are underfunded, possibly by $5 million a year. I'd like to hear from
someone proving me wrong, perhaps in a future newsletter. In the meantime, I
was delighted to hear that President Meridith, on record as a fan of formula
funding, plans to re-examine Western's spending patterns. Academics at Western
may gain a great deal if the university moves closer to the spending
priorities embodied in the formula.
A MATTER OF A CONJECTURE

In about 1850, it occurred to a certain Francis Guthrie, then engaged in the coloring of a map of England, that perhaps only four different colors are needed to paint a map in which adjoining areas must be of different hues. This idea was transmitted by Guthrie's brother to Augustus DeMorgan in 1852, and appeared in print for the first time in 1878. Guthrie's speculation, which became known as The Four-Color Problem (or Conjecture, or Theorem), is more precisely stated, four colors are sufficient to color any map in the plane or on a sphere so that no two regions with a common boundary line have the same color, and, despite the efforts of a great many eminent mathematicians, went unproved until (perhaps) 1976. (The proof produced in 1976 is suspect, depending as it does on a computer analysis of over 1900 special cases, and involving a lengthy and exceedingly intricate analysis.)

The Four-Color Theorem is one of the two most famous conjectures in mathematics, the other being called (with, of all theorems, the name most romantic and doomed) Fermat's Last Theorem:

there are no three positive integers \((x,y,z)\) which satisfy the relation

\[x^n + y^n = z^n\]

where \(n\) is an integer no smaller than 3.

Fermat's Last Theorem, dating from the 17th century, has never been proved or disproved, and quite possibly never will be.

Every so often, one or another eminent mathematician will emit a conjecture (a word used as a term of art in mathematics) - a formally proposed theorem which (s)he suspects may be valid but has not proved. Other mathematicians, eminent or not, then try to prove it, and sometimes succeed. Those who do are either already eminent, or (probably) destined to become so. To prove a difficult and significant conjecture is an achievement of consequence in the eerie other-world of pure mathematics, where thought is raised to an almost incomprehensible level of abstraction and only the keenest and most powerful even of brilliant minds can hope to achieve anything of value. And, unfortunately, it is a world of which this reporter has, and can have, only a crude and dim perception of its lowest and least savory dives.

All of this is intended to lead up to two astonishing facts: (1) a mathematician here, at Western Kentucky University, Dr. Bettina Zoeller, has recently proven a conjecture made by one of the leading mathematicians of our time, and (2) almost no one, outside the Department of Mathematics, seems to be aware of it.

(Given that I won't know what I am talking about, you may want to skip the next four paragraphs.) An algebra can be considered to be a set of elements with a set of rules of combination which assign, to each pair of elements, a third element in the set. In ordinary "algebra," the elements are the real numbers, and the operations of combination are ordinary addition and multiplication. Many other algebras exist (such as the vector and tensor algebras so fashionable in this century in physics and engineering), with different elements and rules of combination. A subalgebra of an algebra is a "portion" of the algebra that is, so to speak, autonomous: it consists of some of the elements of the algebra, which elements have the property that, when combined with (i.e., "added to," or "multiplied by") one another, produce only elements which are also contained in the subalgebra (as, by breeding Scotties, you cannot produce any dog not a Scottie).
Then there are **modules**, and to define them you have to define abelian groups and rings . . . . Let us say only that an abelian group is a set of elements with an operation of combination resembling ordinary addition. A ring has two operations of combination, such as addition and multiplication, which are related one to the other as ordinary addition and multiplication are. The integers form a ring; so do the real numbers. A module is the combination of an abelian group and a ring, in somewhat the way that an administrator can be a combination of a faculty member and a suit. In addition, there must be a way of "multiplying" the elements of the group by the elements of the ring which will result in another element of the group. (An administrator can wear two, three, or more, suits, but he remains an administrator. He does not become a suit.)

An example of a module is provided by the "vectors" and "scalars" of physical science. The vectors form the abelian group; they combine by means of "vector addition." The scalars (real numbers) form the ring, and can be multiplied with the vectors to form other vectors. This module would be said to be a module "over the real numbers." It is said to be a **free module** because it contains a "base": a set of elements which can generate all the elements of the module by means of vector addition and multiplication by scalars (i.e., any three-dimensional vector can be written as a linear combination of, for example, three orthogonal unit vectors).

There is an algebra, called a Hopf Algebra, about which Dr. I. Kaplansky (who, Dr. B. Brunsun tells me, is one of the most eminent algebraists of our era) made in 1971 the following conjecture:

**Every finite-dimensional Hopf Algebra is a free module over any Hopf subalgebra.**

This is the conjecture that has been proven in what is (for this sort of thing) a short - about seven page - proof by Dr. Zoeller and Dr. W. D. Nichols of Florida State University. The proof is contained in an article entitled "A Hopf Algebra Theorem," which has been accepted for publication in the **American Journal of Mathematics**.

Dr. Zoeller came from the University of Würzburg to Florida State University, where she obtained her Ph.D. in 1985. She then came to Western, where she has accomplished what must surely be considered to be, at least, a contender for the greatest single intellectual achievement in the history of the place. No doubt she will be adequately rewarded. Let us hope she suffers from chrematophobia.

