

BUDGET ADVISORY COMMITTEE

REPORT XXXIX

**2008-09 Enrolment Related Budget Allocations (ERBA)
Review**

March, 2009

The Budget Advisory Committee (BAC) was established by the President in 1992 to advise on budgetary matters. The current membership of the Committee includes: - Alan Shaver (Chair), Vice-President, Academic & Provost - Tom Gill, Food Science - Tom Vinci, Philosophy - Rita Caldwell, College of Pharmacy - Keith Taylor, Dean of Science – Jeff Lamb, Assistant Vice-President, Facilities Management - Ken Burt, Vice-President, Finance & Administration and Alan Dalton (Student Representative). The Committee's resource persons are: Ian Nason, Assistant Vice-President (Financial Services), Elizabeth Lane, Director of Institutional Analysis and Research, and Susan Zinck, Director of Budgets and Financial Analysis. The Committee employs an open and consultative approach to budget discussion at the University.

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Dalhousie University
Budget Advisory Committee
2008-09 Enrolment Related Budget Allocations (ERBA) Review

In the Fall of 2008 a Subcommittee of the Budget Advisory Committee conducted a review of the Enrolment Related Budget Allocations (ERBA) mechanism. The Board's Long Term Financial Planning Committee initiated the review as one of the recommendations in its final report dated November 2006. Appendix A contains the terms of reference for the review. A consultant was retained to assist the subcommittee in consulting with stakeholders and preparing a report. (Appendix B) The Subcommittee and in turn the Budget Advisory Committee, have reviewed and endorse the recommendations in the report. The following is a summary of the recommendations of the report.

The following recommendations result in changes to ERBA :

- 1) **International Differential Tuition-** In order to provide Faculties with a financial incentive to increase international enrolments the sub-committee recommends that a separate international student ERBA be implemented. International student enrolments will be tracked for increases/decreases using 2008/09 as the base year and a separate international student ERBA value will be set at a portion of the international differential fee.
- 2) **ERBA value allocation** – The sub-committee concludes that the relationship of Academic costs as a percentage of total university costs at Comparator Universities should be used as the basis for determining the percentage of ERBA allocated to Faculties. Therefore, the subcommittee recommends that the ERBA percentage allocated to Faculties should be increased to 60%. (Currently 50% is allocated to the Faculty)
- 3) **Allocation of Undergraduate Registrations (Between Faculty of Course Registration and Faculty of Student Enrolment)** - The sub-committee recommends that beginning in 2009-10 ERBA be directed 100% to the Faculty of course registration. (The current practice is to allocate one-half of an ERBA unit to the Faculty where the student selects courses (Faculty of Registration) and one-half to the Faculty of enrolment (Faculty of Student Enrolment)).

There was concern expressed that increasing the allocation to the Faculty of course registration may prompt Faculties to initiate new courses to simply replace existing courses outside the student's Faculty of enrolment. These unintended consequences should be monitored and as this is an academic issue it is best dealt with by the Senate.

In addition the subcommittee also looked at the following issues and concluded that no change to the ERBA mechanism is warranted:

- 1) **ERBA Unit Value** – Currently, ERBA unit values for each Faculty are based on tuition for programs within the Faculty. The Sub-committee recommends no change.
- 2) **Allocation of Graduate Registrations** - Unlike undergraduate enrolments graduate enrolments are allocated 100% to program enrolment. The sub-committee recommends maintaining the current allocation ratio of 100% to the Faculty for graduate students and the continuation of special arrangements between Faculties related to costs of inter-disciplinary teaching initiatives.
- 3) **GIFTs** – The sub-committee concludes that GIFTs does not support ERBA in its objective of “*enrolment growth in target areas which would be of greatest financial benefit to the University*” nor does it provide sufficient incentive as an inter-disciplinary teaching objective. This will not be implemented.
- 4) **Timing** – The current methodology in allocation of ERBA units is based on actual change in enrolment units applied one year later. The sub-committee concludes that retention of the current calculation has greater support among Faculties and will be less complex and provide for greater transparency in its application than other alternatives. The sub-committee recommends the current approach be retained.
- 5) **ERBA as a new program incentive** –The sub-committee concludes that a Business Case or equivalent analysis should be developed for all new program initiatives. ERBA may be one component of the overall funding plan for new programs.

**Dalhousie University
2008-09 ERBA Review**

Terms of Reference

The Board's Long Term Financial Planning Committee recommended that the Administration review ERBA in consultation with the BAC. ERBA was last reviewed in 2001-02 resulting in amendments to this important budget mechanism. Given the integration of the ERBA mechanism with the budget and the importance of enrolment management, the BAC is asked to undertake a review of ERBA. Specifically, the LTFPC requested that the review consider "... the utility of ERBA as a more refined incentive to encourage enrolment growth in target areas which would be of greatest financial benefit to the University". The sub-committee will be holding consultations and receiving feedback during October. In November the sub-committee plans to release a discussion paper regarding possible revisions to ERBA or an alternate mechanism(s). Following consultation and feedback, the BAC will make its recommendations to the President on this matter.

Sub Committee Membership:

Tom Vinci
Josh Leon
Liz Lane
Susan Zinck
Alan Shaver (chair)
Ken Burt
Keith Taylor

External Consultant- Eric Schibler (Fulcrum Advisory Services Inc.)

**Dalhousie University
Enrolment Related Budget Allocation (ERBA) Review**

March 2009

Prepared for: Dalhousie University

Date: March 6, 2009

Report of: BAC ERBA Subcommittee

Prepared by: Fulcrum Advisory Services Inc.

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- C Proforma GIFTs Transfer 2004/05

1.0 Purpose

The Enrolment Related Budget Allocation (ERBA) mechanism was implemented approximately twenty years ago. ERBA is the mechanism which relates enrolment increases and decreases in programs and class registrations to annual Faculty budgets.

ERBA has been reviewed twice, the first review was carried out in 1994 and the last review was carried out in 2001.

A sub-committee of the Budget Advisory Committee (BAC) was formed to review, in consultation with Faculty and Administration, issues relevant to the current ERBA mechanism.

