

# news from CUASA

Volume 13, No. 6

Editor: Jon Alexander

November 1982

## THE SQUEEZE ON SCHOLARS

The Steering Committee voted to circulate the attached Globe & Mail articles, "The Squeeze on Scholars", and hope they will be of interest to you.

## DATA FROM CAUT

The following data are from the CAUT bulletin "Facts & Figures".

### AVERAGE SALARIES FOR CANADIAN TEACHERS

1971-72 to 1981-82  
Canadian Dollars

YEAR	CPI	UNIVERSITY TEACHER RANKS (ALL DEGREES)				OVERALL TOTAL	SCHOOL TEACHERS WITH MA	SCHOOL TEACHERS ALL DEGREES
		FULL	ASSOCIATE	ASSISTANT	LECTURER			
1971-72	100.0	22922	16788	13259	10679	15896	13223	9049
1972-73	105.8	24043	17519	13869	11163	16767	15136	10436
1973-74	115.8	25362	18467	14656	11827	18047	16224	11397
1974-75	128.8	27526	20041	15970	12980	19885	17841	12760
1975-76	141.3	31466	23138	18603	15354	23268	20205	14619
1976-77	150.8	34029	25392	20229	16579	25565	23643	17358
1977-78	164.1	36550	27554	21879	18013	27908	25249	19134
1978-79	178.9	38979	29508	23340	19247	30006	26476	20506
1979-80	195.7	41161	30568	24008	19766	31879	28608	22468
1980-81	218.4	44959	33584	26420	21656	35267	31418	24877
1981-82	244.2	29609	37579	29469	24016	39228	N/A	N/A

\* \* \* \* \*

### PERCENTAGE OF TOTAL UNIVERSITY EXPENDITURES

#### BY SALARY CATEGORIES AND NON-SALARY COSTS

PROVINCE	ACADEMIC SALARIES	NON-ACADEMIC SALARIES	FRINGE BENEFITS	NON-SALARY AND BENEFITS	TOTAL
NEWFOUNDLAND	28.7%	27.4%	4.3%	39.6%	100%
P.E.I.	31.8%	24.9%	7.7%	35.6%	100%
NOVA SCOTIA	27.8%	19.9%	4.3%	48.0%	100%
NEW BRUNSWICK	33.8%	21.6%	5.1%	39.5%	100%
QUEBEC	28.8%	27.9%	6.8%	36.5%	100%
ONTARIO	29.1%	26.7%	6.4%	37.8%	100%
MANITOBA	33.8%	26.2%	4.6%	35.4%	100%
SASK.	28.4%	20.3%	4.7%	46.6%	100%
ALBERTA	28.4%	24.4%	5.3%	41.9%	100%
B. C.	29.4%	23.8%	5.6%	41.2%	100%
NATIONAL	29.2%	25.7%	6.0%	39.1%	100%



# Ability to fill Canada research needs in peril

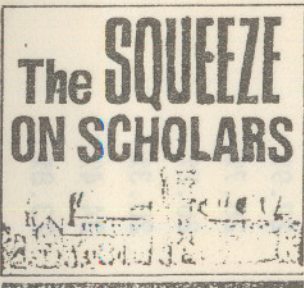
By JOHN CRUICKSHANK

In the chemistry laboratories of Carleton University in Ottawa, young science students try to apply the principles of research on 36 sets of balances too worn to give consistently reliable readings.

The university cannot find the \$36,000 it needs to replace them and the technical staff must spend an ever-greater amount of its time patching damaged equipment.

At the University of Toronto, a geology professor has everything he needs to proceed with research that could be crucial to the future of Canada's mining industry — everything, that is, except a room with proper ventilation.

These are but two examples of what critics such as the Science Council of Canada mean when they warn that Canadian universities, already reeling under the effects of government budget-cutting, may be unable to meet the country's research needs.



At Carleton, chemistry department chairman Donald Wiles says: "I fear that our students will lose faith in Canada's ability to compete in science and research at the very beginning of their careers."

"When they can blame all errors on faulty equipment our chemistry students will lose faith in science itself."

John Trent, executive director of the Social Science Federation of Canada, says: "Canada is no longer competitive internationally and one very important reason is that we're not properly financing research in our universities."

