



ONTARIO UNIVERSITIES
COUNCIL on QUALITY ASSURANCE

FINAL REPORT ON THE QUALITY ASSURANCE AUDIT OF BROCK UNIVERSITY

OCTOBER 2013

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Introduction

Brock University opened in 1964 admitting just 127 full-time students and 15 part-time ones in its first cohort. In 2012, Brock University reported enrolment of approximately 16,900 undergraduate and 1,630 graduate students. During its nearly 50-year history, the University has evolved from being a primarily undergraduate university to one that offers a range of programs at both the undergraduate (more than 100 programs) and graduate (34 master's and 8 doctoral) levels. The University also offers a small number of professional programs, such as Teacher Education, Nursing and Business, that are subject to formal accreditation, and other programs that are professional but not subject to accreditation, such as Earth Sciences.

The University's programs are organized into six Faculties and the Faculty of Graduate Studies. The University places a strong focus on co-op education, and has the third largest co-op program in Ontario with about 2,000 students enrolled in co-op options. International students are actively recruited and make up about 9% of the total student population¹. At present, Brock University offers two programs in collaboration with international partner universities (in the US and Germany). Located in the Niagara peninsula in St. Catharines, the University also hosts a campus site in Hamilton, where it offers a teacher education program. It also offers Teacher Education in Sioux Lookout.

Brock University is one of two universities to be audited in the first cycle of quality assurance audit under the new Quality Assurance Framework (QAF). The University had been audited during the first year of audits under the Undergraduate Program Review Audit Committee (UPRAC) in 1997; its second UPRAC audit occurred in 2003. The timetable for audits under the QAF was based on the timetable in place for UPRAC.

The institutional preparation for the audit of selected programs of Brock University required a tremendous commitment of time and human resources to ensure the audit's successful completion, and the auditors wish to acknowledge Brock University's commitment not only to the University's audit but also to quality assurance itself. A great deal of coordination was needed to ensure that the requirements of the University's Institutional Quality Assurance Process (IQAP) were met, including the collection and provision of all relevant documentation. Then came the task of coordinating a range of meetings for the audit team that included key program representatives in a tightly scheduled site visit. All these duties were charged with enthusiasm as well as professionalism.

¹ Source: Brock University Facts, 2012

The auditors wish to formally applaud the many individuals who participated in the audit process: administrators, administrative staff, faculty members, and students at Brock University. They were supportive, curious, patient and, most of all, committed to the quality assurance process and, as such, the betterment of programs at Brock University.

AUDIT PROCESS

The QAF specifies that each university in Ontario will be audited once every eight years with the objective of determining whether or not the institution, since the last audit, has complied with the provisions of its Institutional Quality Assurance Process (IQAP) for Cyclical Program Reviews as ratified by the Ontario Universities Council on Quality Assurance (Quality Council).

The Quality Council establishes a panel of auditors in collaboration with the Ontario Council of Academic Vice-Presidents (OCAV) (QAF 5.1).

A. Assignment of no fewer than three auditors

The first step in the audit process is the assignment of no fewer than three auditors, by the Executive Director of the Quality Council, to conduct the institutional audit (QAF 5.2.1). The auditors selected are at arm's length from the institution that is undergoing the audit. They are accompanied on the audit visit by member(s) of the Quality Assurance Secretariat. The following comprised the audit team for the Brock University audit (see brief biographical information in Appendix A).

- Dr. Katherine Graham
- Dr. David Marshall
- Dr. Charles Morrison
- Dr. Donna Woolcott, Quality Council Secretariat support

B. Auditors' independent selection of programs for audit

The next step in the audit process (QAF 5.2.2) involves the auditors independently selecting programs for audit, typically four undergraduate and four graduate cyclical program reviews. At least one of the undergraduate programs and one of the graduate programs will be a New Program or Major Modifications to an Existing Program approved within the period since the previous audit.

The Executive Director of the Quality Council authorizes the proposed selection, assuring, for example, a reasonable program mix. Specific programs may be added to the sample when an immediately previous audit has documented causes for concern, and when so directed in accordance with QAF 5.2.5 b. When the institution itself so requests, specific programs may also be audited. The auditors may consider, in addition

to the required documentation, any other elements and related documentation stipulated by the institution in its IQAP.

The auditors selected the following Brock University programs for audit:

Cyclical Program Reviews:

- General Studies: BA; BSc
- Kinesiology:
 - BPhEd Physical Education
 - Concurrent BPhEd/BEd (Junior/Intermediate)
 - Concurrent BPhEd/BEd (Intermediate/Senior)
 - BKin Kinesiology; BScKin
- Earth Sciences: MSc; BSc (Hons); BSc (Hons) co-op; BSc with Major; BSc combined with Biological Sciences, Chemistry and Geography
- Education: Joint PhD (with Lakehead University and University of Windsor)

New Programs:

- Game Design: BA; and Game Programming: BSc (with Niagara College)
- Master's of Sustainability: Science and Society: MS

Major Modifications:

- Native Teacher Education: BEd
- History: MA

C. Desk audit of institutional practices

Step 3 involves a desk audit of the institutional quality assurance practices (QAF 5.2.3). Using the institution's records of the sampled cyclical program reviews and associated documents, this audit tests whether the institution's practice conforms to its own IQAP, as ratified by the Quality Council.² It is essential that the auditors have access to all relevant documents and information to ensure a clear understanding of the institution's practices. The desk audit serves to raise specific issues and questions to be pursued during the on-site visit and to facilitate the conduct of an effective and efficient on-site visit. The documentation to be submitted for the programs selected for audit includes all documents and other information associated with each step of the institution's IQAP, as ratified by the Quality Council and the record of any revisions of the institution's

² Changes to the institution's process and practices within the eight-year cycle are to be expected. The test of the conformity of practice with process will always be made against the ratified Institutional Quality Assurance Process that applies at the time the review is conducted.

IQAP, as ratified by the Quality Council. Institutions may provide any additional documents at their discretion.

During the desk audit, the auditors will also determine whether or not the institution's web-based publication of the executive summaries of the Final Assessment Reports, and subsequent reports on the implementation of the review recommendations for the programs included in the current audit, meet the requirements of QAF 4.2.6. The auditors undertake to preserve the confidentiality required for all documentation and communications and meet all applicable requirements of the *Freedom of Information and Protection of Privacy Act (FIPPA)*. A list of the documents reviewed by the audit team is included in Appendix B.

D. On-site visit at institution

The auditors conducted an on-site visit with Brock University from March 26 to 28, 2013. The site visit schedule is included in Appendix C. The purpose of the on-site visit is for the university to answer the auditors' questions and to address information gaps that may have arisen during the desk audit. The visit allows the auditors to get "a sufficiently complete and accurate understanding of the institution's application of its IQAP so that they can meet their audit responsibilities" (QAF 5.2.4).

E. Preparation of audit report

The audit report is produced following the site visit. As per QAF 5.2.5, the audit report provides a status report on the programs selected for audit. The status report will note the degree of compliance with the institution's IQAP as well as any notably effective policies or practices revealed in the course of the audit. Where appropriate, the report will make suggestions and recommendations and identify any causes for concern, as defined in QAF 5.2.5:

- **Suggestions** will be forward-looking, and are made by auditors when they identify opportunities for the institution to strengthen its quality assurance practices. Suggestions do not convey any mandatory obligations and sometimes are the means for conveying the auditors' province-wide experience in identifying good and, even on occasion, best practices. Institutions are under no obligation to implement or otherwise respond to the auditors' suggestions, though they are encouraged to do so.
- **Recommendations** are recorded in the auditors' report when they have identified failures to comply with the IQAP. These failures indicate discrepancies that weaken the integrity of academic standards or are necessary for effective quality assurance. The institution must address these recommendations.

- **Causes for concern** are potential structural weaknesses in quality assurance practices that auditors may identify (for example, when, in two or more instances, the auditors identify inadequate follow-up monitoring; a failure to make the relevant implementation reports to the appropriate statutory authorities; or the absence of the Manual).

The auditors prepare a draft report and a summary of the principal findings suitable for publication. The Quality Council Secretariat forwards a copy of both to the institution for comment. This consultation is intended to ensure that the report and associated summary do not contain errors or omissions of fact. The institution submits a response to the draft report and associated summary within 60 days. The auditors may use this response to revise their report and/or associated summary before submitting them to the Executive Director of the Quality Council who presents them to the Audit Committee. The Audit Committee reviews the report and associated summary and recommends approval to the Quality Council (QAF 5.2.6).

The approved report and associated summary are forwarded by the Quality Council Secretariat to the institution, and to the Ontario Council of Academic Vice-Presidents (OCAV), the Council of Ontario Universities (COU) and the Ministry of Training, Colleges and Universities (MTCU) for information (QAF 5.2.7). The approved summary of the overall findings, together with a record of the recommendations, are posted on the website of the Quality Council. These are also forwarded to the institution for them to post on their website (QAF 5.2.8).