1.1 Terms of Reference

The following terms of reference was provided to the BAC:

“The Dalhousie Board of Governor’s Long Term Financial Planning Committee (LTFPC) recommended that the Administration review ERBA in consultation with BAC. ERBA was last reviewed in 2001-02 resulting in amendments to this important budget mechanism. Given the integration of the ERBA mechanism with the budget and the importance of enrolment management, the BAC is asked to undertake a review of ERBA. Specifically, the LTFPC requested that the review consider “. . . the utility of ERBA as a more refined incentive to encourage enrolment growth in target areas which would be of greatest financial benefit to the University”.”

1.2 Consultative Process

A consultative process was undertaken with the Dean of each academic Faculty as well as the Chief Librarian and the Vice President of Finance and Administration. In addition the Sub-committee was made up of representatives from academic Faculties as well as Administrative Departments.

1.3 Evaluation Issues

The consultation focused on five specific issues to identify refinements to ERBA which will encourage enrolment growth. In addition each interviewee was asked if there were any additional issues which should be considered. The review included a set of review principles agreed to by the sub-committee in advance of the consultation.

Each interviewee was provided with a Review Consultation paper in advance which provided:

- Terms of Reference;
- Background;

- Principal Features Current Formula;
- Review Principles; and
- Issues for Comment.

2.0 Background and Context

The ERBA the sub-committee took into consideration various financial and operating circumstances within which Dalhousie University (“Dalhousie”) operates. The background and context of these factors are summarized in Appendix A. The following conclusions were drawn from this review as they relate to specific ERBA issues:

- Student enrolment grew from 10,320 students in the late 1980’s to 15,814 students in 2005-06;
- Student enrolment declined in each of the past three years to 15,197;
- The government grant is not related to student enrolment other than for a periodic recalculation of the share of the total grant allocated to universities;
- The link between the grant received from the province and enrolment is tenuous at best and does not reflect annual changes in enrolment;
- Dalhousie relied on substantial tuition increases to fund operations in the face of static government grant funding from 1991-1992 through to 2004-2005;
- The current differential fee for international students is as follows:
 - \$5,190 for international students in graduate – thesis based programs; and
 - \$7,260 for international students in all other programs;
- Direct academic expenditures approximate 60% of total university expenditures at Comparator Universities with non-academic expenditures at 40% on a full cost basis compared to Dalhousie’s academic expenditures at 65% with non-academic expenditures at 45% on a full cost basis;
- In only two Faculties does the total of Faculty tuition and other revenue exceed direct faculty costs thus producing a positive contribution to all other university operating cost in the 2004/05 analysis;
- The student faculty ratio for Comparator Universities in 2005-06 was 23.9 versus 15.4 for Dalhousie;
- Over the period 1989-90 through to 2008-09 all Faculties have received ERBA funding with the exception of the College of Continuing Education which receives revenue for Continuing Education directly;
- Less than 2% of professional Faculties current budget [with the exception of Engineering at 5.3%] was derived from ERBA payments over the period 1989-90 through to 2008-09; and
- The remaining Faculties derived between 6% and 18% of their current budget from ERBA [with the exception of Computer Science at 2.4%] over the same time period.

3.0 Principles

The following principles were provided to each Faculty Dean as part of the ERBA review outline. They were identified as questions that would be answered in the affirmative. The Deans confirmed these principles and provided some comments regarding their current effectiveness.

3.1 Support enrolment growth

ERBA plays a role in new program development as one component of the overall business case. The business case put forward for new programs should include a full analysis including reallocation of existing academic resources, additional revenue sources and net additional enrolment impact.

ERBA plays a greater role on student enrolment in existing programs with excess capacity.

3.1.1 Increase student enrolment growth

The objective of ERBA is “to provide Faculties with a financial incentive to increase university enrolments”.

This is more effective for Faculties with additional program capacity. ERBA is viewed as less effective for graduate enrolment particularly for the Professional Faculties where spaces are fixed by government agreement or maximum class limits are set by accreditation standards. Undergraduate programs are more likely to benefit from ERBA.

3.1.2 Encourage enrolment growth in targeted areas

The LTFPC recommended that this review be undertaken to look at “. . . the utility of ERBA as a more refined incentive to encourage enrolment growth in target areas which would be of greatest financial benefit to the University”.

There was little comment regarding target areas other than incremental opportunities of increasing existing program registrations where additional capacity existed.

3.2 Support split in ERBA value between Faculty and Non-Faculty Budgets

An increase or decrease in enrolment also impacts Non-Faculty budget department activities and costs, thus provides a rationale for a split in the ERBA value between Faculty and Non-Faculty budget.

In principle all Faculties agreed with sharing increases and reductions in the ERBA value between the Faculties and the Non-Faculty budgets. There were comments regarding the apparent lack of a rationale for the percentage share of ERBA between Faculties and the Non-Faculty budgets.

3.3 Support inter-disciplinary objectives

Dalhousie has an objective to increase inter-disciplinary collaboration in the delivery of educational programs and research.

While Dalhousie inter-disciplinary collaboration in the delivery of educational programs and research is an objective, no one believed that ERBA supports this objective. In some instances ERBA was viewed as an impediment.

3.4 Maintain transparency of ERBA process

A Faculty should be able to understand the impact enrolment changes will have on the Faculty budget in the form of ERBA adjustments. Increasing the understanding of how ERBA operates will increase its effectiveness.

A significant number of those interviewed expressed the opinion that the complexity of the ERBA calculation along with the lack of detailed explanation limited the transparency of the ERBA process.

The basis for the inclusion or exclusion of certain revenue sources and the share between Faculty and Non-Faculty should be clearly articulated such that the rationale is understood by those who are impacted by the results.

Consideration should be given to providing not only the schedules with the results of the calculation but an explanation of the how the result is calculated.

3.5 Maintain Faculty level calculation

ERBA is currently calculated at the Faculty level where its impact can be managed for the benefit of the Faculty.