"And looking at science policy in comparison with Germany or Japan or almost all the industrialized countries we're the worst in terms of creativity and organization. We're so inflexible."

One of the major contributors to that inflexibility is a system of research financing shaped more by the dictates of federal-provincial in-

fighting than by the needs of researchers.

Almost all research work in Canadian universities depends on provincial Government support for overhead costs — professors' salaries, laboratories and basic equipment — and federal Government support for direct research expenses — specialized equipment and grants for graduate students and technicians.

David Johnston, principal of McGill University, spends about 25 per cent of his time encouraging alumni, corporations and governments to invest in the productivity his institution can provide.

His analysis of the current situation is simple and direct: "We're writing a suicide note for our competitive capacities in the 1990s."

Generally, federal funds cannot be used to pay for items in provincial areas of responsibility.

That's the trap in which U of T geology professor Norman Evensen is caught.

Prof. Evensen has been developing advanced techniques for dating ore deposits that could help Canada better manage its resources as they grow scarcer.

The university has provided him with space in the Mining Building and a \$35,000 grant for his work. The federal Government's Natural Science and Engineering Research Council has granted him \$35,000 to help create the chemistry laboratory he needs.

But the project has been halted because the research space available in the decrepit Mining Building lacks proper ventilation. Installing a fume hood in the laboratory would cost about \$40,000.

"We're now in the totally ludicrous situation in this department of having about \$250,000 in research grants but no room clean of dirt with adequate ventilation in which to do the work," says Geoffrey Norris, chairman of the geology department.

The rules don't permit use of any of that \$250,000 for the needed ventilation equipment. "If we can't drum up the money (for the fume hood) somewhere," Prof. Norris says, "we'll have to send the research money back and return the equipment."

How the U of T's Mining Building came to a state where it can't properly accommodate Prof. Evensen's research is bound up with what happened to the finances of Canadian universities generally in the 1970s.

That was the decade in which the

dollars that governments had previously been showering generously on the universities began to dry up. Provincial leaders, faced with skyrocketing costs for a host of other services, decided it would be imprudent to maintain high levels of investment in university education.

But scientists, university administrators and a growing number of business leaders believe the savings being made now will cost the country dearly in the years to come.

"The university sector has, in most provinces, been underfunded for half a dozen years to the extent that researchers are demoralized and the country is squandering the investment made in the Fifties and Sixties to build a world-class education system," says a Social Science Federation of Canada policy statement on university financing.

G. M. MacNabb, president of the Natural Sciences and Engineering Research Council, which bankrolls much of Canada's academic research, says it will take "a staggering amount of money" to bring the research equipment used in Canadian universities to "anything like state-of-the-art technology."

That's because the 1970s, the decade in which spending on teaching and research equipment in Canadian universities was allowed to deteriorate, was also the period in which the high-technology revolution took off in other industrialized countries.

The equipment used by university researchers that Mr. MacNabb's council finances is, on average, 14 years old. That's about twice the average age of equipment used in the private sector. In high-technology fields, much equipment becomes obsolete — and uncompetitive with research conducted on the most advanced apparatus — in two to three years.

Mr. MacNabb's council has spent more during the past two years re-equipping university laboratories than during the past six years combined. "But we are just nibbling at the problem of obsolescence; especially in areas where technology is advancing rapidly," he says.

New generations of computers, specially adapted to research needs are quickly separating the research teams that can compete internationally and those that cannot, Carleton's Prof. Wiles says.

"The Americans can push a button and get out as much information in a few minutes as we can get in a few months' intensive work on

obsolete and mediocre equipment.

"In a way, it's helping us sharpen our wits. But it is wearing away at our confidence in our ability to compete."

It is also wearing away at the number of qualified researchers who remain in Canada.

Canadians frequently receive their training on equipment, and in methods, that are no longer used in the private sector. They emerge from university ill-trained for productive work.

Canadian researchers trying to compete internationally are under a tremendous handicap and are easily tempted to other countries where better equipment and conditions are available.

"The only people staying in science in Canada are those who are totally committed or just too old to go anywhere else," says Carleton geology department chairman Allan Donaldson.

The shortage of researchers, coupled with a lack of adequately equipped laboratories, already has led to a postponement of the federal Government's goal, set in 1978, of having 1.5 per cent of Canada's gross national product devoted to research and development by 1983.