Within a year of the publication of the final audit report, the institution will inform the auditors, through the Secretariat, of the steps it has taken to address the recommendations. The auditors will draft a response commenting on the scope and adequacy of the institution's response, together with a draft summary of their commentary, suitable for publication. The auditors' response and summary are then submitted to the Audit Committee, which considers them and makes a recommendation to the Quality Council regarding the acceptability of the institutional one-year follow-up response (QAF 5.2.9). The auditors' summary of the scope and adequacy of the institution's response is posted on the Quality Council website and a copy is sent to the institution for publication on its website; copies are also sent to OCAV, COU and MTCU for information (QAF 5.2.10).

Status Report on Programs Reviewed

This section of the report provides details of the audit results for each of the sampled program reviews. In each case, the report identifies any gaps in compliance with Brock University's Institutional Quality Assurance Process (IQAP) as well as examples of notably effective policies and practices. The report on each review contains suggestions and recommendations, as appropriate. Brock University's IQAP came into effect after it was ratified by the Quality Council in May 2011.

CYCLICAL PROGRAM REVIEWS

1. Earth Sciences: Undergraduate & Graduate

Earth Sciences programs at Brock University were the first to proceed through cyclical review under the University's IQAP. The Department of Earth Sciences submitted its self-study to the Academic Review Committee (ARC) on January 9, 2012. The Final Assessment Report (FAR) for this review was approved by the Brock University Senate on February 6, 2013 and was sent to the Quality Council on March 19, 2013.

The review encompassed the MSc, BSc (Hons), BSc (Hons with Co-op), BSc with major in Earth Sciences, and the BSc combined with Biological Sciences, Chemistry and Geography.

The last undergraduate program review in Earth Sciences occurred under the Undergraduate Program Review Audit Committee (UPRAC) in 2003. The 2012 self-study discusses modification to the Earth Sciences undergraduate program as a result of that review. There is no reference to the last cyclical review of the master's program, either in the self-study or in the provided documentation. Both the undergraduate and graduate programs are dealt with in the integrated self-study. The document approaches them as separate programs, although the review contains a brief discussion of strengths and weaknesses across Earth Sciences. The main point of integration is in the faculty and some of the other resources deployed for the two levels, but the self-study is essentially a *seriatim* review, dealing first with the undergraduate program and then with the master's.

SUGGESTION 1: The opportunity of conducting an integrated review enables the institution to consider the linkages between the undergraduate and graduate programs from an educational and an efficiency perspective. Brock University might think about points at which it would like specific discussion of the integration and alignment between the undergraduate and graduate programs in the self-study.

The auditor's desk audit of Earth Sciences and its site visit focused on the following areas:

A. Evaluation sub-criteria

The 2012 self-study discusses Earth Sciences programs with selective reference to the broad evaluation criteria set out in Brock University's IQAP (section E). However, not all the criteria are dealt with. Specifically, while there is a detailed discussion of curriculum, there is only oblique reference as to how Earth Sciences will fit with Brock University's mission and academic plan. Furthermore, in its treatment of the graduate program, the self-study has only a brief discussion of learning outcomes. Brock University's IQAP indicates, "The self-study for the review of existing undergraduate or graduate programs **shall** [emphasis added] address the evaluation criteria set out below" (section E, page 10). Since the specific sub-criteria in the IQAP were not dealt with, the Earth Sciences Review is not in compliance with Brock University's IQAP.

The site visit revealed that, as a professionally oriented department, Earth Sciences focuses more on professional needs than on the University's mission. Interviewees indicated that this was a factor in the treatment of the IQAP criteria. Accordingly, further guidance on the primacy of different types of evaluation criteria would be helpful.

RECOMMENDATION 1: Brock University must verify that each sub-criterion in its IQAP is dealt with in the self-studies before proceeding to the next stage of the review.

B. Learning objectives and learning outcomes

The undergraduate review does discuss learning objectives and outcomes. Specifically, learning objectives are dealt with in relation to the Association of Professional Geoscientists of Ontario (APGO) standards for learning. It should be noted that APGO is not a formal accrediting body, but it is an important reference group. The self-study also relied on a European document (included in the self-study) on learning outcomes for Earth Sciences as the basis for its learning objectives. Appendix 5 of the self-study does provide a mapping of undergraduate curricula with the learning outcomes.

In contrast, the graduate self-study makes only passing reference to learning objectives and outcomes (pages 38 to 39). There is no reference to the Ontario Council of Academic Vice-Presidents (OCAV) Degree Level Expectations and no curriculum mapping. Discussions with departmental representatives indicated that Earth Sciences perceives itself as having an apprenticeship model of education at the graduate level. Hence, there is a focus on the relationship between faculty members and individual students, rather than a cohort approach. While this may provide an excellent student experience, the development of learning outcomes for graduate programs ensures that the curriculum is forward-reaching, that it engages students in the acquisition of

transferable skills, and that it affords them the opportunity to work on the frontiers of knowledge in their field.

RECOMMENDATION 2: Brock University's graduate programs must develop explicit learning outcomes and map them to their curricula.

SUGGESTION 2: Brock University should undertake a more concerted effort to support and develop understanding of the benefits of working with a learning outcomes focus in quality assurance.

C. Reviewers

There were two external reviewers and one internal reviewer (a senior faculty member from a cognate field). The auditors focused on three matters related to the site visit: the reviewer selection process, the verification of the reviewers being at arm's length, and the instructions provided to the reviewers regarding what to include in their report.

The selection process for reviewers of the Earth Sciences program was opaque. The Department of Earth Sciences developed a long list of external reviewers that identified faculty from institutions somewhat similar to Brock University. The external reviewers were selected from the list provided, but the departmental representatives were unclear regarding who received their list and who made the selection. Specifically, they were unclear about the level of involvement of their Faculty Dean. They were also unaware how the internal reviewer was selected. Section H of Brock University's IQAP discusses the Review Committee. The audit team was not able to discern the reviewer selection process from the University's current IQAP language.

RECOMMENDATION 3: Brock University's IQAP must be amended to describe in more detail the external and internal reviewer selection process (Quality Assurance Framework section 4.2.4 b).

There is a discussion in the IQAP about the necessity of external reviewers being at arm's length. This is appropriate. In discussions during the site visit, the audit team found that the arm's length status of the reviewers is verified informally.

SUGGESTION 3: The responsibility of verifying that the reviewers are at arm's length should be formally assigned to the individual who, as designated in Brock University's IQAP, appoints the external reviewers.

The desk audit and site visit also raised issues concerning the instructions provided to the reviewers. The auditors probed the instructions given to reviewers about the contents of their report and, more specifically, how to treat the question of the faculty and other resources supporting the programs under review.

In the case of Earth Sciences, the reviewers' report was relatively brief. As a result of its discussion of the reviewers' report on April 26, 2012, the Academic Review Committee (ARC) requested that the external review team amend its report to provide specific commentary on the co-op program in Earth Sciences. This suggested during the desk audit that, at least in this case, the reviewers initially reported on issues that were of particular interest to them, rather than according to a specific remit. Section J of the Brock University IQAP describes the site visit and reporting requirement. There is no written documentation to indicate that the reviewers were instructed to include the comprehensive set of evaluation criteria set out in section E of the IQAP. The audit team learned that the Vice-Provost and Associate Vice-President, Academic responsible for Quality Assurance met with each review team upon arrival at Brock University to give them a full briefing on expectations. This is good practice and should minimize the risk of incomplete reviewer reports in the future. A sample template for external reviewers' report is available in the Guide to the Quality Assurance Framework.

SUGGESTION 4: Section J of Brock University's IQAP should be amended to instruct the reviewers to explicitly reference all of the evaluation criteria set out in section E of the IQAP. It might be helpful to provide external reviewers with a report template that includes all evaluation criteria.

A more specific issue, however, concerns the instructions given to reviewers about providing commentary on the adequacy of the faculty and other resources associated with programs under review and the category of assessment assigned to the programs. In the case of Earth Sciences, the reviewers commented on the need for additional faculty resources and the possibility of leveraging the assignment of new faculty to Earth Sciences to establish a PhD program. Discussions during the site visit indicated that the specific remit of external reviewers visiting Brock University is to comment on the outcome of programs reviewed in the context of their current resources and, possibly, in the context of new resources that are actionable under Brock University's plans and finances. This instruction is part of the Vice-Provost and Associate Vice-President, Academic's briefing with reviewers. Section H of the IQAP is not explicit on this point.

SUGGESTION 5: Brock University should consider amending its IQAP to provide more specific instruction about the link between existing resources as set out in the evaluation criteria for learning outcomes (section II E 5 a) and the instructions for the reviewers' report regarding recommended actions to improve the program (section II J 4 c).

D. Clarification of committee relationships

ARC is the working committee that oversees the IQAP. It prepares the Final Assessment Reports (FARs) for all types of program reviews (except for minor modifications). Although Senate has final approval authority over the FARs, ARC works diligently

throughout the process. It works in concert with two other major committees: the Senate Undergraduate Program Committee (SUPC) and the Senate Graduate Studies Committee (SGSC). These two committees are to provide comments on the reviewers' reports to ARC (Brock University's IQAP, section K).