There was significant consensus on the ERBA adjustment being applied at the Faculty budget level.

There was some concern expressed that the graduate student ERBA should be reviewed regarding its application to the Faculty of Graduate Studies and the Departments of various Faculties associated with the interdisciplinary PhD program.

4.0 Issues for Review

This section addresses the specific question regarding target areas of significant financial benefit as well as providing an analysis of the issues within the context of responses received from the various interviewees taking into consideration the current operating circumstances reviewed in Appendix A.

It is important to remember that ERBA is a proxy for allocating tuition revenue obtained or lost from an increase or decrease in overall enrolment respectively.

An unintended consequence of the ERBA calculation can be the impact on individual Faculties if class registrations change resulting from the same or similar new course offerings by another Faculty. In this instance there may be no net increase in enrolment but an increase in enrolment will benefit one Faculty with an offsetting loss to another Faculty.

4.1 Target areas of greatest financial benefit

The terms of reference requested that *“the review consider the utility of ERBA as a more refined incentive to encourage enrolment growth in target areas which would be of greatest financial benefit to the University”*. This leads us to the question what areas would be of greatest financial benefit to the University? As a result of this review the following areas have been identified as those likely to be of greatest financial benefit to the University:

4.1.1 Incremental enrolment in existing courses/programs

The Report of the Long Term Financial Planning Committee 15 November 2006 presents revenues and expenditures allocated to each Faculty based on 2004/05 financial data.

In only two cases does the total of Faculty tuition and other revenue exceed direct faculty costs thus producing a positive contribution to all other university operating costs using the 2004/05 financial data.

Thus an increase in enrolment in existing programs and existing classes must be without any significant incremental increase in academic and non-academic operating costs. Existing Faculty programs with excess capacity represent one of the greatest opportunities for financial benefit to the University. Based on the overall student to faculty ratio noted above there may be existing programs that have excess capacity.

4.1.2 International Students

The current differential fee for international students is \$5,190 for graduate (thesis based programs) and \$7,260 for all other programs. The provincial funding model has a 10% limitation on foreign student enrolment. Dalhousie University

has 1,184 international students enrolled. This represents 7.7% of Dalhousie University's total student enrolment.

Increases in foreign students will result in an overall financial benefit to Dalhousie.

4.2 Split in ERBA Value Between Faculty and Non-Faculty Budgets

The current split is 50% to the Faculty and 50% to the Non-Faculty budgets. This percentage has changed over time. Should there be any changes and if so what should they be and what reasons are there for a change in the existing split?

(a) Split of ERBA in Principle – All interviewees agreed in principle the ERBA value adjustment should be split between the Faculty and the Non-Faculty budgets.

There was however a variety of opinions were expressed regarding how the ERBA value should be calculated and allocated.

In a number of instances comments were made regarding the difficulty in understanding the ERBA calculation. In particular there was a lack of understanding regarding the Non-Faculty budget and what was an appropriate allocation.

(b) ERBA unit value – The question is what should be included in the ERBA unit value?

Historic unit value: ERBA values have been established historically based on the tuition by Faculty taking into consideration the mix of programs within the Faculty and their various tuition rates. The ERBA value has varied by Faculty.

Options: Suggestions included the inclusion of other revenue in the ERBA unit value. In particular two additions were suggested to the ERBA unit value. These included provincial grant revenue and the international differential fee paid by foreign students. Other revenues generated by Faculties are already allocated to each Faculty.

Provincial grant revenue:

Provincial grant revenue is not enrolment based. While enrolments are used to calculate the share each University receives the enrolments are based on points in time that have no bearing on current enrolment.

As noted in Appendix A no new provincial funding was added for overall system enrolment growth.

The increase in the provincial government grant in each year starting 2008/09 through to 2010/11 will be used to fund increases in the base budget as noted in

Appendix A. To the extent there may be additional funds as a result of a change in share of the total grant pool they will be available to fund strategic initiatives of the University.

Conclusion and Recommendation:

Simply stated the government grant's relationship to actual enrolment is tenuous at best and inclusion is not consistent with a direct incremental revenue based approach [e.g. tuition] to the calculation of the ERBA unit value.

The sub-committee recommends that the government grant not be included in the calculation of the ERBA unit value.

International differential fee:

The inclusion of the international differential fee in the ERBA unit value is consistent with a direct incremental revenue based approach to the calculation of the ERBA unit value i.e. it is tied directly to student enrolment.

Comment was received that the international students do require more time and effort by their Faculty, as a result of cultural differences, integrating into their programs. This additional effort also includes working with domestic students to understand these cultural differences.

In addition Non-Faculty Departments also expend additional time and expense in the recruiting and integration process.

International students are a *“target area [of enrolment growth] which would be of greatest financial benefit to the University”* as well as providing for diversity in the student experience a strategic initiative of Dalhousie. Including this differential fee when international student enrolment is increased will provide additional incentive for Faculties to seek out additional international student enrolment for existing programs.

If the recruitment of international students were to exceed 10% of student enrolment there would be no immediate impact on the provincial grant allocation as it is based on enrolments in 2003/04, 2004/05 and 2005/06. In the longer term there may well be an adjustment to the grant amount.

Conclusion and Recommendation:

Based upon its direct relationship to international student enrolment the sub-committee concludes that the inclusion of the international differential fee in a separate international student ERBA calculation is consistent with the ERBA principle “to provide Faculties with a financial incentive to increase enrolments”.

The sub-committee recommends that international student enrolments be tracked for increases/decreases in international student enrolment using 2008/09 as the

base year. This would require ERBA units to be tracked separately for international students and the international student ERBA value be set at some portion of the international differential fee for that year.

- (c) **ERBA value allocation** – The question is what should be the allocation of the ERBA value between the Faculty and the Non-Faculty budgets?

Options: The following three options along with some variations were discussed. While those interviewed during the consultative process agreed in principle that the ERBA should be shared between the Faculty and the Non-Faculty budgets they did not understand the rationale either financial or strategic that supported the actual share.

