

The Allocation of Resources and Degrees Awarded

A Case Study of the University of Manitoba 2001 to 2008

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About the author



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Executive Summary

Accountability, measured by results rather than inputs, is fast becoming a reality in Canadian universities, but administrators still claim they need more resources and fewer constraints on their spending. Over a seven-year period from 2001 to 2008, the resources for Canadian universities increased substantially, but the number of degrees awarded did not increase at the same rate. At the University of Manitoba (U of M), for example, some faculties and schools received substantially more resources during a time when the number of degrees awarded decreased. In fact, the evidence shows that there is virtually no relationship between resources allocated to faculties and schools and the number of degrees awarded. For this reason, this paper proposes five incentive-based policies to ensure that the U of M and other universities are held more accountable for the way they use resources. If these policies were adopted, students, particularly undergraduate students, would be treated more fairly.

“ *...the evidence shows that there is virtually no relationship between resources allocated to faculties and schools and the number of degrees awarded.*

Introduction

In many colleges and universities, students are increasingly complaining about rising tuition fees. Parents are questioning the quality of their children’s education. University administrators are concerned about uncertain revenue. Professors are worried about renewing collective agreements and the new universities that are based on computer technology and online courses (MOOCs) that are rapidly overtaking universities built with bricks and mortar.¹ At the same time, university administrators claim they need more money and more people, but, surprisingly, they want fewer constraints on the resources they receive.²

In this respect, Dr. Emőke Szathmáry, president of the University of Manitoba in 2006 said, “Were more revenue available, universities could ... meet the costs of providing a proper education to their students.”³ Seven years later, her successor, Dr. David Barnard, said, “Manitoba can’t enjoy the benefit of the best from its best students as long as they’re so underfunded. ‘Historically, we’ve been underfunded compared to other medical/professional universities.’”⁴ Similarly, Dr. Harvey Weingarten, president of the University of Calgary in 2008, claimed:

“If you look at funding in Canadian public universities relative to public universities in the United States, we are really underfunded. The average gap is about \$5,000 per student per year. That’s huge. Imagine what a university could do if it had another \$5,000 for every student to spend every year.”⁵

Does more money mean that more undergraduate students graduate from better programs, as these university presidents claim? Because this question is being asked by increasingly more people, transparency and accountability are slowly—perhaps too slowly—transforming Canadian universities.⁶ *Maclean’s*, in fact, began asking some important questions about Canadian universities almost 25 years ago.

“Manitoba can’t enjoy the benefit of the best from its best students as long as they’re so underfunded.”

- Dr. David Barnard

The *Maclean's* Reports

For many years, *Maclean's* provided basic information that was easy for citizens to understand and for students and their parents to use when selecting a university.⁷ Specifically, *Maclean's* ranked universities on 14 criteria, such as the proportion of students who receive scholarships, the student/faculty ratio, research awards won by faculty members, student support, library holdings and the reputation of the university as judged by high school principals, guidance counsellors, university officials and CEOs of corporations across the country.⁸

As expected, the 2013 issue of *Maclean's* sold out within a few days. Also, as expected, some university presidents, particularly those from low-scoring institutions, objected to the magazine's ranking system.⁹ In addition, some administrators and professors criticized the research methodology. *Maclean's* evaluated universities as a single unit, whereas some presidents and faculty members argued that faculties and schools within a university often differ substantially.¹⁰

More importantly, the news magazine rankings are based, in large part, on input and process variables rather than on output variables.¹¹ In this respect, Richard Vedder, the U.S economist, says that measuring inputs and processes in universities are "roughly equivalent to evaluating a chef based on the ingredients he or she uses" and not on the quality of the meals that are served to patrons.¹² There are, in fact, better data for examining the inputs and outputs of Canadian universities.

“*...some administrators and professors criticized the research methodology.*”

University expenditures and degrees awarded

The Canadian Association of University Teachers (CAUT) reports that the resources received by Canadian universities increased from almost \$19-billion in 2000-2001 to almost \$37-billion in 2007-2008, which represents a 94.7 per cent increase. Over the same period, the number of undergraduate degrees awarded rose from 146,226 to 191,340, which is only a 30.9 per cent increase. The number of graduate degrees awarded increased from 31,058 to 46,794, a 50.7 per cent increase.¹³ At the same time, the Consumer Price Index (CPI) increased by 15.9 per cent.¹⁴

Table 1 presents the revenue for all the public colleges and universities in all provinces in 2007-2008 as well as the number of college certificates and undergraduate university degrees awarded in the same year.¹⁵ These figures should be interpreted with caution because there are higher percentages of community college and/or graduate students in some provinces than in others.