The new target date is 1985, and because of the current economic recession Canada will come closer to reaching its goal by default — as research and development spending fails to shrink as quickly as the country's production of goods and services.

According to 1979 figures produced by the Paris-based Organization for Economic Co-operation and Development, France was spending 1.8 per cent of its GNP on research and development, Japan 1.9 per cent, Britain and West Germany 2.2 per cent and the United States 2.3. The French Government has since set a target of 2.5 for 1985 and Japan a new target of 3 per cent.

The Science Council of Canada says that unless this country's research and development policies are radically changed, Canadians face staggering levels of permanent unemployment, a decline in living standards and perhaps the loss of sovereignty.

"Failure to respond adequately to the clear and present dangers could spell an end to Canada as we know it, precipitating a decline which would bring Canadians inevitably to a condition of pastoral servitude," says the council's policy document on the microelectronic revolution.

Council officials are calling for

massive public and private investment in the development of an internationally competitive microelectronics industry. That will require co-ordination of public and private research efforts and an extensive refitting of university teaching and research operations.

Gene Nyborg, secretary of the council, says there is no concerted effort to plan for the future. The council's message has created some interest but prompted no hard decisions.

"It's particularly frightening when you see just how much is going on in other industrialized countries," Mr. Nyborg said.

"We are at a turning point, the equivalent of another industrial revolution. If we fall behind — and we already have — the consequences will be quite severe."

Despite Canada's modified goal for research spending, Mr. MacNabb says the trained people still will not be available to carry out the projects.

While strong investment by his agency and a slumping economy has made specialized natural science and engineering graduate work in Canada's universities somewhat more attractive, the record during the past 10 years is dismal:

- Between 1972 and 1981, the number of Canadians and landed immigrants in graduate programs in chemical engineering in Canadian universities fell to 267 from 322, a 17 per cent decline;

- In electrical engineering, one area of basic training for the mi-

croelectronic revolution — the number of students fell to 427 in 1981 from 611 in 1972, a 30 per cent drop;

- Enrolment in computer science graduate programs declined to 352 in 1981 from 448 in 1972, a drop of 21 per cent;

- The decline in geology and related subjects in the same period was 26 per cent, and for mining engineering 44 per cent.

The research council's officials calculate that there will be an annual need for 3,400 postgraduates with a background in the natural sciences and related branches of engineering. The supply probably will be no higher than 3,000.

The picture in the physical sciences (chemistry, physics, earth sciences, computer sciences) and related branches of engineering is grimmer. The need will be about 3,100 annually, the supply only 2,100.

"In Ontario, there continues to be a great deal of effort aimed at curtailing the growth of graduate schools when the problem is clearly that they are not expanding rapidly enough in the sciences and engineering," says Lynn Watt, dean of graduate studies at the University of Waterloo.

"Since the average time required to get a PhD is four to six years the graduates that will be needed in 1985 must already be in the university system. Clearly, the present enrolment cannot meet the demand."

NEXT: Generation may be lost

## Few opportunities; Canada losing young scholars

By JOHN CRUICKSHANK

Canada is in danger of losing a generation of scholars, says Lynn Watt, dean of Waterloo University's graduate school.

The country's best young academics are turning away from the universities for high paying jobs in industry or leaving the country to teach and research wherever positions and cash are available.

"It's a curious analogy but it's as if the major hockey league teams didn't take in a whole generation of rookies," Professor Watt said during a recent interview.

"The explosive growth of hiring in the 1960s has been followed by almost no hiring at all."

About 60 per cent of Ontario's university faculties are between the ages of 35 and 49. The situation is similar across the country and all universities consider that they have a commitment to those employees.

New positions will not open up as long as that generation — the best qualified in the history of Canadian universities — is in the system.

With few young people being hired, the average age of Canadian university faculties is soaring.

"The young Turks are now 45," says Paul Perron, a French professor at the University of Toronto. "They're not being prodded and challenged by younger people."

Canada's research councils are also deeply concerned that without new blood the country's research effort may wither.

Those potential professors unwanted today will be vitally necessary within a dozen years. But by then they may not be available.

"Approximately half of the professors in Ontario will retire between 1990 and 2000," says a Government report on the future of the province's universities.