The status quo allocation option – the retention of the current 50%/50% share between the Faculty and the Non-Faculty is one option which would be consistent with no change in the derivation of the ERBA unit value based on the tuition fee. However there is no financial or strategic rationale that supports the status quo tuition allocation.

Full tuition allocation option – the adoption of the past 100% allocation to academic has been suggested as an appropriate option. This option has been used in the past. However, this option is not consistent with the principle expressed by those interviewed that the ERBA value adjustment should be split between the Faculty and the Non-Faculty.

There is no financial or strategic rationale that would support the full tuition allocation.

Full cost allocation option – the adoption of a 60%/40% academic/non-academic split is consistent with the full cost relationship of the Comparator Universities academic and non-academic expenditures [see **Appendix A Table A2**]. The rationale for a 60%/40% Faculty/Non-Faculty allocation is that it represents the ultimate target relationship of Dalhousie University operating expenditures/revenues. Applying this sharing of future academic and non-academic funding increases [or decreases] will result in these future expenditures meeting the target ratio of Comparator Universities thus leaving only the current discrepancy in this ratio as outlined in **Appendix A Table A2** to be dealt with through other budget allocation decisions.

Conclusion and Recommendation:

The sub-committee concludes that the allocation between Faculty and Non-Faculty should be equivalent to the cost relationship of the Comparator Universities.

The sub-committee recommends that beginning in 2009-10 the allocation be changed such that 60% of the ERBA is allocated to the Faculty..(consistent with

the target ratio) The proforma impact on ERBA by Faculty over the past three years is illustrated in **Appendix B**.

4.3 Allocation of Undergraduate Registrations (Between Faculty of Course Registration and Faculty of Student Enrolment)

The current practice is to allocate one-half an ERBA unit to the Faculty of course registration and one-half to the Faculty of student enrolment for undergraduate students .

Allocation of ERBA Unit in Principle –in all instances those interviewed agreed in principle with sharing ERBA between the Faculties of course registration and the Faculty of student enrolment.

Options: While those interviewed during the consultative process agreed in principle that the ERBA should be shared between the Faculties of course registration and the Faculty of student enrolment, they were not sure how the current share was determined. No particular rationale either financial or strategic was discussed during the consultative process. Various options were discussed by the sub-committee; principal among these were the following two options.

(a) Status Quo 50%/50% Allocation of ERBA Unit - a number of comments indicated a lack of understanding as to how the current share was calculated.

There is no financial rationale that would support the 50%/50% allocation between the Faculties of course registration and Faculty of student enrolment. Administrative costs which relate to the registration of the student may vary in the Faculty of student enrolment but with only limited exceptions the Non-Faculty Departments are responsible for these services and the Faculty is responsible for delivery of academic courses. The cost of teaching resides in the Faculty in which the student is registered in the course.

The allocation of ERBA to the Faculty of course registration is consistent with Dalhousie's inter-disciplinary teaching initiative and consistent with the financial benefit following the student.

The sub-committee concludes that the current 50%/50% allocation of the ERBA value between the Faculty of course registration and the Faculty of student enrolment while consistent with Dalhousie's inter-disciplinary teaching initiative is not consistent with a rational cost allocation.

(b) 100% Course Registration - the allocation of ERBA 100% to Faculty of course registrations supported by financial rationale that substantially all the cost of course delivery are borne by the Faculty delivering the course with only limited costs to the Faculty where the student is enrolled.

This allocation is also consistent with supporting Dalhousie's inter-disciplinary teaching initiative.

(c) Conclusion and Recommendation

The sub-committee concludes that a 100% allocation of the ERBA value for undergraduate enrolments to the Faculty of course registration is consistent with the financial rationale that substantially all the cost of course delivery are borne by the Faculty delivering the course and with Dalhousie's inter-disciplinary teaching initiative.

The sub-committee recommends that beginning in 2009-10 the cost allocation of ERBA be directed 100% to the Faculty of course registration. The impact on ERBA by Faculty over the past three years is illustrated in **Appendix B**.

Unintended consequences - One concern expressed during the consultative process was that "*ERBA motivates a Faculty to require students to take courses in their own Faculty and not others.*"

There was also concern expressed that increasing the allocation to the Faculty of course registration may prompt Faculties to initiate new courses to simply replace existing courses outside the student's Faculty of enrolment.

These unintended consequences should be monitored. These are academic issues which can not be dealt with by budgetary mechanisms but are best dealt with by the Senate.

4.4 Allocation of Graduate Registrations

Unlike undergraduate enrolments graduate enrolments are allocated 100% to program enrolment. Class registrations by Faculty are not considered. This "*division for graduate students has not been employed partly because of the substantial technical difficulties that would result from the non-uniform credit requirements of graduate programs and the variation by program in the credits assigned to the thesis.*"¹

The 2001 review recommended implementation of Graduate Inter-Faculty Teaching Transfers (GIFTs). The purpose of GIFTs was outlined in Appendix B enclosed in the BAC Report XXI dated November 2001 as follows:

"The Graduate Inter-Faculty Teaching Transfers (GIFTs) mechanism will compensate Faculties that provide teaching at the graduate level to students who are enrolled in programs offered by Faculty for "service" teaching at the graduate level.

¹ Dalhousie University Budget Advisory Committee; Linking Enrolments and Budget Envelopes; A Discussion Paper on the Future of Enrolment Related Budget Allocations (ERBA) October 2, 2000

It is a companion to the Enrolment-Related Budget Allocations mechanism that does not incorporate graduate class registrations in its allocation calculation. GIFTs are designed to encourage interdisciplinary teaching at the graduate level.”

To date GIFTs has not been implemented. What action, if any, should be taken to implement GIFTs?

Appendix C illustrates the actual transfers that would have taken place in the 2004/05 Academic Year had GIFTs been implemented.

(a) Graduate Enrolment allocated 100% to Faculty – the majority of all interviewees agreed with the current graduate allocation of 100% to Faculty and no division between the Faculty of student enrolment and the Course of student registration. This position is derived from the rationale that the “division for graduate students has not been employed partly because of the substantial technical difficulties that would result from the non-uniform credit requirements of graduate programs and the variation by program in the credits assigned to the thesis.”²

There are instances where cost allocation/sharing issues associated with interdisciplinary teaching arrangements have been addressed directly by the Faculties themselves with respect to graduate students.