The nature of commentary provided by these two committees is still evolving. In April 2012, ARC requested that SGSC revisit its first commentary on the report for Earth Sciences, indicating in its minutes that comments made by SGSC regarding the Earth Sciences review were "not helpful" (ARC Minutes, April 17, 2013, Item 4). SGSC did provide additional commentary. The SUPC reviewed the reviewers' report regarding the undergraduate program offerings and also provided commentary. However, discussions during the auditors' site visit revealed that there is still some uncertainty about the roles and relationships between SGSC, SUPC and ARC in the quality assurance process, even though these three committees have their roles set out in the Brock University Faculty Handbook.

SUGGESTION 6: Brock University should consider revising its IQAP to clarify roles and reporting expectations between its Academic Review Committee and two Senate Committees, Senate Undergraduate Program Committee and Senate Graduate Studies Committee.

E. Decanal commentary on the Final Assessment Reports (FARs)

ARC is responsible for preparing the FAR for each review. In the case of Earth Sciences, the FAR referred to the role of Geography in supporting and engaging with the Earth Sciences programs. The Department of Geography is located in the Faculty of Social Sciences, whereas the Department of Earth Sciences is located in the Faculty of Mathematics and Science. The Faculties are separate budget centres. On October 15, 2012, the Dean of Social Sciences wrote to request that ARC modify the FAR. In his view, it contained implementation plans that would commit his budget, without adequate consideration of Social Sciences priorities and constraints. During the site visit, the audit team heard concerns that FARs could potentially proceed to Senate for approval without full consideration of their resource implications by Deans and others engaged in university finance.

SUGGESTION 7: Brock University should consider establishing a university-wide process by which Deans and other affected senior budget managers would review draft Final Assessment Reports prior to distribution to Senate.

2. Kinesiology: Undergraduate

Brock University offers three undergraduate programs in Kinesiology: a BPhEd in Physical Education, a BKin (Kinesiology) and a BScKin (Kinesiology). The Department of Kinesiology submitted its self-study to the Academic Review Committee (ARC) on

January 5, 2012. ARC submitted for review the Final Assessment Report (FAR) to Senate on November 14, 2012. The Senate-approved FAR was submitted to the Quality Council on November 19, 2012.

Kinesiology programs at Brock University underwent cyclical program review under the authority of the Undergraduate Program Review Audit Committee (UPRAC) in 2003, and the response to the results of that review is discussed in the 2012 self-study.

In general, the auditors considered this program review to be comprehensive and adhering to most components of Brock University's IQAP. ARC and the Office of the Vice-Provost and Associate Vice-President, Academic guided the process diligently. The self-study is thorough. The BPhEd program is subject to accreditation. The lead author of the self-study was able to use some of the accreditation process material for the self-study, but ensured that the document met all of Brock University's IQAP requirements. The site visit occurred at the appropriate time, after ARC approved the self-study. The reviewers' report is a good blend of formative and summative evaluation. The FAR is comprehensive and well-laid out for the purpose of implementation.

Based on the desk audit and the site visit, the audit team has, however, identified some areas in which this review might have more strongly adhered to the Quality Assurance Framework (QAF) and Brock University's IQAP.

A. Responsibility for the self-study

While the self-study was very well done, it was apparent that most of the work on the report was done by one faculty member, without extensive involvement of other members of the department. This is contrary to the principles of the QAF and section G of the Brock University IQAP. In light of daily work pressures, it might seem easier to assign one designated faculty member to take the lead in writing the review, but the task of writing the review is served best by collective engagement.

RECOMMENDATION 4: Brock University must ensure that it is in compliance with section G of its IQAP regarding the involvement of faculty, staff and students in preparation of the self-study.

B. Treatment of learning outcomes

Most of the evaluation criteria identified in section E of Brock University's IQAP were followed. The extensive analysis of the programs' learning outcomes relative to the Undergraduate Degree Level Expectations (UDLEs) was particularly laudable. However, the relationship between learning outcomes and learning modes was not as thorough in its discussion. Neither the self-study nor the reviewers' report fully addressed the questions posed in Brock University's IQAP (E4) under teaching and learning assessment. During the site visit, representatives of the Department of Kinesiology were

unsure how to respond to the questions posed in the University's IQAP regarding methods for achieving learning outcomes. In addition, although the self-study was diligently prepared, considerable work remains to be done to develop "buy in" among faculty regarding the value of the self-study/learning outcomes/modes exercise. The cyclical review process still remains "a job to get over with." See SUGGESTION 2.

RECOMMENDATION 5: Brock University must identify the relationship between learning outcomes and learning modes in its self-studies and external reviews.

C. The external review

The process for selecting reviewers was unclear in the audit documentation. Discussions with departmental representatives indicated that they were also unclear about the process for selecting reviewers. The lead author of the self-study and the Chair developed a list of 8 to 10 reviewers (most of whom were from Ontario). They looked for individuals who were both faculty members and who had administrative experience. Their nominees came from universities that were similar in character to Brock University and who had a roughly similar program philosophy. This long list was submitted to the Dean but, beyond that, the selection process was not transparent to the unit. Further discussions indicated that the reviewers were selected by the Office of the Provost and Vice-President, Academic. There was an informal vetting of candidates for conflict of interest.

Section H of the Brock University IQAP does not specify a process for selecting the internal reviewer. The auditors met with the internal reviewer for Kinesiology. He indicated that he had been asked to participate by the Vice-Provost and Associate Vice-President, Academic and had found the review experience to be a good one. See RECOMMENDATION 3 and SUGGESTION 5.

D. Data to support the self-study

The IQAP timelines (section F) for activities prior to the self-study submission were followed. However, the department received the required data very late in the process. This meant that the author had to work over the December holidays to meet the self-study deadline. It also meant that Undergraduate Program Coordinator and Advisor for the program had to spend a considerable amount of time doing calculations of raw data to meet the requirements of the self-study. The auditors learned during the site visit that the Office of Institutional Analysis and Planning at Brock University is being expanded to provide more institutional support.

SUGGESTION 8: Brock University should review the package of data required for its self-studies, providing a comparable, analytically complete data set to units undergoing cyclical program review. The University should also develop a timeline to ensure the provision of data at an appropriate point.

3. General Studies: Undergraduate

General Studies consists of two programs, a Bachelor of Arts (BA) and a Bachelor of Science (BSc). Responsibility for the two degrees is vested in separate Faculties. The BSc program reports to the Dean of Mathematics and Science. The BA in General Studies has two streams, with responsibility for the social sciences residing with the Dean of Social Sciences and responsibility for the humanities residing with the Dean of Humanities. Neither program is housed in an academic unit nor has an academic Chair. There are designated individuals in the office of both Deans who handle student advising. One advisor serves the entire General Studies BA.

Neither of the General Studies programs had been subject to cyclical program review under the previous Undergraduate Program Review Audit Committee (UPRAC). Through the desk audit and the site visit, it became evident that cyclical review of General Studies under the Brock University IQAP was problematic. Since the degrees are not attached to any academic unit and have no designated faculty, the task for preparing the self-study fell to Associate Deans with the assistance of the undergraduate advisor.

The following issues emerged:

A. Adherence to the IQAP template

The layout of the self-study does not follow Brock University's IQAP template for cyclical program reviews. To a considerable extent, this results from the character of the programs themselves. Within the parameters of the University's regulations for granting BA and BSc degrees, students are free to select any mixture of courses to fulfill degree requirements. Hence, there is essentially no curriculum associated with either program, although BSc students do gravitate toward clusters of courses to meet prerequisites. Furthermore, there are no designated faculty, whose *curriculum vitae* can be included in the self-study.

B. Treatment of learning outcomes

The requirements outlined in section 4 of the University's IQAP, to develop and map curriculum to learning outcomes, have not been met in the self-study of the General Studies BA program. Appendix 3 of the self-study indicates how the specific requirements of the General Studies BSc programs (both Pass and Honours) satisfy Brock University's Undergraduate Degree Level Expectations (UDLEs). Appendix 5 charts a sample of courses in the BSc, showing the alignment between these courses and the University's UDLEs and the math and science learning outcomes attached to these particular courses. This enables the BSc program to meet the requirements of Brock University's IQAP. However, there are no core courses or common paths in the BA program, so the requirements of section 4 were deemed impossible to meet.

C. Other missing elements

Other IQAP requirements were also missing from the self-study, including a discussion of specific admission requirements; an assessment of the human, physical and financial resources associated with the program; the quality of teaching in the program; and the qualifications of teaching faculty.

D. How to ensure quality assurance for these degrees

Discussions during the site visit indicated that all parties associated with this review found it challenging. The Academic Review Committee (ARC) found itself in the same quandaries as the self-study authors about how to ensure that this review is in compliance with the University's IQAP.