"The situation in other provinces is similar. If the replacements are to be found among young Canadian scholars then the number of PhD graduates must be increased significantly in all disciplines. Again, given the time lag in the system, graduate enrolments must begin to increase by the mid-1980s."

If they want to fill those positions in the future with the best young men and women of this generation the universities will have to offer some incentives today.

"If the demand (for professors and researchers) develops first in the U.S., as I fear it may, there could be a major brain drain of people who have been trained at such great expense," warns John Leyler, dean of the University of Toronto school of graduate studies.

Ironically, the universities have been unable to find the skilled people they need to fill jobs available in high-demand areas. There were 67 faculty positions in computer science advertised nationally last year. Only 35 were filled — 32 remained vacant.

"There is a disturbing tendency for able young people to simply direct their efforts to immediate economic goals," says Prof. Leyler.

"What is happening is that the A and A+ students are redirecting their paths toward areas where they'll be sure to find employment."



## FEW OPPORTUNITIES

The universities haven't the financial resources to compete with the private sector for the best graduates of bachelor programs in commerce and business administration, computer science, geology and engineering.

Financial resources are severely limited at least in part because the cost of wages in the system is much higher than it would be if faculty numbers were not so heavily weighted in the middle and upper ranges.

Across Canada, full professors and associate professors — the top two levels of the academic heap — make up about 75 per cent of the total faculty.

The financial constraints have created some wild variations in professor-student ratios at the institutions. While arts programs boast one professor for 12.3 students, the ratio in commerce and business administration is one professor to 33 pupils. Science students can expect a one to 10.3 ratio while there is just one professor for 21 engineering students.

Canadian universities have undergone a radical change in composition during the past 10 years — best seen through alterations in Ontario where information is most carefully collected and reported.

While the number of arts and science students in 1981 was about the same as in 1971, enrolment in professional and career-oriented programs rose 70 per cent from 36,541 to 61,049.

In just four years — between 1977 and 1981 — undergraduate enrolments in engineering rose 22.3 per cent, in computer science 83.3 per cent and in commerce and administration 87.8 per cent.

There has been some decline in certain arts programs. During the past eight years the number of modern language specialists — including English language and literature — has fallen by 21 per cent to 4,200 from 5,328. The number of philosophy majors has dropped to 332 from 589 — a 43 per cent decline. The number of history majors has dropped 34 per cent to 1,697 from 2,573.

Naturally, little hiring is being done in these areas. Less predictably — given the universities' needs for cash to put new professors into high-demand areas — there has been virtually no firing.

The job prospects at universities for this decade's students of the humanities are practically nil.

"Good people are leaking away on all sides," Prof. Leyerle said. "The key problem is the lack of financing for junior appointments. If we lose our nerve and allow the system to collapse on us it can't be rebuilt easily."

This year the Mellon Foundation, a U.S. philanthropic fund, announced it would give U of T \$720,000 to hire young academics in the humanities. The money for these new positions could not be found in the university's general fund.

"But it's a sad irony that it's an American foundation that has taken this constructive step in Canada," Prof. Leyerle said.

Between 1971 and 1981 the number of full-time students increased in Ontario universities by more than 20 per cent — at the same time the Government squeezed savings out of the universities by holding financing increases below the inflation rate.

As David Foote, a University of Toronto economist, has noted: "The idea of squeezing the universities from the mid-1970s through the mid-1980s is counter to the demographics."

According to the Council of Ontario Universities, much of the saving has resulted from holding down professors' salaries. Since 1975-79, the consumer price index has risen 47.5 per cent while academic salary scales have increased only 27.7 per cent.

"Starting salaries for university faculty now differ little from those offered by the private sector to recent bachelor graduates," says a recent COU report.

Prof. Foote believes that the assumption by government that that university enrolments would follow elementary and secondary student numbers into a deep decline during the 1980s and early 1990s is unsound.

The decline will be much less severe than in the elementary or secondary schools, he says, "because universities have been much more successful in attracting older students."

While the number of students going directly from high school into full-time university programs will certainly decrease, the number of older individuals returning to university for either full or part time studies is likely to increase dramatically, Prof. Foote maintains.

"It's in graduate and part-time enrolments that the action's going to be — not in full-time undergraduate. Current policy seems to concentrate there and the growth areas are just not being looked at. I'm concerned there isn't sufficient sensitivity to this issue."