Conclusion and Recommendation:

Leaving the issue of revenue sharing for interdisciplinary teaching at the graduate level to the GIFTs issue, the sub-committee concludes that the current graduate allocation of 100% to Faculty of student registration has general acceptance with special arrangements between Faculties to cover costs associated with specific inter-disciplinary teaching initiatives.

The sub-committee recommends maintaining the current allocation ratio of 100% to the Faculty for graduate students and the continuation of special arrangements between Faculties related to costs of inter-disciplinary teaching initiatives.

(b) GIFTs – is designed as “*a companion to the Enrolment-Related Budget Allocations mechanism.*”³ As well “*GIFTs is designed to encourage interdisciplinary teaching at the graduate level.*”⁴

GIFTs was not implemented and is not viewed as having a significant impact by the majority of interviewees:

² Dalhousie University Budget Advisory Committee; Linking Enrolments and Budget Envelopes; A Discussion Paper on the Future of Enrolment Budget Allocations (ERBA) October 2, 2000.

³ BAC Report XXI dated November 2001 Appendix B

⁴ BAC Report XXI dated November 2001 Appendix B

GIFTs as compensation for “service” teaching objective – is “*designed to encourage inter-disciplinary teaching at the graduate level*”. This assertion was questioned by the majority of those interviewed as to whether this objective can be met by GIFTs as currently designed.

In the ERBA calculation a net increase in enrolment is rewarded with a net increase in revenue and vice versa with a net decline in enrolment. The GIFTs mechanism rewards some at the expense of others and is not based on a change in enrolment but on the number of inter-disciplinary courses taken by graduate students. There is no overall incentive for increases in inter-disciplinary course registrations taken or penalty for a reduction in inter-disciplinary course registrations.

Insofar “*as a more refined incentive to encourage enrolment growth in target areas which would be of greatest financial benefit to the University*”:

- GIFTs does not focus on increasing enrolment in existing programs and existing classes [primarily undergraduate programs/courses] without any incremental increase in academic and non-academic operating costs;
- GIFTs does not include in the unit value the current differential fee for international students; and
- There is no evidence that suggests GIFTs has a positive influence on graduate student enrolment.

Based on these factors GIFTs likely does not support “enrolment growth in target areas which would be of greatest financial benefit to the University”.

GIFTs as an inter-disciplinary teaching objective – It was viewed as not providing sufficient incentive and may be a disincentive. There is no net new money for inter-disciplinary teaching courses in the overall academic system. Thus for every positive incentive there is a negative penalty. It would appear that Dalhousie University’s strategic initiative with respect to inter-disciplinary co-operation should be encouraged through other budget mechanisms. GIFTs does not support the ERBA objective.

Conclusion and Recommendation:

The sub-committee concludes that GIFTs does not support ERBA in its objective of “*enrolment growth in target areas which would be of greatest financial benefit to the University*” nor does it provide sufficient incentive as an inter-disciplinary teaching objective.

The sub-committee recommends that GIFTs be evaluated as part of the overall budget process as it does not relate to ERBA in any meaningful way.

4.5 Timing Methodology Associated with Current Allocation

The current methodology in allocation of ERBA units is based on actual historic change in enrolment units applied one year later i.e. a one year lag between enrolment changes and ERBA funding. This delay in funding does not necessarily match the need for resources to service the enrolment increase. Is there a better methodology that would alleviate this delay? e.g. smoothing changes over a longer period?

(a) Period of the ERBA Calculation – is a function of the precision of the calculation and how soon the calculation can be made. Since ERBA is based on the change from one year to the next there are two options:

Completed year's basis - This option is based on both the prior year and previous [base] year enrolment statistics which are complete and final. This assumes that the ERBA adjustment will be calculated in the second year following the base year. The calculations will be based on the actual results. This is the basis upon which the ERBA adjustments are currently calculated.

Forecasted years basis - It is also possible to forecast the current year and compare it to the prior [base] year. Only the prior year enrolment statistics will be final and complete. However there will always be changes when actual enrolment statistics are available at the end of the current year. Thus adjustments to the ERBA calculation will be necessary making the calculation more complex and less transparent.

Conclusion and Recommendation:

In an effort to maintain transparency in the ERBA process the sub-committee concludes that the use of actual results upon which to base the ERBA calculation is the best option. The use of forecasts and subsequent adjustments will increase the complexity of the calculation and explanations thus reducing the transparency.

The sub-committee recommends that the ERBA calculations be based upon actual results.

(b) Adjustment to ERBA timing –is a function of the number of annual student enrolment results utilized in the calculation. There are two options for consideration:

Status Quo - This option assumes that the calculation is based on a single year statistical change. This is the way the ERBA unit adjustment has been calculated since ERBA was implemented.

Smoothing - This option is based on averaging a number of ERBA year calculations. The number of years to be included in the averaging calculation was expressed in the comments by only two Faculties. The most likely smoothing would be based on a moving average of annual ERBA calculations.

Variations on the smoothing option could include:

- dependency on size of change;
- smoothing only on decreases; and
- smoothing on both the way up and the way down.

Which smoothing option should be considered the most appropriate? As many interviewees agree with the status quo as those looking for a smoothing option. A couple of those choosing smoothing prefer the status quo when there is an increase. Thus the majority do not necessarily want to have any change in the timing when there is an increase in ERBA.

There are as many who would want smoothing in the event of a decrease as compared to those who prefer the status quo. While smoothing decreases may be an appropriate adjustment to mitigate the impact of negative changes it will increase the complexity of the calculation and may require smoothing from then on for purposes of fairness.

It may also be appropriate to limit this smoothing adjustment to negative adjustments exceeding a minimum dollar or percentage reduction value. This however will increase the complexity of the calculation.

There is no overall consensus on the single year or multi year calculation of ERBA.