E. Approval of self-studies

The desk audit suggested that, contrary to Brock University's IQAP, the self-study for the General Studies BA was sent to the external reviewers before ARC had completed its review (ARC Minutes, January 5, 2012). During the site visit, this was confirmed. In this case, one reviewer had a very strict timeline. ARC has assured the audit team that the self-studies will get final approval before going to reviewers.

RECOMMENDATION 6: Brock University must develop a specific section of its IQAP that sets out a process for reviewing programs such as General Studies programs that do not have a single departmental home or prescribed set of courses. Particular attention should be paid to developing and assessing learning outcomes.

4. Education PhD (Joint with Lakehead University and the University of Windsor)

This program has existed, as a joint program among the three universities, for a number of years. It is guided by a Joint Program Committee consisting of representatives of each of the three universities. There is a designated Program Coordinator, who is responsible for the administration of the program. This position rotates among the three universities every five years. The program is currently coordinated and administered from the University of Windsor. Therefore, the University of Windsor assumed responsibility for coordinating its cyclical review, and followed the section of its IQAP that details the quality assurance requirements of joint programs.

The program was last reviewed by the Ontario Council on Graduate Studies (OCGS) in 2003-2004 and implementation of the action plan stemming from that review is discussed in the 2012 self-study. The jointly developed self-study was approved by the University of Windsor on March 20, 2012, to be submitted to the external reviewers.

The program reviewers visited Brock University in March 2012 and met with faculty and students. The Joint Program Committee responded to the reviewers' report. The review under the University of Windsor's IQAP has yet to proceed beyond this stage. At Brock University, ARC has not yet been involved in this review.

The desk audit and site visit has led to the following observations and conclusions:

A. Brock University procedures for review of joint programs

The review process has followed the Brock University IQAP procedures for review of joint programs (section V).

B. Brock University procedures for cyclical reviews

Despite the above, the review seems to be deviating from the general requirements for a cyclical review as described in the Brock University IQAP. This observation applies to the self-study and the reviewers' report. Both reported on all of Brock University's IQAP evaluation criteria with the exception of learning outcomes. The reviewers did not provide an "outcome" category in their report, as required under section J of the University's IQAP. The reviewers did not follow all of the content requirements of the report as described in section J6 of the IQAP. Specifically, there was no mention of learning outcomes or how the program is organized to achieve learning outcomes. There is no comparison of this joint PhD to similar programs elsewhere.

There is no evidence in the review materials that the University's process for selection of reviewers (section H3, 4 and 5 of its IQAP) was followed. The Brock University representative on the Program Coordinating Committee consulted her university colleagues for suggestions for reviewers. She and members of the Office of the Provost and Vice-President, Academic noted the particular challenges associated with finding external reviewers when three institutions are involved in delivering a program.

These findings and observations led the audit team to inquire if a gap analysis had been undertaken to determine which elements of Brock University's IQAP were not covered by the University of Windsor's IQAP. This has not been done in a formal way.

SUGGESTION 9: Brock University might consider undertaking a gap analysis to determine if there are items in its IQAP that are not included in the IQAPs of partner institutions. Where gaps exist, procedures should be put in place to ensure that the requirements for cyclical program reviews under the Brock University IQAP are met.

C. Timelines

Officials at Brock University and the auditors observed long timelines associated with this cyclical review. The reviewers' report was received in May 2012. The Joint Program

Committee responded in November 2012. Brock University received the responses from the University of Windsor's Dean of Education and Dean of Graduate Studies only the week before the auditors' site visit, even though the record indicates that both Deans had responded by the end of November 2012. Section K of Brock University's IQAP sets out expected response times for comments/responses to reviewers' reports. These are not compulsory but desirable.

SUGGESTION 10: Brock University should monitor the timelines associated with reviews of joint programs led by partner institutions in order to encourage a timely process.

NEW PROGRAM REVIEWS

1. Game Design BA and Game Programming BSc (Joint with Niagara College)

This proposal for two new programs is still in an early stage. These programs will be jointly run with Niagara College, but the Brock University IQAP governs the development process. At Brock University, both the Faculty of Humanities and the Faculty of Mathematics and Science are involved. ARC approved the Statement of Intent (SOI) for the programs in mid-October 2012. The audit team received the Program Proposal Brief (PPB) shortly before the site visit. The team was informed it would go to the Academic Review Committee (ARC) in April 2013.

The audit team found that the SOI and PPB were very well presented with clear organization and significant alignment with Brock University's IQAP. The auditors were particularly impressed by the treatment of learning outcomes in the PPB. The learning outcomes are well documented and mapped to courses both at Brock University and Niagara College. They provide clear differentiation between the BA and BSc. The program development team is to be commended.

During the site visit, the audit team met with representatives from Brock University and Niagara College who are involved in developing this proposal. Based on the desk audit and site visit discussions, the following items warrant consideration:

A. The IQAP and a dual credential program

The development of this proposal has proven challenging, since the initiative is multi-disciplinary and inter-institutional. Earlier, an effort was made to have this initiative treated as a major modification before the conclusion was reached that this constituted a new program under the University's IQAP. The gestation process, so far, has lasted

four years. The program development team has a number of questions as the process of review and approval proceeds.

Given the complexity and the proposal that graduates of these programs receive credentials from both Brock University and Niagara College, it is very important to ensure clarity of process and central support for the development team. The Brock University IQAP, which will oversee the process, currently does not provide significant guidance on developing joint programs with partner universities or, as in this case, with colleges that are subject to other quality assurance processes.

RECOMMENDATION 7: Brock University's IQAP must be amended to elaborate the process for developing joint programs, especially those of an inter-institutional and dual credential nature.

2. Master's of Sustainability: Science and Society

This is an interdisciplinary master's program involving faculty from the Department of Tourism and Environment and the Department of Biological Sciences. It is intended to have two streams: one that provides a co-op component, and the other that provides the opportunity for independent and original research for students who wish to pursue further studies. The proponents of this program submitted the Statement of Intent (SOI) in July 2012 with the goal of having this new program begin in September 2013. The Academic Review Committee (ARC) approved the Program Proposal Brief (PPB) on January 11, 2013, and the site visit scheduled for May 13 to 15, 2013.

This is the first new graduate program proposal under Brock University's IQAP. The program proponents view themselves as trailblazers in this regard and acknowledged the support they have received from the Vice-Provost and Associate Vice-President, Academic responsible for Quality Assurance; Dean and Associate Dean of Social Sciences; Dean of Graduate Studies; Director of Brock University's Centre for Pedagogical Innovation; and Director of the Office of Institutional Analysis and Planning. They consider the quality assurance process to be generally transparent and indicated that it had encouraged them to plan a coherent graduate program.

The desk audit and site visit discussions related to this program proposal resulted in the following:

A. Timing

As indicated, the proponents of the program aspire to start the first cohort of students in September 2013. The desk audit and site visit discussions revealed significant confusion about the timelines for developing new programs under Brock University's IQAP. Section B of the IQAP's treatment of review of new programs sets out a timeline; it establishes an October 1 deadline for submission of the SOI to ARC and concludes

with the preparation of calendar copy for the following September/October. It is unclear whether this is meant to indicate that the process essentially will take 12 months, or whether this represents a specific month-by-month timeline for developing all new program proposals. This question arose during the desk audit. Proponents of the program are also unclear about timing and have received conflicting interpretations from different sources. The record shows that they have submitted everything earlier than the due dates specified in Brock University's IQAP. However, the auditors noted that the external review will not occur until May 2013, later than the timeline provides. Greater clarity about timelines for new program development would be helpful.

SUGGESTION 11: Section 3 B of Brock University's IQAP should be reviewed and clarified. One approach might be to develop a timeline that works backward, in the number of weeks associated with each stage of approval, and that begins with the arrival of the first cohort of students.

B. Posting of the Statement of Intent

The desk audit verified that the SOI did meet all of the requirements of the Brock University IQAP. Proponents of the proposal chose to post the SOI in order to invite comments/support from other parts of the institution. There is no reference to posting SOIs in the Brock University IQAP, but the audit team viewed this as good practice.

SUGGESTION 12: Brock University should consider encouraging proponents of a new program to post that program's Statement of Intent for broad review within the University.

C. Treatment of learning outcomes in the Program Proposal Brief

In the PPB, Tables 1.1 and 1.2 (pages 31 to 36) set out the alignment of program outcomes to the Graduate Degree Level Expectations (GDLEs). The audit team considered these during the desk audit and found that the statements of program outcome were essentially repetitions of the mandated GDLE statements. This was raised with program proponents during the site visit. They expressed uncertainty about how much farther they could go with the mapping process at this stage. They also indicated that they were beginning to map courses to learning outcomes. Section E6 of the IQAP evaluation criteria for new programs establishes the need for a strong link between student performance, degree level expectations and learning outcomes. The audit team judged that the PPB did not conform to this requirement.

SUGGESTION 13: Brock University should consider providing additional encouragement and support to proponents of new programs in their program learning outcomes/curriculum mapping process.