# Universities have choice: quality or accessibility

By JOHN CRUICKSHANK

The 20-year-old tradition in Ontario of attempting to provide a university education for virtually all who seek it may soon be brought to an abrupt end for want of money.

A decade of budget cuts has spawned overcrowded classes, obsolete teaching and research equipment, deteriorating intellectual standards and low faculty morale.

Despite productivity increases and efficiencies that have reduced the cost of educating each student to just 70 per cent of the average spending of other provinces, Ontario wants further economies.

But Grant Clarke of the Council of Ontario Universities, an organization that brings together the heads of the province's universities, thinks there is little room for further cuts.

"The only way you're going to save money now is to cut the size of the system and sacrifice accessibility (of qualified students to places at university)," says Mr. Clarke.

"But it's very hard for this Government to admit that it can't afford to finance the system at an effective rate to provide quality education."

Continuing austerity without substantial reorganization will "ensure the demise of quality universities in Ontario," a committee of senior Education Ministry officials and university presidents predicted a year ago.

Bette Stephenson, Ontario's Minister of Colleges and Universities, who commissioned the report, has promised but not yet published a comprehensive response to the committee's conclusions.

According to Dr. Stephenson's advisers the universities' financial plight is now so severe that the Government can no longer postpone some tough decisions about the future of the institutions.

Here are the options from which the Ontario Government must eventually choose a new direction for university education in the province:

- Option 1: Plow another \$300-million into the university system to replace obsolete equipment, renovate badly decaying buildings, pay higher salaries and reduce the size of classes in high-demand areas such as computer science, business administration and commerce and economics.

There is little likelihood the Government will pursue this option. As Dr. Stephenson said in a recent interview:

"I don't know when people are going to understand that Governments can't be all things to all people at all times. There is a limit to what you can do that way, unless you want to make the universities arms of Government — and I don't think anybody wants to do that."

- Option 2: Close several universities.

By reducing the total expenses of the system, the Government would be free to provide the remaining institutions with the cash they need to improve the quality of education they deliver.

Premier William Davis, who as Education Minister during the 1960s presided over the rapid expansion of the colleges and universities system, has rejected this option. No universities will be closed.

As Queen's University politics professor Peter Leslie wryly notes in a study of politics and universities: "When a government categorically refuses to entertain the idea of shutting down a university its policy has more to do with regional development than with education."

The remark might also read: "What politician in his right mind would close a university in Windsor, Peterborough or Toronto during a deep recession?"

- Option 3: Slash student enrolments by raising entrance standards.

This course is finding growing support among university administrators and Dr. Stephenson's advisers. They argue that if the Government would just maintain the present level of financing, lower enrolments would allow the universities to spend more money on each student.

"When for budget reasons you can maintain either accessibility or quality of education, quality must come first," says George Harrower, president of Lakehead University.

"Otherwise, you must ask yourself: 'Accessibility to what? Why bother if we aren't going to give our students a good education?'"

The University of Toronto has announced that it will slim its enrolments by at least 10 per cent during the next decade in an effort to become a "leaner, intellectually tougher institution."

That move is philosophically consistent with the views of Dr. Stephenson who said during a recent interview that "I believe universities should be elitist in the very best sense of the word."

"Universities should be for the intellectual elite. They should be centres of excellence for the expansion of the intellectual capacity of those that participate at whatever level within them."

By tradition, any Ontario high school student who scores 60 per cent coming out of Grade 13, is guaranteed a spot at one of the province's 19 universities.

Critics of the guarantee — notably U of T president James Ham — believe the universities have become mediocre by teaching students who should be at community colleges or in the work force.

Dr. Stephenson says the universities are free to set entrance standards at any level they wish.

But for a university of less secure reputation and population base than U of T, turning away students would be a politically hazardous process.

"The universities are not going to carry the can on student accessibility without having the Government on board," Mr. Clarke of the COU says flatly. "It would be self-defeating."

The Ontario Council on University Affairs is designing a new system for distributing provincial dollars to the universities that might be accepted — without great enthusiasm — by all parties.

Under the proposed system, aid to the universities would be cut off when student numbers reached an upper limit. Any university accepting more students than the allowable limit would have to rely solely on fees and donations to meet added costs.

At the very least, that system could be used to eliminate future growth in student numbers at Ontario universities. It would also mean that students would no longer have a right to a university education because of their academic success at high school. Entrance to a university would become a simple numbers game.