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**GENERAL EDUCATION**

**(THE NIGHTMARE CONTINUES)**

The projected winter and spring episodes in the Continuing Story of the General Education Curriculum, now that the General Education Task Force has submitted its report to the Academic Council, are, according to Vice President Haynes, to be as follows: the Task Force report will go to the General Education Committee of the Academic Council; this Committee will make its report to the Academic Council; the Academic Council will submit its report to the General Education Task Force, which will then, taking into consideration the recommendations of the Academic Council, submit a proposed General Education Program to the Vice President. (When, in our last issue, we exclaimed, "It's Done," we referred to the work of the Task Force only. We were wrong.)
Dear Faculty Senate and Colleagues:

The 27 September 1988 issue of the Faculty Senate Newsletter included a report on the "Proposed General Education Program," with the notation "It's Done." After all the debate and information furnished by the Health & Safety Department, it's beyond my understanding as to why Personal Health was not incorporated. Herophilus, physician to Alexander the Great, stated the case for including this course very succinctly and forthrightly as he was quoted, "When health is absent, wisdom cannot reveal itself, art cannot become manifest, strength cannot fight, wealth becomes useless, and intelligence cannot be applied." In essence, humans cannot function optimally without being healthy.

It is obvious that the majority of college students and the American population in general do not know what "good health habits" are, or lack the motivation to practice them. When one considers what Surgeon General Koop has said and written, and his conclusions that Americans are eating themselves to death, or using tobacco and drugs which are detrimental to their health, or not exercising enough, it is apparent that health education is desperately needed. A course in Personal Health may be the most vital education one could take during the college career, yet it's not even included in the proposed general education program.

Apparently many people just cannot be convinced of the value of a personal health course with facts, logic, or any other form of intelligent persuasion. I can only guess that the majority of faculty still do not understand the connection between a "bad" diet, smoking, drug use, sedentary lifestyle, and illness or poor health. Surgeon General Koop says there is a connection; just look around you and you'll see it too.

Respectfully,
Henry Baughman

Henry, you amaze me. Facts, logic, and intelligent persuasion have nothing to do with it. How long have you been at Western? What have you been eating? You must know how decisions are made here. Herophilus could probably have explained our behavior after one examination. He was onto us. — ed.

THE MEDIA

A letter in the Courier-Journal (October 8, 1988) from former WKU art professor, Lysbeth Wallace, makes an excellent point.

Professor Wallace's letter deals with media coverage of the current presidential race and points out that both candidates are being given lopsided, unfair treatment. We are seeing more of "photogenic anchor-persons" than we are seeing of or hearing from the candidates themselves.

Her thoughtful letter brings some additional points to mind. On the one hand, we, as citizens, are constantly reminded, even lectured (by the media), to be alert to any and all infringements of the right of the press to write or say essentially anything it pleases, but we are rarely reminded to remind ourselves that the whole truth from any branch of the media is very difficult to come by. In the current race, Bush supporters complain about distortions designed to make
Dukakis look good. Dukakis supporters complain about distortions designed to make Bush look good. And well both should. Of course, on the national scene the saving grace is that we can find that voice expressing the stand we want to hear. This is better than nothing and a billion times better than having a government-controlled press. We know all that, but Professor Wallace stresses the importance of our continuing to insist on fairness from any and all sides at the national level.

It was not the point of her letter to warn against local reporting that may be the only coverage, but her letter brings that point to mind. How hard it can be when we read only one side of an issue to remember there may be second, third, or fourth sides.

The power of the press! Anyone who can letter legibly can post a broadside saying, "Elvis lives!" Somebody will believe it. Lots of somebodies will believe it if they need to. I think part of the underlying intent of Professor Wallace's letter is to warn us to separate what we need and want to hear from the truth.

The Faculty Senate Newsletter provides a campus alternative – a place where one can be heard without fear of deletions, distortions, or follow-up vendettas. We should treasure that alternative.

Mary Ellen Miller

Letters to the editor, articles, and other submissions should be sent to: The Faculty Senate Newsletter, Dept. of Physics & Astronomy, Room 246, TCCW. Errors in spelling or grammar will not be corrected, nor will material be altered without consultation with and the permission of, the author. Authors who will not accept any alterations should request that the material be printed in full or not at all. As usual, anonymous communications will be neither printed nor read.

NOTICES

To make things easier for all of us, please notice this important notice about notices. You may have noticed the increased amount of notices for you to notice. We notice that some of our notices have been noticed, on the other hand some of our notices have not been noticed. This is very noticeable! It is noticed that the responses to the notices have been noticeably unnoticeable. This notice is to remind you to notice the notices and respond to the notices. Because one does not want the notices to go unnoticed.

(From the Oakland University, via Ron Seeger.)

Material in the Newsletter not ascribed by name to a particular author is due to the editor (Ed Dorman), who thanks Joe Glaser for the great amount of work he did on this issue – Ed Dorman.

* Joe Glaser assures you no one else on the Communications Committee necessarily shares his opinions. He also wants to insist on his own disagreements with Dorman. Glaser would never describe Western's vice president for academic affairs or any other vice president for academic affairs as "snippy"; moreover, he has never felt awe of any description when confronted by Ward Hellstrom's dauntlessness in the face of superior knowledge. As his comments on formula funding will show, under these circumstances Glaser is pretty dauntless himself. *