TABLE 1

University and College Revenue, College Certificates and University Degrees and the Average Cost per Certificate and Degree By Province (2007-2008)

Province	University and College Revenue (\$000) ^a	Certificates and Degrees Awarded ^b	Average Cost
Alberta	\$ 4,708,464	31,320	\$ 150,334
British Columbia	\$ 4,768,998	33,729	\$ 141,392
Manitoba	\$ 987,091	9,024	\$ 109,385
New Brunswick	\$ 493,864	7,056	\$ 69,992
Newfoundland	\$ 598,634	4,611	\$ 129,827
Nova Scotia	\$ 1,162,640	11,466	\$ 101,399
Ontario	\$ 15,067,934	142,500	\$ 105,740
Prince Edward Island	\$ 163,518	1,770	\$ 92,383
Québec	\$ 7,538,717	99,414	\$ 75,832
Saskatchewan	\$ 1,135,118	6,648	\$ 170,746

Sources: a. The Canadian Association of University Teachers, "CAUT Almanac of Post-secondary Education in Canada, 2009-2010, p. 2; b. The Canadian Association of University Teachers, "CAUT Almanac of Post-secondary Education in Canada, 2011-2012," p. 36.

Nevertheless, this table illustrates that there is considerable variability in college and university revenue, the number of students graduating with college certificates and/or undergraduate degrees and the average cost of educating these students. Specifically, the cost of graduating students with certificates or degrees varies from a low of \$69,992 in New Brunswick to a high of \$170,746 in Saskatchewan, which is a difference of 1.4 times. Manitoba is around the median, with a cost of \$109,385 per graduate, which is less than Newfoundland and Labrador at \$129,827, British Columbia at \$141,392 and Alberta at \$150,334.

Table 2 presents the number of full-time equivalent students enrolled in selected Western Canadian universities, the number of full-time equivalent faculty members and the student-faculty ratios.

TABLE 2

Full-time Equivalent Students Enrolled, Full-time Equivalent Faculty Members and Student-Faculty Ratios

Selected Western Canadian Universities (2007-2008)

University	Number of Students	Number of Faculty Members	Student-Faculty Ratio
Athabasca University	5,505.9	120	45.9
Brandon University	1,944.9	150	13.0
Simon Fraser University	17,964.9	789	22.8
University of Alberta	34,046.6	1,290	26.4
University of British Columbia	38,964.4	1,641	23.7
University of Calgary	24,388.7	1,068	22.8
University of Lethbridge	7,473.0	309	24.2
University of Manitoba	24,499.7	852	28.8
University of Northern British Columbia	3,131.1	183	17.1
University of Regina	11,010.0	342	32.2
University of Saskatchewan	17,126.1	666	25.7
University of Victoria	14,528.1	648	22.4
University of Winnipeg	6,649.7	240	27.7

Source: The Canadian Association of University Teachers, "CAUT Almanac of Post-secondary Education in Canada, 2010-2011," p. 42.

There is approximately a variability of 2.5 times across universities, from a high of 45.9 students per faculty member in Athabasca University to a low of 13.0 students per faculty member at Brandon University. Since Athabasca University specializes in online and distance education, it is not typical of Canadian universities. The University of Manitoba has the third-highest student-faculty ratio with a score of 28.8, almost 4 per cent higher than the University of Winnipeg (27.7 students per faculty member), and 9 per cent higher than the University of Alberta (26.4 students per faculty member). In essence, the data show considerable variability across provinces, universities and colleges in the way the funds are used, which suggests that giving more money to the universities and colleges does not necessarily mean that more students will graduate.

No wonder some people are suggesting that it is time to compare the cost-effectiveness of universities and their faculties and schools.¹⁶ However, more-detailed data are required to determine how funds are used within faculties and schools. Fortunately, the U of M publishes data that can be used to answer the following five important questions.