Patrick Wesley, director of the Ontario Confederation of Faculty Associations, says any plan to restrict student numbers would actually be aimed at reducing staff in the system.

Salaries account for about 80 per cent of the costs of the Ontario university system — and simply cutting student numbers will not change that, Mr. Wesley notes.

But slashing student numbers would make it possible for universities to cut their payrolls through attrition. The resulting lighter workloads might also make it possible for university administrations to hold professors and support staff to low salary increases.

It is possible that professors could be laid off but the rapidly escalating cost of golden handshakes in the private sector indicates that the process would be extremely expensive.

Dr. Stephenson will not say university professors should be fired — and she certainly wants to avoid responsibility for any layoffs.

Asked during an interview whether professors in areas of the humanities where enrolment is declining should be fired to free money to hire teachers for high-demand areas such as computer science and commerce, she said:

"If the humanities course is superb, no. If it isn't, I think they (the universities) have to make some very tough decisions. But surely those with the capability to determine academic excellence should be those responsible for making those decisions."

- Option 4: Substantially increase tuition fees.

This option is out — at least for a year — as fee increases will be held to 5 per cent under the Government's wage and fee restraint legislation.

Ontario university tuition fees in most fields are as high or higher than in any other Canadian province. However, they pay for only about 15 per cent of the total cost of a university education.

Fees would have to be doubled or tripled to increase significantly university revenues. That would be a politically unappealing move even if it were accompanied by generous increases to the federal-provincial student aid plan.

Until the Ontario Cabinet picks an option or package of options for change the universities will have to rely on the Ontario Council on University Affairs, a Government-appointed advisory group, to make the ministry aware of its problems.



## UNIVERSITIES HAVE CHOICE

But OCUA has met with little success recently impressing politicians on the need for more generous and rational financing policies. For the past three years the Ministry of Colleges and Universities has ignored OCUA's advice on grant increases and its warnings that the system is on the brink of disaster.

Since the last time the Government the council's advice, the system has received about \$400-million less than the advisory body believes is necessary to maintain quality.

Burton Matthews, the council's president, admitted last spring he could do little to convince the province to increase its support for the university sector.

"If I thought for a minute my resignation would get universities funding even equal to inflation, I'd resign today," he told a delegation of students. "But it wouldn't make a bit of difference. You know it. And I know it."

**NEXT: Ottawa's power grab**

## THE FAR SIDE

By GARY LARSON



"Wait! Wait! Listen to me! ... We don't HAVE to be just sheep!"

# Ottawa dangles \$3.2 billion as bait for more say in university education

By JOHN CRUICKSHANK

Nobody can force the provinces to discuss higher learning with Serge Joyal.

But the newly appointed federal Secretary of State has \$3.2-billion a year that says they will.

That's the amount Ottawa estimates it gives the provinces in cash and tax points to support Canada's universities and colleges. It represents more than half the cash spent in the institutions.

And the federal Government believes that contribution should buy discussions — and an agreement on how the cash is spent.

If an accord is struck it could determine:

- Minimum standards of quality and investment;
- Who will qualify to receive a university education in Canada;
- How much public aid will be available to students who need loans and grants;
- What sorts of programs will be available and how many places in each;
- The commitment Canadians will make to research in the universities;
- And how the Canadian taxpayer will pay for it.

The provinces' initial bargaining position will be that there can be no accord because there is nothing to negotiate.

Their trump card is the new Constitution, which says that education is a provincial responsibility.

They've been receiving money for higher education from the federal Government since the Second World War with no strings attached — and they want to keep it that way. Above all, they suspect the federal Government is making an unconstitutional power grab to turn the universities into fancy manpower training centres.

The constitutional argument — and the provinces' position that no bargaining is needed — may not hold for long.

Ottawa policy planners say the federal Government might find new ways to distribute its billions, cutting the provinces out of the action.

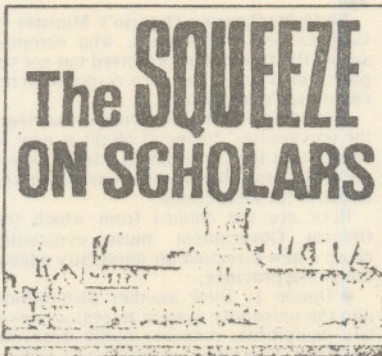
The federal Government could give the money directly to the universities — and achieve its policy objectives by applying conditions to the grants.