Other adjustments to timing of ERBA – A number of alternatives to advance funding of ERBA increases were suggested.

The concept of an advance is similar to basing ERBA on a forecast when making the calculation. As previously noted this will add to the complexity of the calculation and requires another adjustment when the actual results are known. There is a slightly different nuance to this option as this adjustment is phrased as an advance.

Conclusion and Recommendations:

The sub-committee concludes that retention of the existing single year calculation has the greater support among the Faculties and will be less complex and provide for greater transparency in its application. There are other budget mechanisms [e.g. carry-forward of surpluses, etc.] to ease any significant ERBA generated budget reductions.

The sub-committee recommends the retention of the single year ERBA calculation of adjustments.

4.6 Does ERBA work for new program initiatives?

How does ERBA work with new program initiatives? Are there changes that should or could be made to ERBA to properly fund new initiatives?

(a) ERBA as a new program incentive –In all interviews ERBA was characterized as important but not the only support required for new program initiatives.

New programs were identified as new courses or combinations of new courses of interest to potential students.

As articulated by one Dean *“It is very risky to start a new program based on ERBA. If the University wants to start new programs it needs to go to a more aggressive cut back. Then each Faculty should make its own proposal for add back with ERBA as a bonus on top. We can not establish new programs whose success is based on ERBA. ERBA works for repackaging of existing courses”* [not the establishment of new courses/programs].

Given the gap in student teacher ratio at Dalhousie relative to the Comparator Universities there may be an opportunity for increased enrolment without significant increases in academic expenditures. Within individual Faculties an assessment by program could identify areas from where resources could be transferred to meet other areas of strong student demand or interest. Identifying such areas for increased enrolment would meet the ERBA objective of identifying *“target areas which would be of greatest financial benefit to the University.*

Conclusions and Recommendations:

The sub-committee concludes ERBA can be a significant influence in increasing existing course enrolment where additional capacity exists. ERBA can also support repackaging existing courses with additional capacity into new programs that attract additional student enrolment to those courses/programs.

(b) Other funds required for new programs – In all interviews additional funding sources other than ERBA were identified as necessary to establish new program initiatives. ERBA was viewed as one, but not the only, funding component required for new program initiatives.

It is clear from the responses that new programs/courses require greater funding initially than can normally be provided by ERBA. ERBA may be a significant component of ongoing funding for new program initiatives at maturity but not necessarily the only source.

The preparation of a comprehensive Business Case that would evaluate all capacity factors [physical facilities, time of use, reallocation of existing academic resources, utilization of other existing courses in other Faculties, other revenue sources, etc.] including the impact of ERBA could be the basis for implementation of new programs.

Conclusion and Recommendation:

The sub-committee concludes that a Business Case or equivalent analysis should be developed within the overall budget preparation for new program initiatives and not within the ERBA component of the budget process.

The sub-committee recommends that new initiatives be considered outside the ERBA budget process.

4.7 Other Issues

Are there other issues associated with ERBA that need to be addressed?

The following additional issues were articulated during the interviews that while they may be important are not issues that relate directly to ERBA.

- (a) **Central Pooling** – One interviewee commented that “*consideration should be given to central pooling with applications based on needs*”. In this scenario ERBA would be held centrally. Allocations would be made to Faculties based on the merit of applications received.

This issue relates to new program initiatives funding and should be considered within the context of the overall budget plan and not solely with respect to the ERBA budget component.

- (b) **Research Funding** – One interviewee commented “research dollars are needed to fund graduate students and Researchers [full time academic faculty] are needed to obtain research dollars. Research draw should be a key factor in assessing overall benefits to new program development, as some inter-disciplinary programs may have low enrolment but high research funding potential.”

This comment refers to specific criteria for evaluating support for new program initiatives and should be considered within the context of the overall budget plan and Dalhousie strategic initiatives and not solely with respect to the ERBA budget component.

- (c) **ERBA category for inter-disciplinary programs** – These comments were supplied by the Faculty of Graduate Studies: “There should be an ERBA category that encourages the growth of inter-disciplinary programs at the graduate level, either by having ERBA funds go to inter-disciplinary programs directly (rather than one or more faculties) where appropriate or by the course for professional masters degree programs. The Faculty of Graduate Studies needs a solid foundation of central budget funding with ERA like funding incentives for managing the effects of enrolment growth and for targeting specific program growth at a university wide level.”

Inter-disciplinary programs is a strategic initiative of the University and not the focus of ERBA. The Inter-disciplinary program initiative should be considered within the context of the overall budget plan and not solely with respect to the ERBA budget component.

- (d) **ERBA and capacity** – This comment was supplied by the Faculty of Graduate Studies: “Make a clear connection between ERBA and capacity (faculty, space, and scholarship funds) planning so that ERBA reinforces capacity planning at the graduate level.”

This statement also holds true for undergraduate level capacity planning to ensure adequate capacity exists, not only academic class capacity but other capacity supports. The objective is to increase enrolment nearer to the Comparator Universities. However there may be other barriers that would limit the effectiveness of ERBA e.g. physical space/class room size, residence, etc? This issue is not a direct ERBA issue but indirectly could have a significant impact on the effectiveness of ERBA. This is an issue best dealt with within the context of the overall budget plan and not with respect to the ERBA budget component.

Conclusion and Recommendation:

The sub-committee concludes that these additional issues are outside the ERBA budget process.

The sub-committee recommends that these issues be considered in the context of the overall budget plan.

Dalhousie University Enrolment Related Budget Allocation (ERBA) Review

Appendices

- A. Background and Context ERBA Review 2009**
- B. Proforma Impact of Proposed 2009 Changes in ERBA**
- C. Proforma GIFTs Transfer 2004/05**

Prepared for: Dalhousie University

Date: March 2009

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A. Background and Context ERBA Review 2009

This appendix outlines the background context in which the sub-committee evaluated the various issues and principles associated with the ERBA review.

A.1 Context

In evaluating the ERBA issues it is important to understand the various financial and operating circumstances within which Dalhousie University (“Dalhousie”) operates.