1. What resources has the university received?
2. How have these resources been dispersed to faculties and schools?
3. How many students have graduated with degrees from the faculties and schools?
4. What is the relative cost of each degree awarded in each faculty and school?
5. How have the costs and graduation rates changed over time?

“**...the data show considerable variability**
across provinces, universities and colleges
in the way the funds are used...”

Resource allocation and degrees awarded at the University of Manitoba

By examining the data in Table 3, we see that from 2001 to 2008, the operating funds for the U of M increased from \$235,396,600 to \$350,665,200, an increase of 49 per cent, while, as noted above, the CPI rose by 15.9 per cent. In other words, the operating expenditures at the U of M increased by more than three times the CPI. Interestingly, expenditures for academic salaries, both hiring new professors and augmenting current professors' salaries, increased by 44.5 per cent, the least amount. Expenditures for administrative and support staff increased by 58.7 per cent, the greatest amount. Other expenditures (libraries, equipment, etc.) rose by 50.5 per cent. Not surprisingly, Andrew Hacker, Claudia Dreifus and Vedder noted that the administrative costs at U.S. universities increased much faster than the expenditures for educating undergraduate students have.¹⁷

TABLE 3

Expenditures (\$ x 1000) at the University of Manitoba (2001 and 2008)

Source	2001	2008	Increases 2001-2008	
			\$	Percentage
Academic Salaries in Faculties and Schools	\$90,994.9	\$131,516.0	\$40,521.1	44.5%
Support Staff Salaries in Faculties and Schools	22,284.1	35,354.8	13,070.7	58.7%
Other Expenditures	122,117.6	183,794.4	61,676.8	50.5%
Total Operating Expenditures	\$235,396.6	\$350,665.2	\$115,268.6	49.0%

Sources: The University of Manitoba, "Institutional Statistics 2000-2001," p. 97; The University of Manitoba, "Institutional Statistics 2007-2008," p. 135.

Table 4, next page, reports the number of full-time equivalent staff at the U of M in 2001 and 2008. This table shows that the number of full-time equivalent academic staff increased by 44.3 per cent and that the number of full-time equivalent support staff increased by 26.7 per cent. Surprisingly, the data also show that in 2001, the academic staff represented only 42.1 per cent of the full-time equivalent employees, and by 2008, the academic staff had increased slightly to 45.3 per cent of the full-time equivalent employees.

TABLE 4

Full-time Equivalent Staff at the University of Manitoba (2001 and 2008)

Full-time Equivalent Staff	2001	2008	Increases 2001-2008	
			Number	Percentage
Academic	1,189.5	1,716.0	526.5	44.3%
Support	1,635.3	2,073.5	438.2	26.7%
Total	2,824.8	3,784.5	964.7	34.2%

Source: The University of Manitoba, "Institutional Statistics 2001-2002," p. 97; The University of Manitoba, "Institutional Statistics 2008-2009," p. 161.

Table 5 indicates that the number of degrees awarded increased by only 25.4 per cent from 4,097 in 2001 to 5,139 in 2008 with obvious random variation over the intervening years. Specifically, the number of undergraduate degrees increased by 23.9 per cent, and graduate degrees increased by 35.4 per cent, indicating a shift of resources from undergraduate education to graduate teaching and supervision. Even though the number of faculty members increased by more than 44 per cent, the number of degrees that were awarded increased by only 25 per cent. In other words, it takes more faculty members to educate a set number of students. It also takes more administrators.

TABLE 5

Degrees Awarded by Faculties and Schools at the University of Manitoba (1999-2008)

Degrees Awarded	1999	2000	2001	2006	2007	2008	Increases 2001-2008	
							Number	Percentage
Undergraduate	3,411	3,348	3,538	4,165	4,052	4,382	844	23.9%
Graduate	604	541	559	720	749	757	198	35.4%
Total	4,015	3,889	4,097	4,885	4,801	5,139	1,042	25.4%

Sources: The University of Manitoba, "Institutional Statistics 2001-2002," p. 54; The University of Manitoba, "Institutional Statistics 2008-2009," p. 102.

Overall, the data show that the U of M has been treated favourably in the resources provided by the provincial government and students.