Another possibility could be a national student voucher system under which the federal Government would underwrite some portion of all students' fees. That would give Ottawa the public visibility it wants for its dollars.

The most dramatic possibility is a scheme for a multi-billion-dollar tax break. Under this scheme, Ottawa would simply stop contributing to higher education and instead plow those dollars back into the economy through federal tax reductions on individuals and corporations.

But the institutions themselves would not see any of this money and would probably be required to double or triple their fees to remain solvent.

Despite the importance of these discussions to the universities, their representatives will not be participants.



The uncertainties of future financing plans — and the cash shortages the institutions now suffer — reduce the measures the universities can take to plan for the future or even make their day-to-day operations more efficient.

While dollars are available for this school year, the direction for the future is unclear.

The Canadian Association of University Teachers, unwilling to take sides in the discussions, wants national public hearings on the role of the universities — before any rash decisions are taken.

But that should be the least of their worries. The last set of fiscal arrangements to determine what federal money would be available under the Established Program Financing agreement of 1977 took 10 years to negotiate.

Ottawa sources say the Secretary of State has a spring, 1983, deadline to bring to the Cabinet draft legislation to establish the national responsibilities of the universities and the amount of federal money available.

But before that is possible the governments must, at the very least, agree on the ground rules.

The provincial education ministers, who met with then-Secretary of State Gerald Regan in early July, say they will not talk money without their treasurers present. They want a first ministers' conference on the principles of health and education financing and a fiscal arrangements act developed and negotiated by finance officials.

The issues will be exceptionally difficult to negotiate because Ottawa and the provinces have radically different interpretations of the history of the past 15 years of not-so-cooperative federalism.

From 1967 through 1977, the federal Government paid for 50 per cent of most of the operating costs of all universities and colleges in Canada.

The 1977 arrangement dropped the direct link between federal transfers and spending in the universities. Under the Established Program Financing Agreement, Ottawa gave up tax points to the provinces and transferred cash directly into their coffers — in amounts that increased with national economic growth. The only conditions of the agreement were that minimum standards would be met

in the area of health care. There was no requirement to meet minimum conditions of investment in academic excellence or research effort.

The system no longer required a close accounting of how the money was spent in education.

Although in 1977 the higher education component of the transfer was taken to be 32 per cent of the total, there was no legal requirement that the provinces spend all or any of the money received after that on universities and colleges.

The purpose of the agreement, so Prime Minister Pierre Trudeau said, was to give the provinces a stable flow of funds for health and higher education, and some incentive to bring costs under control.

According to federal statistics, the provinces took advantage of the opportunity to siphon dollars out of their universities.

While the portion of the federal transfer theoretically intended for universities increased by 46 per cent between 1977 and 1980, provincial spending increased, on an average, only about 25 per cent.

The provinces don't accept the federal calculation but do admit that they have held grant increases to universities below previous levels. They say they were forced to spend an increased portion of their financial resources to meet an rapidly increasing bill for health costs.

"We've done a good job of managing our university system and bringing costs under control," says Ben Wilson, assistant deputy minister of the Ontario Ministry of Colleges and Universities.

"That's what we were supposed to do. What right have the feds got to be angry with us for succeeding?"

Mr. Regan, when he was Secretary of State, said the federal Government wanted to reduce the share of post-secondary costs Ottawa finances. He suggested this reduction could be phased in over a number of years to allow the provinces time to adjust.

The point remains highly contentious. Ottawa and the provinces are claiming the legal right to certain tax points covered under the last fiscal agreement. Determining what is legally federal tax income and what is legally provincial revenue is, according to financial experts in both levels of government, a terribly complex problem.

But Ottawa experts say if the federal Government really wants to win its point on higher education it can piggy back the internal accounts sufficiently to give the provinces tax points for health spending while holding on to billions previously earmarked for post-secondary education.

It is unlikely that any resolution of the federal-provincial impasse will bring more dollars into the universities' budgets. What most professors and administrators now seek is an end to the chaos in financial policy and a serious national reappraisal of the role that universities should play in Canadian social and economic development in the years ahead.

Last of a series