RYERSON UNIVERSITY
ACADEMIC POLICIES AND PROCEDURES

STUDENT ACQUISITION OF LAPTOP COMPUTERS AS A MANDATORY
ACADEMIC PROGRAM REQUIREMENT

Senate Approval Date: May 1, 2001

Policy Number: 146

Introduction

In the University and in the future workplaces of our graduates, computer technology and computer applications are pervasive and constantly changing. In this environment, the benefits of computer applications to a university program's curriculum and pedagogy may be more effectively realized if all students in a program have access to common hardware and software for scheduled instructional activities and for learning outside the classroom. Therefore, academic programs may adopt mandatory student acquisition of laptop computers as a program requirement.

Purpose

This policy guides academic program decisions regarding mandatory acquisition of laptop computers by students. The purpose of the policy is to provide a framework of common understanding concerning the process and criteria for such decisions, in order to ensure that the primary rationale for requiring laptops is the enhancement of teaching and learning within the program.

Principles

•   The most important consideration in any educational decision is the effect of the decision on the learning process and learning outcomes. A requirement for student laptop acquisition should be introduced only after it has been demonstrated that substantial enhancement of these processes and outcomes would be achieved.

•   The adoption of laptops will change the physical environment in which students work. Consideration must be given to the positive (or negative impacts) this may have on students, including those with disabilities.

•   A mandatory laptop requirement should be accompanied by review and potential revision of the program curriculum, to ensure that the value of laptops to students is maximized.

•   The direct and indirect costs to students and to faculty should be evaluated and weighed in relation to educational benefits. Since much of the direct cost of the adoption of laptops is borne by the student, this cost must be justifiable, by positive educational processes and outcomes and the commitment of the program's faculty to effective use of the technology, in order to produce these outcomes.

Policy

Adoption of a mandatory laptop provision for an existing Ryerson program is regarded as a significant academic revision which must be brought to Senate for approval, following a review by the Academic Standards Committee. In addition, the resource and technical considerations must be reviewed by the Office of the Vice President, Academic. The Senate will consider the case brought before it in the general context of the academic and resource issues raised by the proposal, with specific attention to the criteria set out in the attached Guidelines, which will be maintained by the Vice President, Academic.

Authority

The Vice President Academic is responsible for administration of this policy and may update or revise the guidelines as required.

Revised: 10 May 2001

Student Acquisition of Laptop[1] Computers as a
Mandatory Academic Program Requirement

Guidelines

Adoption of a mandatory laptop provision for an existing Ryerson program is regarded as a significant academic revision which must be brought to Senate for approval. The Academic Standards Committee will assess the academic merit of the proposal. Technical and resource issues will be reviewed by the Office of the Vice President, Academic. The rationale for the proposed change should be based on the following criteria:

Academic Issues
1. Evidence that laptops will contribute to the desired educational outcomes for the program:

    For a variety of reasons, evaluating educational outcomes is not a clear-cut process, and programs need not have rigorous data on outcomes before being allowed to proceed. However, demonstrating that consideration has been given to such issues is a central element of the approval process.

    The following questions should be considered:

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[1] A laptop or notebook computer is a portable personal computer that can easily be transported and conveniently used in temporary spaces such as in classrooms, libraries and at meetings. A laptop computer has similar functionality to a standard desktop personal computer, typically including processor, display, large volume data storage, use of standard software packages and network connectivity.

a. What are the current outcomes? How will laptops affect these? What additional outcomes are expected from adoption of a laptop program? Why are these not achievable in the current environment?

b. How will the use of laptops in a program provide students with skills demonstrated to be relevant to their careers.

2. Evidence of positive effects on the learning process:

Any proposal for laptop adoption must identify and assess appropriate and/or desired changes in the learning process that will be facilitated by laptop computer use by all students.

The following questions should be considered:

a. How will the educational process change?

b. What aspects of the curriculum and learning process will change, and in what ways?

c. Will students have more class time or less? More assignments and other work, or less?

d. How will class activities change? Will student interactions (in and out of class) change significantly?

e. Will laptop computer use enhance contacts with faculty or limit them? Will electronic communication count as office hours?