However, there is a rather weak relationship between the money received and the number of students graduating from the university programs. Richard Vedder says, "Very little of the additional financial support recently given to ... universities has actually been used to reduce the cost of undergraduate instruction."¹⁸

The data, of course, do not tell what happened within the various faculties and schools. The next section examines the changes in both expenditures and degrees awarded to students within the faculties and schools at the U of M.

Resource allocation and degrees awarded in the faculties and schools

Table 6, next page, presents data on the academic and support staff expenditures for 17 of the 18 faculties and schools in 2001 and 2008. During those seven years, the Faculty of Environment, Earth, and Resources was created from resources reallocated from the faculties of Arts and Science when geography and geological sciences were combined. Consequently, this table does not report expenditures for this faculty in 2001, and the data showing changes from 2001 to 2008 are biased in the faculties of Arts and Sciences.

Nevertheless, examining the percentage increases in resources spent on faculty and support staff illustrates that there is substantial variation, from a low of a 17.6 per cent increase for Science to a high of a 148.2 per cent increase for Social Work, with moderate increases in the faculties of Arts, 24.6 per cent; Nursing, 25.1 per cent; Education, 32.6 per cent; and Human Ecology, 35.4 per cent during a period when the CPI increased by 15.9 per cent. On the other hand, some faculties received substantially higher increases: Law, 61.4 per cent; Business, 66.2 per cent; Physical Education and Recreational Studies, 71.6 per cent; Pharmacy, 73.8 per cent; Medicine and Medical Rehabilitation, 74.4 per cent; and Music, 76 per cent.

TABLE 6

Increases in Academic and Support Staff Expenditures (\$ x 1000) in Faculties and Schools (2001 and 2008)

Faculties/Schools	2001	2008	Increases 2001-2008	
			\$	Percentage
Agricultural and Food Sciences	\$8,657.5	\$11,003.2	\$2,345.7	27.1%
Architecture	3,164.5	4,602.3	1,437.8	45.4%
School of Art	1,607.2	2,288.8	681.6	42.4%
Arts	21,484.2	26,773.3	5,289.1	24.6%
I.H. Asper School of Business	5,973.1	9,929.0	3,955.9	66.2%
Dentistry and Dental Hygiene	6,423.9	9,388.0	2,964.1	46.1%
Education	4,641.4	6,155.5	1,514.4	32.6%
Engineering	7,852.8	11,367.1	3,514.3	44.8%
Environment, Earth and Resources	---	5,520.3	5,520.3	---
Human Ecology	2,273.0	3,078.1	805.1	35.4%
Law	2,206.9	3,562.4	1,355.5	61.4%
Medicine and Medical Rehab	17,773.7	31,001.8	13,228.1	74.4%
Music	1,552.2	2,731.3	1,179.1	76.0%
Nursing	5,740.6	7,178.7	1,438.1	25.1%
Pharmacy	1,366.9	2,376.0	1,009.1	73.8%
Phys. Education/Rec. Studies*	1,457.3	2,500.0	1,042.7	71.6%
Science	18,167.6	21,361.0	3,193.4	17.6%
Social Work	2,011.1	4,991.2	2,980.1	148.2%
Total	\$112,353.9	\$165,808.0	\$53,454.4	47.6%

* Now called Kinesiology and Recreational Management.

Sources: The University of Manitoba, "Institutional Statistics 2000-2001," p. 97; University of Manitoba, "Institutional Statistics 2007-2008," p. 135

TABLE 7

Changes in the Number of Degrees Awarded in Faculties and Schools (2001 and 2008)

Faculties/Schools	Under-graduate	Graduate	Total	Under-graduate	Graduate	Total	Number	Percentage
Agricultural and Food Sciences	170	41	211	123	67	190	-21	-10.0%
Architecture	96	41	137	79	62	141	4	2.9%
School of Art	49	0	49	80	0	80	31	63.3%
Arts	734	82	816	1,039	117	1,156	340	41.7%
I.H. Asper School of Business	372	58	430	431	51	482	52	11.8%
Dentistry and Dental Hygiene	46	6	52	62	6	68	16	30.8%
Education	548	64	612	558	83	641	29	4.7%
Engineering	221	62	283	218	64	282	-1	-0.4%
Environment, Earth and Resources	---	---	---	124	46	170	170	---
Human Ecology	57	11	68	140	11	151	83	122.1%
Law	88	4	92	98	1	99	7	7.6%
Medicine and Medical Rehab	156	37	193	173	113	286	93	48.2%
Music	38	0	38	46	6	52	14	36.8%
Nursing	183	12	195	344	22	366	171	87.7%
Pharmacy	47	2	49	46	0	46	-3	-6.1%
Phys. Education Rec. Studies*	80	13	93	135	9	144	51	54.8%
Science	526	44	570	506	55	561	-9	-1.6%
Social Work	118	32	150	149	39	188	38	25.3%
Total	3,529	509	4,038	4,351	752	5,103	1,065	26.3%