D. Data to support the proposal

Program proponents gathered data in support of their SOI and PPB from a variety of sources. They had significant interaction with the Vice-Provost and Associate Vice-President, Academic responsible for Quality Assurance. Data on student demand for the program proved somewhat challenging outside of asking for a “show of hands” from Brock University students who would be interested. Other data on student demand was gathered from outside organizations. ARC discussed the need to have the Office of Institutional Analysis and Planning involved in obtaining more information on student demand for all new programs during its review of this PPB.

SUGGESTION 14: Brock University should review the protocols for obtaining data in support of new program development, with the aim of providing the best level of central support possible to new program proponents.

E. Selection of reviewers

Program proponents were asked to submit a long list of nominees for external and internal reviewers. At the time of writing this report, no internal reviewer was assigned. Brock University’s IQAP does not include a requirement for an internal reviewer in the protocol for reviewing new programs; nonetheless, there was some confusion as to why no internal reviewer had been selected. Consistent with the IQAP, two external reviewers had been selected, one from Ontario and one from another jurisdiction, but program proponents were unclear as to who was responsible for selecting them. See RECOMMENDATION 3.

MAJOR MODIFICATIONS

1. History MA: Addition of Co-op Option

The History MA Program initiated a major modification to its curriculum by adding a co-op option. The Statement of Intent (SOI) was submitted on October 3, 2011. The full IQAP process for major modifications was completed by May 9, 2012. Brock University reported this change to the Quality Council through its Annual Report on major modifications on July 5, 2012. Accordingly, this was one of the first major modifications to proceed through Brock University’s IQAP.

The desk audit indicated that the SOI and Program Proposal Brief (PPB) in their final forms met the requirements of Brock University’s IQAP for major modifications. The audit team commended the representatives from the Department of History and from the Office of the Dean of Humanities for the quality of submissions. The desk audit and site visit suggested one area of concern during this process – the communication of requests by the Academic Review Committee (ARC) to the unit to modify submissions.

ARC approved the SOI on October 27 2012, with suggestions for clarification on certain items; however, these points of clarification were not specified in the Minutes. Similarly, when ARC first reviewed the PPB on February 16, 2012, changes were suggested but not itemized. The practice at this time was for the Associate Dean of the Faculty responsible for the program to attend ARC on the understanding that (s)he would communicate the specifics of ARC comments and requests to the unit. In this case, it was acknowledged that a degree of uncertainty about ARC's requests and how they should be met was injected into the process. ARC requested more data on employer demand for History co-op students. It was unclear how this might be satisfied, a question that could have been resolved through direct discussion between the proponent of the modification and ARC.

Brock University has recognized that this practice resulted in uncertainty and delay in the approval process. It has now adopted the practice of having program proponents attend meetings of ARC to receive comments and requests directly. This is a constructive improvement in the IQAP process.

SUGGESTION 15: Brock University may want to consider making specific reference in its IQAP regarding the practice of program proponents attending the relevant Academic Review Committee meeting(s) to receive comments on new program proposals.

The PPB was also forwarded to the Senate Graduate Studies Committee (SGSC). In this case, neither the Associate Dean of Humanities nor the History representative was present. The Dean of Graduate Studies, who is also a member of ARC, had carriage of the file at SCGS. Comments from SCGS were communicated to ARC. Had there been requests for clarification or amendment at this stage, there possibly would have been further delays.

SUGGESTION 16: Brock University may want to review its IQAP to ensure that there are processes for efficient communication between university-level committees and program proponents.

2. Native Teacher Education Program, BEd: Discontinuation

This program was discontinued in 2009 when Brock University implemented its regular BEd program in Sioux Lookout. The request for discontinuation was submitted on January 9, 2012; it was approved by the Academic Review Committee (ARC) in January 2012 and by Senate at its February 2012 meeting. The closure was reported to the Quality Council in July 2012.

There was no indication during the desk audit that this major modification followed the Brock University IQAP. This was verified during the site visit although the audit team

has concluded that most of the steps for a major modification, as outlined in the University's IQAP, were followed in 2009. A discussion with Brock University senior officials indicated that the Academic Review Committee and Senate had approved the discontinuation in 2012 as "housekeeping." This is appropriate. However, this audit prompted the auditors to consider whether Brock University's IQAP on major modifications adequately covers program discontinuation.

SUGGESTION 17: Brock University should consider including a separate section in its IQAP on program discontinuation.

Broader Considerations

Four issues emerged across multiple programs that were selected for audit. These are reviewed here to assist Brock University in reviewing its IQAP and related practices.

1. The site review process

This was the most persistent issue emerging from the desk audits and site visit discussions. It has a number of components.

The process of external reviewer selection is opaque, both in the IQAP document in the experience of academic units going through the cyclical review and new program development processes and, in some instances, in the experience of Faculty Deans. The auditors suggest that Brock University's IQAP be amended to include specific information about procedures for moving from the long list of reviewer names suggested by the unit to final selection. It should also clarify whether or not additional candidates might be added to the list of potential reviewers.

Currently, the process of vetting nominees to ensure their arm's length requirement seems informal. The audit team suggests that Brock University officials consider regularizing this process.

An additional component of this issue concerns the initial instructions given to reviewers about the scope of their commentary and recommendations. This particularly relates to their treatment of how existing program resources affect their assessment of program quality and the circumstances under which they can discuss existing programs' potential to serve as a springboard for developing new programs, especially at the graduate level. The audit team is aware that the Vice-Provost and Associate Vice-President, Academic responsible for Quality Assurance meets with every team of external reviewers and provides them with a briefing on these and other topics. This is commendable practice and should be continued. However, if more information is provided to the academic units undergoing review on how the reviewers are to treat resource questions under Brock University's IQAP, this may reduce the likelihood of false expectations and misunderstandings within the institution and among reviewers.

The final point related to the site reviews concerns the selection and role of internal reviewers. The audit team met with three Brock University faculty members who had participated as internal members of review teams under the University's IQAP. All were from cognate disciplines to the programs under review but were at arm's length, adhering to the terms of the IQAP. All three internal reviewers indicated that they found the experience to be both collegial and rewarding. The audit team has no doubt that they contributed to their respective site reviews, providing local knowledge and other

insights. However, the auditors concluded that the role of internal reviewers may be elaborated more formally in Brock University's IQAP and, as a result, these reviewers may benefit from a common understanding of their remit. For example, section H of the IQAP on cyclical program reviews indicates that internal reviewers "shall participate fully in the review" (page 13). In at least one case, the internal reviewer was not fully involved in preparation of the review report. While the audit team does not propose to prescribe the role of internal reviewers, it would be advisable to expand upon the role of being "fully involved" in the IQAP. Furthermore, to ensure the consistency of engagement by internal reviewers, Brock University could select a cohort of internal reviewers for programs undergoing cyclical program review in any given year and convene them for a collective briefing at the start of the quality assurance process.

2. Training in and treatment of degree level expectations, learning outcomes and curriculum mapping

The audit team observed a spectrum of approaches to treating degree level expectations and learning outcomes, as well as to mapping curriculum to learning outcomes. The spectrum ranged from no treatment at all (General Studies BA) to a rather elegant and intentional approach to planning curriculum in the context of learning outcomes and degree level expectations (for both the BA Game Design and BSc Game Programming proposals). It is noteworthy that this full range of treatments was reviewed and, in each case, deemed acceptable under Brock University's IQAP. There are case-by-case reasons for this.

At Brock University, like many institutions, incorporation of learning outcomes and curriculum mapping into academic planning and evaluation for all programs is a work in progress. Nonetheless, the audit team concluded that it is important for Brock University to do much more work in this area. A number of unit representatives indicated that they had consulted the Centre for Pedagogical Innovation in undertaking this part of the work. This centre is likely an excellent resource. However, the audit team suggests that the Office of the Provost and Vice-President, Academic consider how it can best undertake a leadership role in generating understanding of the pedagogical importance of developing focused learning objectives and mapping them to curriculum to meet degree level expectations so that students can gain the most from their programs. This is a large task that requires support to units that resist or flounder as they engage in the process.

3. Dispersion of responsibility for data gathering and analysis

Brock University has an Office of Institutional Analysis and Planning that is being expanded. At the present time, the student surveys associated with program reviews are undertaken through the Office of the Vice-Provost and Associate Vice-President,

Academic. During the site visit, all program representatives spoke of the support that they had received from both offices in supplying different data requirements for their submissions. A number of units noted that they also had to retrieve data from other sources and, in some cases, learn how to perform calculations to transform the data into an appropriate form. The audit team suggests that this may not be the best approach. Both the Office of Institutional Analysis and Planning and the Office of the Vice-Provost and Associate Vice-President, Academic should consider working together (perhaps also with the Registrar's Office, as well as others) to define and develop a "data kit" that supports the needs of units undergoing cyclical program reviews, developing new programs, or proposing major modifications.