3. An evaluation of the impact of laptops on physical accessibility:

The adoption of laptops will change the physical environment in which students work. Consideration must be given to the impact (positive or negative) this may have on students.

The following questions should be considered:

a. How will the change to laptops change the physical environment of students? How will these changes affect learning?

b. What positive or negative impacts will this have on students with disabilities?

4. Integration of laptops into the program curriculum:

The curriculum for the program as a whole should be reviewed with the objective of maximizing the value of laptops to the students.

The following questions should be considered:

a.   Can the student follow courses of study that make use of the laptop throughout?

b.   Will the courses be developed using common software so that students don't have to learn different use/search interfaces for each course?

c.   Will the use of the laptop in a program provide the student with a continuity of learning experience from course to course?

d.   Which courses in the program will use the laptop to some advantage?

5. Identification of modes of delivery suitable to laptops:

Each course should be reviewed with respect to appropriate modes of delivery and the implications of laptop use.

The following questions should be considered:

a.   In which courses is the mode of delivery enhanced by the use of laptops?

b.   What uses will be made of the lap tops in each course, and how will these uses differ from use of desk-top systems?

6. Implications of use of laptops in evaluation:

If evaluation using the computer is proposed, many issues related to methods of evaluation arise.

The following questions should be considered:

a.   How may the student practice and perform the assignments on the laptop?

b.   How may the student submit their individual or team results?

c.   Will the laptop be used for in-class quizzes and tests?

d.   How are results, comments, and feedback to be communicated to the student?

7. Commitment of faculty to use of the technology:

In order to fully realize enhanced learning outcomes, there needs to be a commitment by the program faculty to use the technology.

The following questions should be considered:

a.   How is the benefit to students tied to faculty commitment to use the new medium?

b. Is the benefit worth the costs, both to the students and the program?

Technical and Resource Issues

1. Marketing and cost implications of laptop adoption:

   The laptop requirement's positive and negative effects on marketing of the program should be carefully evaluated.

   Costs to prospective students and to the university must be detailed in a business plan.

   The following questions should be considered:

   a. What is the motivation for this move to laptops? What is the likelihood of continued benefit from laptops during the next five years?

   b. Will the University encounter difficulty in meeting its target for entering students in the program if laptops become mandatory?

   c. Is there a complete academic plan outlining the rationale, purpose and costs and benefits to the students and to the program?

   d. How will the move to laptops affect the students in the program? What financial support will be provided to students who cannot afford the laptop program?

2. Security implications re: use of laptops in evaluation:

   If evaluation using the computer is proposed, issues related to security arise.

   The following questions should be considered:

   a. How is confidentiality assured when students submit assignments using the laptop?

   b. How is confidentiality assured when results, comments, and feedback are to be communicated to the student on the laptop?

   c. What security measures are required for use of the laptop for in-class quizzes and tests?

   d. What mechanism will be in place for dealing with computer failure in test situations?

3. Incentives for faculty to use the technology:

   Given that much of the direct cost of the adoption of laptops is borne by the student, there needs to be a commitment by the program faculty to use the technology, in order to fully realize the enhanced learning outcomes that justify this cost.

The following questions should be considered:

a. What supports will be in place for faculty who want to incorporate laptops in their teaching?

b. What training and support will be required for faculty members in the program?

4. Computing Infrastructure and Support:

There are both central and school computing infrastructure and support issues related to students using laptops. The following questions should be considered:

a. What impact will there be on Ryerson's Internet connection and the RIN?

b. What level of central support (repairs) must be available?

c. What level of school support (orientation, software refreshment, batteries, loaners) must be available?

d. What computing infrastructure (servers, software and wireless) and support must be available?

5. Digital Information Content:

There are several issues related to licensing of digital content and Library access and resources. The following questions should be considered:

a. Are plans in place to work through the University Library to ensure that appropriate copyright obligations are fulfilled in the licensing and use of digital content?

b. Are plans in place to arrange coordinated acquisitions, involving site licensing and/or consortia based licensing where appropriate?

c. Has consideration been given to impact on overall University Library collection strategies?