Source: The Canadian Association of University Teachers, "CAUT Almanac of Post-secondary Education in Canada, 2010-2011," p. 42.

Table 7 reports the number of degrees awarded in the 17 faculties and schools in 2001 and 2008. Data for the intervening years were examined to ensure that the 2001 and 2008 data were not anomalous. The number of undergraduate, graduate and total number of degrees awarded is reported separately, but the total number of degrees awarded, equally weighting undergraduate and graduate degrees, is used for most comparisons. This procedure biases the results because there has been a general shift of resources from undergraduate programs to graduate programs, and this shift has taken place to a greater extent in some faculties and schools than in others.

Nevertheless, the two columns on the right-hand side of this table represent the changes in the total number of degrees awarded and the percentage changes between 2001 and 2008.

As noted previously, the total number of degrees awarded by the U of M increased by 25.4 per cent, but this table reports a slightly higher (26.3 per cent) increase between 2001 and 2008. The overall trend masks the substantial variation between the faculties and schools. Human Ecology, for example, increased the number of degrees awarded from 68 to 151, an increase of slightly more than 122 per cent; Nursing increased the number of degrees awarded from 195 to 366, an increase of almost 88 per cent; the School of Art increased the number of degrees awarded by 31, slightly over 63 per cent; and Physical Education and Recreational Studies increased the number of degrees awarded by 51, almost 55 per cent.

On the other hand, Agriculture and Food Sciences decreased the number of undergraduate degrees awarded from 170 to 123, a reduction of approximately 27 per cent, while the number of graduate degrees increased from 41 to 67, which is slightly more than 63 per cent. Similarly, Pharmacy decreased the number of degrees awarded from 49 to 46. Over the same period, a number of faculties and schools barely changed their graduation rates: Architecture (2.9 per cent), Education (4.7 per cent), Engineering (-0.4 per cent) and Science (-1.6 per cent).

With this information in mind, the question is how do the financial resources for each faculty and school relate to the number of students who graduate? Table 8 presents the percentage increase in the expenditure for both academic and support staff, which is the input that administrators consider crucial because many of them have said that more money is needed to educate more students.¹⁹

TABLE 8

Percentage Increases in Academic and Support Staff Expenditures and Percentage Changes in the Number of Degrees Awarded in Faculties and Schools (2001 and 2008)