4. Perception of new quality assurance approach at Brock University

As noted earlier, it is still early days in the implementation of Brock University's IQAP under the new Quality Assurance Framework. Not surprisingly, the audit team came away with the sense that there are various perspectives about the purpose and effect of the new approach. People uniformly describe the quality assurance process as a lot of work. But their views on the value of the process range from seeing it as a necessary evil (the proverbial trip to the dentist) to viewing it as a platform for excellence in academic planning and continuous program improvement (a chance for a spot on the academic Olympic team). The senior academic administration team is well aware of this spectrum of views. The auditors recognize the difficulty in creating positive attitudes about this kind of work in the current climate of cost-cutting. Nonetheless, they encourage the University's senior academic administration team to provide information and support that speaks to the positive opportunities presented by the quality assurance process. A number of units expressed the view that at the time the workload was significant, but in retrospect the process had helped them. One way to create a more positive attitude about the process is to encourage those units that have gone through self-study to share their experiences with others that are coming up for review.

ADDITIONAL ISSUES

Two issues had emerged from the site visit requiring treatment outside of the specific program audits:

A. Role of students in the quality assurance process

The audit team met with three students who had participated in site visits for two programs (Earth Sciences and the Joint PhD in Education). They found the process interesting but did not know the current status of their respective reviews. All expressed interest in knowing the results. However, unless they serve as student representatives on ARC or on unit committees, it is unlikely that students would be aware of the precise terms of the IQAP, unless they troll the University's website looking for Final

Assessment Reports (FARs). Nonetheless the students do have an interest. Thought might be given to ways to keep students appropriately informed about the status of IQAP reviews and the posting of FARs.

B. Link between accreditation and cyclical programs as required under Brock University's IQAP

Brock University has several programs subject to accreditation: Business, Teacher Education, and Nursing. Section A3 of the IQAP indicates that accreditation reviews may contribute to reviews carried out under the IQAP but do not supersede the IQAP. This is appropriate. There has yet to be an IQAP review of an accredited program, although Business has just renewed its Association to Advance Collegiate Schools of Business (AACSB) accreditation. Going forward, Brock University will need to be industrious that the terms of the IQAP with regard to accredited programs are upheld, since this is a cornerstone of the Quality Assurance Framework.

RECOMMENDATION 8: The University must ensure that all programs are included on the schedule for cyclical program review including those that are subject to accreditation.

Additionally, the auditors would like to offer their thoughts on two broad issues that the senior academic administration team may want to consider when going forward.

The first concerns how best to align the range of central functions associated with the quality assurance process. The Brock University IQAP states very clearly the "responsibility for the conduct of academic reviews and the evaluation of new academic programs lies with the Provost and Vice-President Academic" (IC). Operationally, however, responsibility for overseeing the process has clearly been vested with the Office of the Vice-Provost and Associate Vice-President, Academic. However, as this report has described, there are elements of its IQAP that are somewhat distinct. Two important ones are data and data analysis (the Office of Institutional Analysis and Planning) and work to build capacity with regard to learning outcomes, degree level expectations and curriculum mapping (the recently created Vice-Provost Teaching and Learning). There is no reason to believe that the relationship among these important elements of the quality assurance process will be problematic. The audit team would simply like to encourage the Brock University senior academic administration team to monitor the alignment of quality assurance initiatives going forward to ensure appropriate coordination and collaboration among these three offices and with others.

The second concerns the relationship of the quality assurance process at Brock University to broader academic planning and budgeting. The Quality Assurance Framework, under which the Brock University IQAP falls, is intended to promote and govern quality assurance for specific academic program initiatives. The cyclical program review process is essentially a *seriatim* examination of individual programs. A broad

review of programs and the establishment of broader academic priorities are not in its scope. Nonetheless, the process has the potential to provide important input into broader academic planning and budgeting at Brock University. Working at both the program and broader institutional level is important for the continuing health of the institution, especially in times of severe budget constraints and provincial initiatives such as the Strategic Mandate Agreement process. The audit team is aware that Brock University is considering how best to develop an institutional academic planning process that informs the University's global budget and the development of individual programs. Harvesting the best of that its IQAP has to offer to broad institutional planning will make integrated strategic planning at Brock University robust.

Conclusion

In general, the audit team is of the view that that Brock University's quality assurance process has been developing very well. Brock University's IQAP has been described as a generally clear document that provides appropriate guidance to programs undertaking cyclical program reviews, developing new program proposals, or making major modifications to existing programs. The Academic Review Committee (ARC) is doing an impressive job of overseeing quality assurance. ARC is to be commended for its diligence and its preparedness to adapt its procedures to ensure transparent and efficacious deliberations as much as possible for units undergoing review.

The Office of the Provost and Vice-President, Academic clearly appreciates the importance and need for supporting academic units through the quality assurance process, and has monitored the units' implementation of the University's IQAP to ensure that its elements are understood and hence the process is successful.

In summary, the auditors commend Brock University for developing and implementing an IQAP that is generally effective in meeting the new Quality Assurance Framework.

The following are the auditors' recommendations and suggestions for Brock University's quality assurance process:

RECOMMENDATION 1: Brock University must verify that each sub-criterion in its IQAP is dealt with in the self-studies before proceeding to the next stage of the review.

RECOMMENDATION 2: Brock University's graduate programs must develop explicit learning outcomes and map them to their curricula.

RECOMMENDATION 3: Brock University's IQAP must be amended to describe in more detail the external and internal reviewer selection process (Quality Assurance Framework section 4.2.4 b).

RECOMMENDATION 4: Brock University must ensure that it is in compliance with section G of its IQAP regarding the involvement of faculty, staff and students in preparation of the self-study.

RECOMMENDATION 5: Brock University must identify the relationship between learning outcomes and learning modes in its self-studies and external reviews.

RECOMMENDATION 6: Brock University must develop a specific section of its IQAP that sets out a process for reviewing programs such as General Studies programs that do not have a single departmental home or prescribed set of courses. Particular attention should be paid to developing and assessing learning outcomes.

RECOMMENDATION 7: Brock University's IQAP must be amended to elaborate the process for developing joint programs, especially those of an inter-institutional and dual credential nature.

RECOMMENDATION 8: The University must ensure that all programs are included on the schedule for cyclical program review including those that are subject to accreditation.

SUGGESTION 1: The opportunity of conducting an integrated review enables the institution to consider the linkages between the undergraduate and graduate programs from an educational and an efficiency perspective. Brock University might think about points at which it would like specific discussion of the integration and alignment between the undergraduate and graduate programs in the self-study.

SUGGESTION 2: Brock University should undertake a more concerted effort to support and develop understanding of the benefits of working with a learning outcomes focus in quality assurance.

SUGGESTION 3: The responsibility of verifying that the reviewers are at arm's length should be formally assigned to the individual who, as designated in Brock University's IQAP, appoints the external reviewers.

SUGGESTION 4: Section J of Brock University's IQAP should be amended to instruct the reviewers to explicitly reference all of the evaluation criteria set out in section E of the IQAP. It might be helpful to provide external reviewers with a report template that includes all evaluation criteria.

SUGGESTION 5: Brock University should consider amending its IQAP to provide more specific instruction about the link between existing resources as set out in the evaluation criteria for learning outcomes (section II E 5 a) and the instructions for the reviewers' report regarding recommended actions to improve the program (section II J 4 c).

SUGGESTION 6: Brock University should consider revising its IQAP to clarify roles and reporting expectations between its Academic Review Committee and two Senate Committees, Senate Undergraduate Program Committee and Senate Graduate Studies Committee.

SUGGESTION 7: Brock University should consider establishing a university-wide process by which Deans and other affected senior budget managers would review draft Final Assessment Reports prior to distribution to Senate.

SUGGESTION 8: Brock University should review the package of data required for its self-studies, providing a comparable, analytically complete data set to units undergoing

cyclical program review. The University should also develop a timeline to ensure the provision of data at an appropriate point.

SUGGESTION 9: Brock University might consider undertaking a gap analysis to determine if there are items in its IQAP that are not included in the IQAPs of partner institutions. Where gaps exist, procedures should be put in place to ensure that the requirements for cyclical program reviews under the Brock University IQAP are met.

SUGGESTION 10: Brock University should monitor the timelines associated with reviews of joint programs led by partner institutions in order to encourage a timely process.

SUGGESTION 11: Section 3 B of Brock University's IQAP should be reviewed and clarified. One approach might be to develop a timeline that works backward, in the number of weeks associated with each stage of approval, and that begins with the arrival of the first cohort of students.

SUGGESTION 12: Brock University should consider encouraging proponents of a new program to post that program's Statement of Intent for broad review within the University.

SUGGESTION 13: Brock University should consider providing additional encouragement and support to proponents of new programs in their program learning outcomes/curriculum mapping process.

SUGGESTION 14: Brock University should review the protocols for obtaining data in support of new program development, with the aim of providing the best level of central support possible to new program proponents.

SUGGESTION 15: Brock University may want to consider making specific reference in its IQAP regarding the practice of program proponents attending the relevant Academic Review Committee meeting(s) to receive comments on new program proposals.