A.1.1 Student Enrolment Overview

Student enrolment grew from 10,320 students in the late 1980’s to 15,549 students in 2005-06. Since then student enrolment has reached a plateau with student enrolment in 2008-09 at 15,377.

A.1.2 Government Grant

The following table summarizes the history of government grants received by Dalhousie from 1992 to 2008.

Table A1: Government Grants and Student Enrolment 1992 to 2008

Year	Grant (000’s of \$)	Grant (000’s of 1992 Constant \$)	Student Enrolment	Grant Per Student (\$)	Grant Per Student (1992 \$)
1992	107,969	107,969	12,094	8,927	8,927
1993	107,073	105,063	12,452	8,599	8,437
1994	106,270	104,073	12,412	8,562	8,385
1995	101,305	97,061	12,359	8,197	7,853
1996	100,097	94,495	12,322	8,123	7,669
1997	91,873	85,098	12,410	7,403	6,857
1998	91,239	83,674	12,561	7,264	6,661
1999	95,329	86,567	12,773	7,463	6,777
2000	97,214	85,675	12,798	7,596	6,694
2001	98,700	84,921	12,764	7,733	6,653
2002	100,842	85,188	13,643	7,391	6,244
2003	100,886	81,750	14,761	6,835	5,538
2004	103,395	83,135	15,528	6,659	5,354
2005	104,929	82,464	15,814	6,635	5,215
2006	110,920	85,329	15,549	7,134	5,488
2007	116,718	87,770	15,440	7,559	5,685
2008	121,516	90,161	15,197	7,996	5,933

Table A1 includes grant and enrolment data from the Technical University of Nova Scotia (TUNS) for the period 1992 to 1997 prior to its amalgamation with Dalhousie.

A new Memorandum of Understanding (MOU) with the province provides funding to cover the estimated increase in costs to universities for the three year period from 2008-09 to 2010-2011. In return the University will freeze tuition for all students at the 2007-08 levels.

The enrolment base used by the government for grant allocation purposes prior to 2008 dates back to the three years 1994-1995 to 1996-1997. This enrolment level and mix has remained unchanged until the current year. The 2008-2009 year is the first year of a four year phase in of 2003-2004, 2004-2005, and 2005-2006 enrolments in the provinces funding distribution model.

As illustrated in **Table A1** the government grant is not related to student enrolment other than for a periodic recalculation of the share of the total grant allocated to universities.

During the period 1995 to 2001 the actual grant received declined and only recovered to 1995 levels in 2002. This period coincides with the ERBA share allocated 100% to Faculty and no allocation to Non-Faculty budgets.

The level of government grants declined over the period from 1992 to 1998 and only recovered to its 1992 level in 2006. In constant 1992 dollars the government grant has not recovered to 1992 levels.

In the new MOU the province updated its funding distribution model using enrolments in 2003-04, 2004-05, and 2005-06. This MOU reflects:

- a redistribution of existing funding to universities based on revised proportional shares; however
- no change in the funding model program weightings; and
- no new funding for overall system enrolment growth.

The provincial operating grant will increase \$14.1 million in 2008-2009 and includes:

- \$12.2 million to fund all Dalhousie operating budget increases; and
- \$1.9 million related to phasing in the impact of Dalhousie's increased share of the total grant pool.

The redistribution provided for in the MOU allows for a phase in of increases to Dalhousie University over four years (by 2010-11).⁵

While there is a link between the grant received from the province and enrolment it is tenuous at best and does not reflect annual changes in enrolment.

⁵ Source: Dalhousie University Finance Department.

A.1.3 Tuition funding

Since 1991-92 Dalhousie has relied on substantial tuition increases to fund operations in the face of static government grant funding from 1991-1992 through to 2004-2005.

A.1.4 History of international differential fees

The BAC issued a discussion paper on International Student Fees in November 2004. The differential fee is a separate fee charged to international students in addition to regular program tuition.

As an outcome of the BAC XXX report, in 2005-06 Dalhousie began implementing annual increases in international fees of \$810. In the first year the fee was increased for all international students, but an offsetting scholarship was provided to graduate students in thesis programs. In 2006-07 the fee was decreased for these thesis students and the scholarship eliminated. Dalhousie moved to a two rate structure for international students with those in thesis programs not subject to the \$810 increase. The differential fee is currently held at 2007-08 rates as required by the new MOU with the province.

The current differential fee for international students is as follows:

- \$5,190 for international students in graduate – thesis based programs; and
- \$7,260 for international students in all other programs.

A.1.5 Comparison of operating expenditures and student Faculty ratios

In comparison to eight Canadian Comparator Universities, Dalhousie spends more on Academic areas than on non-academic areas. A comparison to the four largest Canadian universities produces a similar result.

The following table summarizes this comparison over the periods 2005-06 and 2006-07.

Table A2: Comparison of Operating Expenditures and Student Faculty Ratios

	Dalhousie University	Comparator Universities	Larger Universities
2006-07 Operating Expenditures %			
- Academic	64.7%	60.1%	61.4%
- Non-Academic	35.3%	39.9%	38.6%
2006-07 Student Faculty Ratio	14.0	22.3	23.6
2005-06 Operating Expenditures %			
- Academic	66.3%	60.8%	60.3%
- Non-Academic	33.7%	39.2%	39.7%
2005-06 Student Faculty Ratio	15.4	23.9	23.2

Direct academic expenditures approximate 60% of total university expenditures at Comparator Universities with non-academic expenditures at 40% on a full cost basis compared to Dalhousie's 65% academic expenditures and 35% non-academic expenditures.

A.1.6 Faculty Contribution

The Report of the Long Term Financial Planning Committee 15 November 2006 presents revenues and expenditures allocated to each Faculty based on 2004/05 financial data.

In only two cases does the total of Faculty tuition and other revenue exceed direct faculty costs thus producing a positive contribution to all other university operating cost in the 2004/05 analysis.