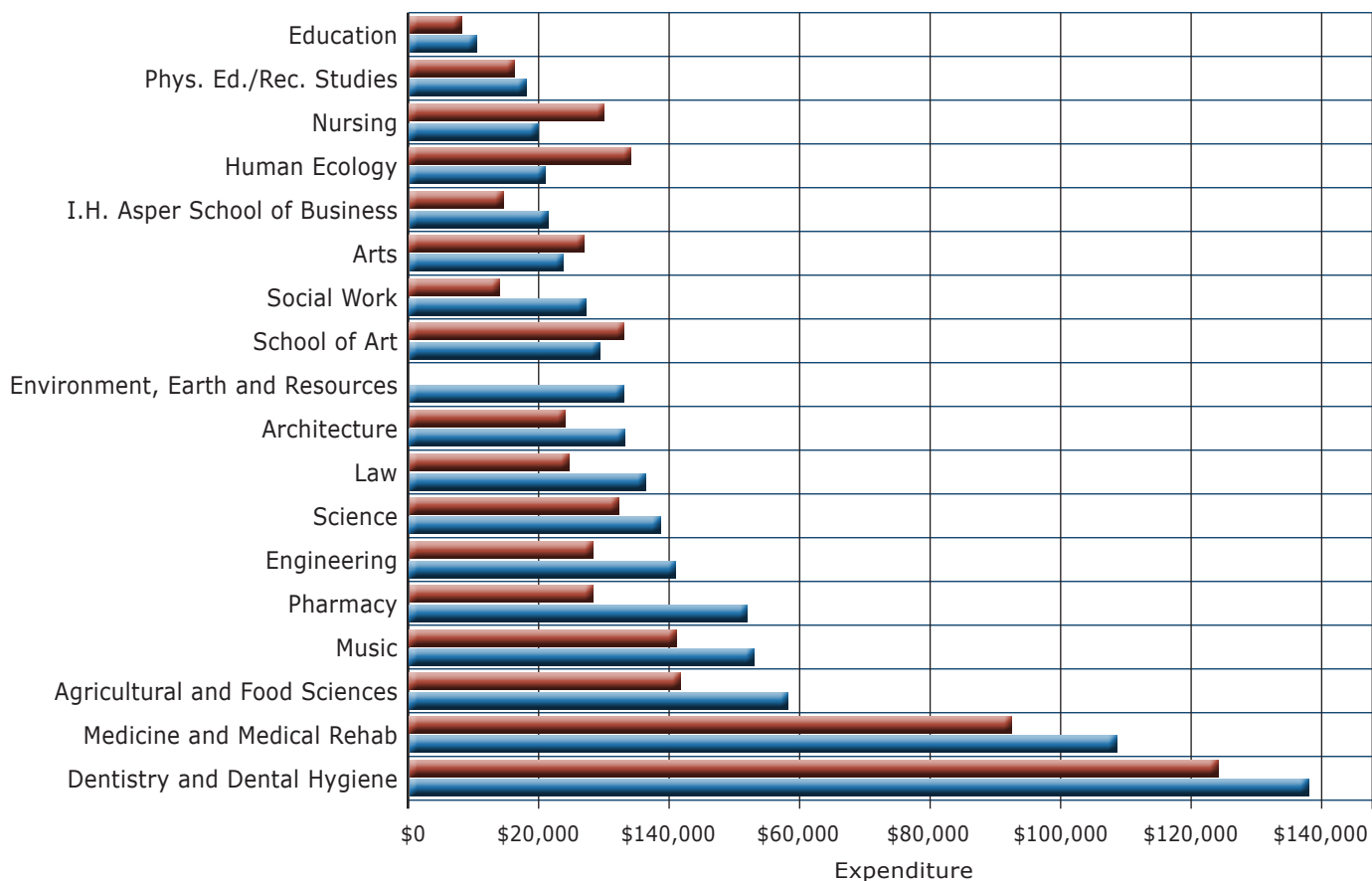
Faculties/Schools	Percentage Increases in Academic and Support Staff Expenditures	Percentage Changes in Degrees Awarded
Agricultural and Food Sciences	27.1%	-10.0%
Architecture	45.4%	2.9%
School of Art	42.4%	63.3%
Arts	24.6%	41.7%
I.H. Asper School of Business	66.2%	11.8%
Dentistry and Dental Hygiene	46.1%	30.8%
Education	32.6%	4.7%
Engineering	44.8%	-0.4%
Environment, Earth and Resources	—	—
Human Ecology	35.4%	122.1%
Law	61.4%	7.6%
Medicine and Medical Rehab	74.4%	48.2%
Music	76.0%	36.8%
Nursing	25.1%	87.7%
Pharmacy	73.8%	-6.1%
Phys. Education/Rec. Studies*	71.6%	54.8%
Science	17.6%	-1.6%
Social Work	148.2%	25.3%
Average	47.6%	26.3%

* Now called Kinesiology and Recreational Management.

Table 8 illustrates that, on the one hand, Agricultural and Food Sciences increased its expenditures on academic and support staff by 27.1 per cent and decreased the degrees awarded by 10 per cent. Engineering increased its expenditures on faculty and staff by 44.8 per cent and decreased the degrees awarded by 0.4 per cent. On the other hand, Arts increased its expenditures on academic and support staff salaries by 24.6 per cent and increased the number of degrees awarded by almost 42 per cent; Music increased its expenditures by 76 per cent and increased the number of degrees awarded by 37 per cent; and, surprisingly, Social Work increased its expenditure by 148.2 per cent but increased the degrees awarded by only 25.3 per cent.