SUGGESTION 16: Brock University may want to review its IQAP to ensure that there are processes for efficient communication between university-level committees and program proponents.

SUGGESTION 17: Brock University should consider including a separate section in its IQAP on program discontinuation.

Appendix A: Members of the Audit Team

Professor Katherine Graham, *Senior Advisor to the President and Provost and Professor, School of Public Policy and Administration, Carleton University*

Professor Graham has considerable administrative experience at the departmental, Faculty and University levels. From 1992-1996, she was the Director of Carleton University's School of Public Policy and Administration. From 1998-2002, Professor Graham was an Associate Dean in Carleton's Faculty of Public Affairs, and in 2009 she was appointed Dean of that Faculty. She stepped down as Dean in 2009. Following a year's leave, Professor Graham returned as Senior Advisor to the Provost, working on a number of initiatives involving undergraduate student engagement as well as the relationship of the University's academic programs and research to community development. From 2011-2012, Professor Graham assumed the position of Interim Associate Vice-President (Academic). In this position, she worked closely with Carleton's Associate Provost (Academic Quality Assurance) in implementing Carleton's new quality assurance processes and in integrating these with the University's initiatives in academic planning and program and curriculum development.

Professor Graham has a long and distinguished career as a scholar, researcher and consultant, specializing primarily in issues of governance and community development. In addition to her considerable experience in the administration of graduate and undergraduate programs, Professor Graham is well placed to reflect and comment on issues of knowledge transfer and application, issues addressed through four of the six provincial degree level expectations at both the graduate and undergraduate levels.

Dr. David Marshall, *President Emeritus, Nipissing University*

After several years as a Professor of Education at the University of Manitoba and two years working with the Manitoba government, in 1985 Dr. Marshall accepted the Deanship of the Faculty of Education at Nipissing University College. He became President of Nipissing in 1990 and led the institution to full university status in 1992. He remained Nipissing's President until 2003 when he accepted the presidency of Mount Royal College and the challenge of leading that institution to full university status. Mount Royal became Canada's newest university in 2009. Dr. Marshall officially retired on July 1, 2011, with the notable distinction of being one of the longest-serving university presidents (21 consecutive years) in Canadian history.

While Dr. Marshall has been recognized and received numerous awards for many specialties (such as small schools, administration in developing areas, computers in education, and college-university relationships) over the years, the circumstances of his

positions have led him to become one of Canada's leading spokespersons on institutional change (having changed two colleges to universities), managing financial sustainability in university budgets (his institutions had a reputation for both balanced budgets and labour peace), and effective undergraduate education/undergraduate universities (both of the universities he led were undergraduate-focused universities). Dr. Marshall still writes and speaks on these three topics. His most recent article, "Differentiation by Design: The Revitalization of Canadian Undergraduate Education," was published in Policy Options, in June 2011.

Dr. Charles Morrison, Professor, Faculty of Music, Wilfrid Laurier University

Dr. Morrison is a Professor in Wilfrid Laurier University's Faculty of Music. He has been with the University since 1987 and served as Dean of the Faculty of Music from 1999-2010. During that period, the Faculty of Music reinforced its position as one of Canada's best performance-based music programs and continued to offer the country's only full-time master's program in Music Therapy.

External to Wilfrid Laurier, Dr. Morrison has been actively sought after as a reviewer for Music programs across the country. He is a member of the University's program review subcommittee, the committee now tasked at Wilfrid Laurier with overseeing its quality assurance program reviews for new and under-review programs. This committee reports to the Senate Academic Planning Committee, which is a standing committee of Senate and has oversight of the program approval process. Dr. Morrison was specifically nominated and appointed to the program review subcommittee because of his long-standing interest and expertise in the area of program development and quality control that includes membership on the Senate Academic Planning Committee.

Dr. Morrison's interest in program quality stems from a deep-seated commitment to the integration of high impact teaching and learning practices into all programs. He was one of the first deans at Laurier to encourage discussions on the importance of explicitly developing learning outcomes for each program that were discipline-specific for the undergraduate and graduate degree-level expectations. When serving as Dean, he led a multi-Faculty/multi-academic support unit delegation from Wilfrid Laurier University to an American Association of Universities and Colleges Great Expectations workshop, which laid the foundation for the University's "integrated and engaged learning" umbrella for its teaching and learning activities across all campuses and programs (undergraduate and graduate).

Appendix B: List of Documents Reviewed by Auditors

All documents were provided in electronic format, or links were provided to the appropriate web address:

- Quality Assurance Framework
- Brock University's IQAP (ratified May 2011)
- Forms (for example, for reviewer nominations, and new Program Proposal Briefs)
- Statement of Intent Form and Guidelines

GENERAL DOCUMENTS REVIEWED

- Report of the UPRAC Auditors on Undergraduate Program Review at Brock University (Cycle 1) – September 1997
- Report of the UPRAC Auditors on Undergraduate Program Review at Brock University (Cycle 2) – November 2003
- Brock University's Schedule of Cyclical Academic Program Reviews
- Agendas and minutes of Brock University's Senate Graduate Studies Committee (SGSC) meetings – May 24, 2011 to January 21, 2013
- Agendas and minutes of Brock University's Undergraduate Program Committee (UPC) meetings – September 7, 2011 to January 30, 2013
- Agendas and minutes of Brock University's Academic Review Committee (ARC) meetings – September 8, 2011 to March 1, 2013
- Agendas and minutes of Brock University's Senate meetings – September 21, 2011 to February 6, 2013
- Methodology for counting number of undergraduate degree programs – July 26, 2012
- List of undergraduate degree programs for 2011-12 – July 26, 2012
- List of graduate programs – as of October 2012
- Summary report of programs for Quality Council Audit – October 17, 2012
- Minutes of Appraisal Committee Meeting (Brock University Audit Team Notes) – October 17, 2012
- Self Study Manual for Cyclical Program Reviews – May 24, 2012
- Brock University's Final Assessment Reports (FARs)
- Letter to the Provost and Vice-President, Academic, assessing whether the University's FARs satisfactorily met the requirements of the Quality Assurance Framework – November 28, 2012
- Annual Report on Major Modifications – July 5, 2013
- Minutes of the meeting of the Brock University Audit Team – March 12, 2013
- Brock University's Terms of Reference for its committees: SGSC, UPC and ARC

PROGRAM DOCUMENTS for Earth Sciences (Integrated)

- Final version of Self-Study Document 2012
- Review Committee Report – submitted March 9, 2012
- Departmental response to report – April 12, 2012
- Dean (Faculty) response to report – April 19, 2012
- Dean (Graduate) response to report – April 22, 2012
- UPC response to report – April 19, 2012
- SGSC response to report – April 12, 2012

PROGRAM DOCUMENTS for Game Design, BA & Game Programming, BSc

- Statement of Intent (SOI) – published for comment September 19 to October 10, 2012; and approved by ARC October 16, 2012
- Program Proposal Brief (PPB) – submitted March 2013
- UPC response to PPB
- SGSC response to PPB
- Revised Program Proposal Brief (PPB)
- Reviewer Report submission
- Departmental response to report
- Dean response to report
- UPC response to report
- SGSC response to report

PROGRAM DOCUMENTS for Sustainability: Science and Society

- Statement of Intent (SOI) – submitted July 20, 2012
- SOI published for comment – July 25 to August 15, 2012
- SOI approved by ARC – September 18, 2012
- Proposal Program Brief (PPB) – approved by ARC January 11, 2013
- SGSC response to PPB
- Reviewer Report submission
- Departmental response to report
- Dean response to report
- UPC response to report
- SGSC response to report
- Revised Program Proposal Brief (PPB) – approved by ARC and by Senate

PROGRAM DOCUMENTS for General Studies

- Program Self-Study – submitted January 6, 2012
- Undergraduate Review of General Studies Program report (February 24, 2012)
- Departmental response to report – February 28, 2012
- Associate Dean, Faculty of Social Sciences response to report – May 8, 2012

- Associate Dean, Faculty of Humanities – May 12, 2012
- Dean, Faculty of Social Sciences response to report – May 18, 2012
- Dean, Faculty of Humanities response to report – May 17, 2012
- Minutes of ARC meetings: January 5, 2012; May 24, 2012; October 2, 2012; November 13, 2012
- Final Assessment Report – approved by Senate December 5, 2012

PROGRAM DOCUMENTS for Kinesiology

- Self-Study submission – January 5, 2012
- Self-Study approved by ARC – February 2, 2012
- Site Visit – March 4-6, 2012
- Reviewer Report – submitted April 5, 2012
- Revised Reviewer Report – April 10, 2012
- Chair response to report – April 25, 2012
- Departmental response to report – May 5, 2012
- Dean response to report – May 5, 2012
- UPC response to report – May 16, 2012
- Final Assessment Report – approved by ARC November 6, 2012; and by Senate November 14, 2012