A.1.7 ERBA Impact

ERBA was established in 1989 -1990 to provide Faculties with a financial incentive for enrolment growth, a disincentive for enrolment decline, and greater predictability for resourcing new programs.⁶

Over the period 1989-90 through to 2008-09 all Faculties have received ERBA funding with the exception of the College of Continuing Education which is excluded from ERBA (all revenue for Continuing Education courses flows directly to the College).

The following table outlines the dollar amount received by each Faculty and the percentage it represents of its current budget.

⁶ Source: Report of the Long Term Financial Planning Committee 15 November 2006; Section M – Enrolment Related Budget Allocation Policy

Table A3: ERBA Payments by Faculty 1989/90 to 2008/09

(‘000’s of dollars)

Faculty	ERBA Received	Current Budget Estimate	ERBA as % of Current Budget
Health Professions	\$3,090	\$19,000	16.3%
Arts and Social Sciences	2,728	17,000	15.9%
Management	1,610	9,000	18.1%
Science	1,419	23,000	6.2%
Engineering*	739	14,000	5.3%
Medicine	488	30,000	1.6%
Architecture*	398	3,900	1.0%
Computer Science*	118	5,000	2.4%
Graduate Studies	115	1,000	1.2%
Dentistry	32	8,000	0.4%
Law	12	8,000	0.1%
Total	\$10,749	\$137,900	7.8%

*since amalgamation in 1997-98

B. Proforma Impact of Proposed 2009 Changes in ERBA

This Appendix is intended to provide the reader with an illustration of the impact of the proposed changes to the ERBA mechanism. It summarizes the proforma impact on the actual ERBA calculations [column 1] by Faculty for the three years ending March 30, 2009 had the changes been in effect for those years. The first impact is based on the proposed change in the split in the ERBA value between the Faculty budgets and Non-Faculty budgets from 50%/50% to 60%/40% respectively. Column 2 shows the change to the actual ERBA calculation. The change is equivalent to 20% of the actual ERBA calculation for the year ending March 31st.

The second impact, based on the proposed change in the allocation of ERBA unit for undergraduate students between Faculty of course registration and Faculty of student enrolment from 50%/50% to 100% course registrations, is shown in Column 3. It assumes a 60%/40% adjustment in split between the Faculty and non Faculty budgets has been implemented. Since these changes relate the unit allocation to courses the changes are not consistent across all Faculties.

Column 4 shows the total proforma ERBA after adding the impact of columns 2 and 3 to column 1.

Table B1: Modeling of Impact of Changes in ERBA for 2008-09

(000's of dollars)

	(column 1) Actual ERBA (Faculty Budget 50% and 50% Faculty of Course Registration)	(column 2) Change in Allocation to Faculty Budget 60%	(column 3) Change in Allocation 100% to Faculty of Course Registration	(column 4) Proforma ERBA
Architecture	57	12	(15)	54
Arts & Social Sciences	(660)	(133)	(85)	(878)
Biomedical Engineering	7	1	0	8
Computer Science	35	7	53	95
Dentistry	1	0	(14)	(13)
Engineering	(2)	0	44	42
Graduate Studies	(10)	(2)	0	(12)
Health Professions	157	32	(25)	164
Law	4	1	7	12
Management	83	16	(201)	(102)
Medicine	7	1	(47)	(39)
Science	(119)	(24)	163	20
Total	(440)	(89)	(120)	(649)

Table B2: Modeling of Impact of Changes in ERBA for 2007-08

(000's of dollars)

	(column 1)	(column 2)	(column 3)	(column 4)
	Actual ERBA (Faculty Budget 50% and 50% Faculty of Course Registration)	Change in Allocation to Faculty Budget 60%	Change in Allocation 100% to Faculty of Course Registration	Proforma ERBA
Architecture	(97)	(19)	(79)	(195)
Arts & Social Sciences	(134)	(27)	8	(153)
Biomedical Engineering	(27)	(5)	0	(32)
Computer Science	(122)	(24)	14	(132)
Dentistry	6	1	0	7
Engineering	33	7	(66)	(26)
Graduate Studies	19	3	0	22
Health Professions	502	101	188	791
Law	(128)	(26)	(35)	(189)
Management	94	19	(34)	79
Medicine	(136)	(28)	(71)	(235)
Science	(354)	(70)	147	(277)
Total	(344)	(68)	72	(340)

Table B3: Modeling of Impact of Changes in ERBA for 2006-07

(000's of dollars)

	(column 1)	(column 2)	(column 3)	(column 4)
	Actual ERBA (Faculty Budget 50% and 50% Faculty of Course Registration)	Change in Allocation to Faculty Budget 60%	Change in Allocation 100% to Faculty of Course Registration	Proforma ERBA
Architecture	49	10	(5)	54
Arts & Social Sciences	6	1	(30)	(23)
Biomedical Engineering	10	2	0	12
Computer Science	(349)	(70)	69	(350)
Dentistry	(1)	0	0	(1)
Engineering	59	12	(13)	58
Graduate Studies	27	5	0	32
Health Professions	75	15	(17)	73
Law	17	3	15	35
Management	(92)	(18)	(49)	(159)
Medicine	(16)	(3)	(51)	(70)
Science	(312)	(63)	(18)	(393)
Total	(527)	(106)	(99)	(732)

C. Proforma GIFTs Transfer 2004/05

The following table illustrates the proforma GIFTs transfer amounts for the year 2004/05.

Faculty	Teaching Other Students	Teaching by Other Faculties	Net Teaching	Tuition Amount	GIFTs Transfer
Architecture & Planning	5	6	-1	\$324.53	-\$324.53
Arts & Social Science	32	19	13	\$324.53	\$4,218.86
Computer Science	17	45	-28	\$324.53	-\$9,086.78
Engineering	17	47	-30	\$324.53	-\$9,735.83
Health Professions	42	25	17	\$324.53	\$5,516.97
Law	0	3	-3	\$324.53	-\$973.58
Management	73	47	26	\$324.53	\$8,437.72
Medicine	13	19	-6	\$324.53	-\$1,947.17
Science	76	64	12	\$324.53	\$3,894.33
Total	275	275	0		\$0.00