CHART 1

Academic and Support Staff Expenditures per Academic Degree Awarded in Faculties and Schools (2001 and 2008)



2001 2008 Source:

Finally, Chart 1 presents a graph of the cost, using only the academic and support staff salaries, of each academic degree awarded in the 17 faculties and schools in 2001 and 2008, organized from the least expensive, Education, at slightly less than \$10,000 in 2008, to the most expensive, Dentistry, at slightly more than \$138,000.

This chart illustrates the more than 14-fold difference between faculties and schools in the cost of the degrees they award when only the salaries of faculty members and support staff are included in the calculations. Recall that Tables 1 and 2 illustrate that the differences between universities and provinces, at least on a couple of variables, were less than 3-fold. Thus, there is considerably more variability between faculties and schools at the U of M than there is between Canadian universities.

This chart reveals that a few faculties and schools have been highly funded while other faculties and schools have not been funded to the same extent.

On the one hand, Agriculture increased its expenditure per degree by \$16,881; Dentistry increased its expenditures per degree awarded by \$14,522; Music increased its expenditure by \$11,678; but Education increased its expenditure by only \$2,019. On the other hand, only four faculties decreased the cost of awarding degrees over the seven years: Human Ecology decreased its expenditure per degree by \$13,041; Nursing decreased its expenditure per degree by \$9,825; the School of Art decreased its expenditure by \$4,190; and Arts decreased its expenditure by \$3,169.

Obviously, for these 17 faculties and schools, there is virtually no relationship between changes in the expenditures for academic and support staff and changes in the number of degrees awarded. Therefore, contrary to the claims of many university administrators,²⁰ the more money that universities spend on increasing the number of faculty and support staff and/or on increasing their salaries does not necessarily lead to more students graduating with degrees.²¹ Thus, it seems that other things account for the weak or non-existent relationship between the resources that faculties and schools receive and the number of students who graduate.

“...for these 17 faculties and schools, there is virtually no relationship between changes in the expenditures for academic and support staff and changes in the number of degrees awarded.

Conclusion and Recommendations

Taxpayers and students pay for universities, and for their sake, it is important to ask why university administrators have not reduced the cost of educating undergraduate students in each of the faculties and schools. Except for four faculties and schools—Art, Arts, Nursing and Sciences—it takes more, rather than fewer, resources to educate a fixed number of undergraduate students even though there are increasingly more graduate students to serve as teaching assistants, more administrators and support staff to facilitate teaching and learning and substantial advances in technological support.

The reason may be quite simple. Increasingly, the self-governance ethos in universities means that professors, department heads and deans participate on committees that make institutional policies for both the allocation of resources and the enrollment of students.²² Some deans and directors have shifted resources to the education of more graduate students and away from educating undergrads. Some have increased their resources and, at the same time, decreased their graduation rates for both undergraduate and graduate students without facing negative consequences, consequences that private businesses would face if they made similar decisions.

Economist Thomas Sowell explained findings such as these with the words of a science professor at the University of Michigan who bluntly said, “Every minute I spend in an undergraduate classroom is costing me money and prestige.”²³ A lecturer at an Australian university said, “[T]eaching is used as punishment for people who don’t get grants.”²⁴ Thus, it seems that there are few, if any, incentives for university administrators to minimize costs and direct more resources toward improving the education of undergraduate students so that more of them graduate from good-quality programs. Self-governance at universities produces what economists call “rent-seeking.”²⁵

The question now: Can the U of M spend the money it receives to better serve the needs of undergraduate students? More rhetorically, what is the problem with universities taking money from provincial governments and from the students’ tuition fees and distributing different amounts to faculties and schools?

Obviously, the most important problem is that university administrators often ask for increased tuition fees from students under the guise that the money will be used for their education and that it will not be distributed to subsidize students in other faculties and schools. In addition, university administrators have often asked for money from provincial governments by implicitly claiming that all students—undergraduate, graduate and students in all faculties and schools—will be treated equally because they are all equally deserving.²⁶ But, as shown above, these grants are often distributed unequally.

For this reason, new policies are needed to realign the resources distributed to faculties and schools with the number of students, particularly undergraduates,

who complete degrees.²⁷ In fact, at least five policies could help the university allocate resources while ensuring that more undergraduate students successfully graduate. These policies are outlined here, but they need to be fleshed out before they can be implemented.