PROGRAM DOCUMENTS for Education, PhD

- Self-Study Brief – submitted March 20, 2012
- Reviewer Report – submitted May 16, 2012
- Joint Program Committee response to report – November 6, 2012
- Dean (Faculty) response to report – October 3, 2012
- Dean (Graduate) response to report – November 26, 2012
- Final Assessment Report – approved by ARC and by Senate

PROGRAM DOCUMENTS for Native Teacher, PhD

- Letter requesting discontinuation sent to ARC – January 10, 2012
- Minutes of ARC meeting including approval of discontinuation – January 12, 2012
- Minutes of Senate meeting re approval – February 8, 2012
- Annual Report on Major Modifications

PROGRAM DOCUMENTS for History, MA

- Statement of Intent (SOI) – submitted October 3, 2011; and approved by ARC October 27, 2011
- Program Proposal Brief (PPB) – submitted February 6, 2012; approved by ARC April 5, 2012; and approved by Senate May 9, 2012
- Annual Report on Major Modifications

Appendix C: Schedule of Auditors' Site Visit

BROCK UNIVERSITY

MARCH 26-28, 2013

TUESDAY, MARCH 26		
10:30 – 11:30	Planning Meeting	Committee Room
11:30 – 12:00	Pat Beard, Coordinator, Academic Reviews and Planning	Committee Room
12:00 – 1:00	Lunch	Committee Room
1:00 - 2:00	Murray Knuttila, Provost and Vice-President, Academic Greg Finn, Vice-Provost and Associate Vice-President, Academic Pat Beard, Coordinator, Academic Reviews and Planning	Committee Room
2:00 – 3:00	MSc Sustainability: Science and Society (new program): Ryan Plummer, Director, Environmental Sustainability Research Centre and lead author Program representatives	Committee Room
3:00 – 3:15	Refreshment Break	Committee Room
3:15 – 4:00	Kinesiology (undergraduate cyclical review): Phillip Sullivan, Chair Diane Mack, Faculty, lead author Program representatives	Committee Room
4:00 – 5:00	Joint PhD in Education (cyclical review) Renee Kuchapski, Chair and joint author	Committee Room
WEDNESDAY, MARCH 27		
9:00 – 10:00	Deans:	PL 500A

	<p>Neil McCartney, Faculty of Applied Health Sciences Don Cyr, Interim Dean, Goodman School of Business Fiona Blaikie, Faculty of Education Douglas Kneale, Faculty of Humanities Ejaz Ahmed, Faculty of Mathematics and Science Tom Dunk, Faculty of Social Sciences Mike Plyley, Faculty of Graduate Studies</p>	
10:00 – 11:00	Associate Deans:	PL 500A
	<p>Nota Klentrou, Graduate, Faculty of Applied Health Sciences Jamie Mandigo, Undergraduate, Faculty of Applied Health Sciences Danny Cho, Graduate, Goodman School of Business Deborah McPhee, Undergraduate, Goodman School of Business Susan Sydor, Graduate and Undergraduate, Faculty of Education Carol Merriam, Graduate, Faculty of Humanities Brian Power, Undergraduate, Faculty of Humanities Joffre Mercier, Graduate, Faculty of Mathematics and Science Hichem Ben-El-Mechiaekh, Undergraduate, Faculty of Mathematics and Science June Corman, Undergraduate, Faculty of Social Sciences Ingrid Makus, Graduate, Faculty of Social Sciences</p>	
11:00 – 11:15	Refreshment Break	PL 500A
11:15 – 12:00	Native Teacher Education Program (major modification):	PL 500A
	<p>Lorenzo Cherubini, Director, Tecumseh Institute for Aboriginal Research and Education Michael Manley-Casimir, Prof. Emeritus and former Director, Tecumseh Institute</p>	
12:00 – 1:00	Lunch meeting with students involved in cyclical reviews	PL 600F
1:00 – 2:00	Senate Graduate Studies Committee:	PL 500A
	<p>Linda Rose-Krasnor, Faculty of Social Sciences (Chair) Nota Klentrou, Faculty of Applied Health Sciences (Vice-Chair) Tansu Barker, Goodman School of Business (Vice-Chair) Beatrice Ombuki-Berman, Faculty of Mathematics and Science (Vice-Chair) Renee Kuchapski, Faculty of Education Tim O'Connell, Faculty of Applied Health Sciences</p>	

	<p>Angus Smith, Faculty of Humanities Taylor Dawson, Graduate Student Senator Kiel Ormerod, Graduate Student Susan Sydor, Chair of Senate Murray Knuttila, Provost and Vice-President, Academic Mike Plyley, Dean, Faculty of Graduate Studies Neil McCartney, Dean, Faculty of Applied Health Sciences Margaret Grove, University Librarian Coral Mitchell, Brock University Faculty Association (Observer) Gail Pepper, Director of Graduate Studies (Administrative Support)</p>	
2:00 – 3:00	<p>General Studies (undergraduate cyclical review):</p> <p>June Corman, Associate Dean, Faculty of Social Sciences Hichem Ben-El-Mechaiekh, Associate Dean, Faculty of Mathematics and Science Brian Power, Associate Dean, Faculty of Humanities John Lye, former Associate Dean, Faculty of Humanities Program representatives</p>	PL 500A
3:00 – 3:15	Refreshment Break	PL 500A
3:15 – 4:00	<p>MA in History Program (major modification)</p> <p>Mark Spencer, Chair Danny Samson, former Graduate Program Director Carol Merriam, Associate Dean, Faculty of Humanities</p>	PL 500A
4:00 – 5:00	<p>Senate Undergraduate Program Committee:</p> <p>Lucie Thibault, Faculty of Applied Health Sciences (Chair) Deborah McPhee, Goodman School of Business (Vice-Chair) Jeff Boggs, Faculty of Social Sciences Laurie Morrison, Head, Liaison Services, University Library Heather Gordon, Faculty of Mathematics and Science Richard Parker, Faculty of Humanities Drew Ursacki, Undergraduate Student Susan Sydor, Chair of Senate Greg Finn, Vice-Provost and Associate Vice-President, Academic Tom Dunk, Dean of Social Sciences Don Cyr, Interim Dean, Goodman School of Business Barb Davis, University Registrar Kim Meade, Vice-Provost and Associate Vice-President, Student Services</p>	PL 500A

Erin Sharpe, Brock University Faculty Association (Observer)
 Caroline Lidstone, Administrative Coordinator, Office of the Registrar (Administrative Support)
 Evelyn DiFruscio, Office of the Registrar (Institutional Support)
 Gloria Gallagher, Office of the Registrar (Institutional Support)
 Amanda Whitwell, Office of the Registrar (Institutional Support)

THURSDAY, MARCH 28

8:45 – 9:45	<p>Senate Academic Review Committee:</p> <p>Murray Knuttila, Provost and Vice-President, Academic (Chair) Greg Finn, Vice-Provost and Associate Vice-President, Academic Francine McCarthy, Faculty of Mathematics and Science Carman Cullen, Goodman School of Business Coral Mitchell, Faculty of Education Russell Johnston, Faculty of Social Sciences Joe Norris, Faculty of Humanities James Mandigo, Faculty of Applied Health Sciences Zopito Marini, Faculty of Graduate Studies Jory Korobanik, Graduate Student Sonia Reynolds, Undergraduate Student Joy Stewart-Riffle, Manager, Institutional Analysis Pat Beard, Coordinator, Academic Reviews and Planning Trish Greydanus, Executive Assistant to the Vice-Provost and Associate VP, Academic (Administrative Support)</p>	Board Room
9:45 – 10:45	<p>Earth Sciences (integrated cyclical review):</p> <p>Francine McCarthy, Chair Frank Fueten, Faculty, lead author Program representatives</p>	Committee Room
10:45 – 11:00	Refreshment Break	Committee Room
11:00 – 12:00	<p>BSc Game Programming/BA Game Design (new program) Joint with Niagara College:</p> <p>Kevin Kee, Director, Centre for Digital Humanities, Brock Jean Bridge, Centre for Digital Humanities, Brock, lead author</p>	Committee Room

	<p>David Hughes, Computer Science, Brock, lead author Greg Unrau, Chair, School of Media Studies, Niagara College Linda Roote, Professor and Coordinator, School of Media Studies, Niagara College Rick Goertz, Professor and Coordinator (Game Development), School of Media Studies, Niagara College</p>	
12:00 – 1:00	<p>Lunch meeting with internal reviewers:</p> <p>John Middleton, Earth Sciences cyclical review Nancy Francis, General Studies cyclical review Zopito Marini, Kinesiology cyclical review</p>	Committee Room
1:00 – 1:30	<p>Jack Lightstone, President</p>	Committee Room
1:30 – 2:30	<p>Audit team wrap-up meeting</p>	Committee Room
2:30 – 3:15	<p>Audit team debrief:</p> <p>Murray Knuttila, Provost Greg Finn, Vice-Provost Pat Beard, Coordinator, Academic Reviews and Planning</p>	Committee Room