First, the federal and provincial governments need to establish an independent auditing agency for quality and standards as exists in other jurisdictions—Australia, for example, where the The Tertiary Education Quality and Standards Agency has recently been established.²⁸ The agency would critically assess and report on the costs of graduating students, both undergraduate and graduate, from the faculties and schools for all Canadian universities that receive federal and provincial funds. It would also ensure that courses and degrees are comparable across universities.

Second, the procedures used for allocating funds need to become more transparent because presently they favour faculties and schools that have been successful rent-seekers. Foremost, professors, department heads and deans or directors who might be the recipients of funds must not sit on committees that make decisions about the allocation of funds. Rather, a truly independent body—the Board of Governors, for example—should make budgetary decisions for all faculties and schools. In addition, the schools and faculties should identify their strategic outcomes before the independent body uses the information for assessing their performances. Publishing strategic plans, the criteria used in making decisions about the allocation of resources, and the data on resources used and the number of students graduated from the schools and faculties would make the process much more transparent so that faculty members, students, and taxpayers could more easily see how and why resources have been allocated. The U of M, fortunately, publishes excellent data, but most of the other universities do not.

Third, students should be empowered by the requirement that they pay the cost of their education to the faculties and schools and not to the central administrators of the university who can and do distribute it in ways that are unrelated to the cost of the students' education. Tuition fees, in total, should be approximately 40 per cent of the cost of the salaries of the academic and support staff in the faculties and schools in which the students are enrolled because universities often claim that about 40 per cent of faculty members' time is spent on teaching and supervising students.²⁹ Under present conditions at the U of M, the tuition fees for students in the Faculty of Education would be the lowest on campus. The fees for students in the Faculty of Medicine would be approximately 11-fold higher, and the fees for students in the Faculty of Dentistry would be roughly 14-fold higher.

Essentially, this policy would make the students' fees contingent upon the costs of delivering the educational programs by each of the 17 teaching units. As important, the policy would allow students to compare their fees within and between universities. As a result, students could more easily shop comparatively for courses and programs, and the teaching units and universities would suffer

serious consequences if students did not enroll or if they dropped out before completing their degrees. Importantly, each teaching unit would be forced to keep tuition fees as low as possible and enroll as many students—particularly undergraduate students—as possible while delivering good-quality educational programs.

Fourth, academic units should receive funds from the grants provided by the federal and provincial governments based on the percentage of students who graduate with degrees. If this policy were implemented, faculties and schools would be more careful in admitting ill-prepared and/or unmotivated students and more concerned about graduating the students they do admit.

At present, only about 56 per cent of U of M undergraduate students graduate with degrees within six years.³⁰ Thus, a faculty that graduated 80 per cent of its undergraduate students within six years would receive more funds than would a faculty that graduated only 40 per cent.

Finally, increases in the salaries of both deans and department heads should be tied directly to their effectiveness in restraining increases in students' tuition fees. If, for example, the tuition fees for undergraduate students in one faculty increased by 50 per cent of the increase in CPI while the tuition fees in another faculty increased by twice the increase in CPI, the dean and department heads in the first faculty would receive larger increases in their salaries than would the dean and department heads in the second faculty. This policy would align the self-interests of deans and department heads with the interests of students in keeping the costs of their education as low as possible.

Overall, these five policies would provide incentives for universities, generally, and for faculties and schools, specifically, to keep the cost of educating undergraduate students low and the quality of their programs high. Economists tell us that incentives matter; thus, effective educational policies must align incentives with fairness for students and strategic outcomes for faculties and schools.³¹ The incentives created by these policies would increase the value universities and faculty members place on teaching undergraduate students. For this reason, faculties and schools would increase their efficiency and productivity in both enrolling and graduating a cost-effective mix of undergraduate and graduate students

No doubt, it is time to seriously consider incentives that will result in the transparent administration of faculties, schools and universities so that more undergraduate students receive the education they pay for and deserve. Many universities, unlike the U of M, do not publish this sort of high-quality data. Consequently, these other universities are not as accountable as the U of M, and they need to be more responsive to the increasing demands for transparency and accountability.

Endnotes

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Further Reading

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