

Interactive Arts and Science Undergraduate Program Review Four-Year Report (2017)

A. Summary of Review

This review was conducted under the terms and conditions of the IQAP approved by Senate on June 6, 2011.

1. The academic program offered by the Centre for Digital Humanities which was examined as part of the review was:

BA Pass and Honours Interactive Arts and Science (IASC)

2. The Review Committee consisted of two external reviewers: Geoffrey Shea (Ontario College of Art and Design) and Stefan Sinclair (McGill University) and an internal reviewer, Duncan MacDonald (School of Fine and Performing Arts).

3. The site visit occurred on February 24-26, 2013.

4. The Final Assessment Report was approved by Senate on December 4, 2013.

5. The reviewers assigned the following Outcome Category:

Category 2, "Good Quality."

6. The next review of the programs in the Centre for Digital Humanities will be in 2020/21.

B. Recommendations

The reviewers provided 23 recommendations.

Recommendation #1

Revisit cross-appointments so that faculty maintain and demonstrate a real and viable commitment to the program and its goals - they need to have a specified number of courses from their course load dedicated to the program.

ARC Disposition of the Recommendation

ARC considers this recommendation to be worthy of consideration but not accepted as it lies outside of ARC's jurisdiction.

Implementation Plan

Recommendation NOT accepted.

Recommendation #2

In addition to this restructuring of cross-appointments, at least one or two full-time faculty members should be hired within the program to increase cohesiveness and ensure capacity. Existing cross-appointments demonstrate strengths in more traditional disciplines (such as history), but there is an urgent need to boost expertise related specifically to game development, including programming, design, modeling, and audio. Ideal hires would come from the game industry with experience (i.e. not just an academic interest in games). Attention needs to be paid to the gender imbalance among faculty.

ARC Disposition of the Recommendation

ARC considers the recommendation regarding hiring to be not accepted as it lies outside ARC's jurisdiction. The Committee expects that the Centre will proceed through normal channels of advocacy for faculty resources and that Human Resources will adhere to university guidelines with respect to gender imbalance.

Implementation Plan

Recommendation NOT accepted.

Comment: Two tenure-track faculty positions in the fields of Game Studies (2014) and Digital Prototyping (2016) have been filled.

Recommendation #3

Faculty should be teaching at least one of the early core courses to ensure that the learning outcomes for the program are conveyed and understood by students.

ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted while recognizing that it is consistent with existing practice.

Implementation Plan (First Priority)

Responsible for approving: Centre
 Responsible for resources: Centre
 Responsible for implementation: Centre
 Timeline: Dean of Humanities to report by end of academic year 2013/14

Actions Taken	Year Action Started	Year Action Completed
Action #1 Ensure that full-time faculty member teaches full course load in IASC	2014	2015

Explanation of Actions Taken, Status and Results:

Action #1: The two fully appointed faculty members and the one cross-appointed faculty member in the Centre for Digital Humanities (CDH) each teach core courses in the IASC program. This includes the 1st year IASC program orientation course (IASC 1F01) which is co-taught by the two fully appointed faculty members

Recommendation #4

Transition staff focus on hardware and software maintenance (which can be increasingly done by central computing services) to technical expertise with specialized hardware and software in support of courses and projects. For instance, staff might be available to help students in the labs outside of class time with software such as Maya or with the administration of web-based server applications. This shift in focus would also help to serve the needs of researchers within the Centre for Digital Humanities. Given a stronger focus on research applications, staff could assume alternative academic appointments (i.e. not tenure-track teaching, but not strictly just support roles either).

ARC Disposition of the Recommendation

ARC considers the recommendation to be worthy of consideration but not accepted, as it lies outside of the Committee's jurisdiction. The Committee expects that the Centre will work within established practices with regards to changes to staff resources.

Implementation Plan

Recommendation NOT accepted.

Recommendation #5

Find a mechanism to move current students who are interested into the proposed GAMES program if it is approved. Although this represents considerable extra effort and planning, we strongly feel that it would demonstrate that the students are the first priority and that it is the right thing to do. It may also help to address fears (particularly during the transition) that the minor would become an impoverished little sibling destined to atrophy and disappear. In a similar vein, communication with students about the proposed program needs to be greatly improved: students with whom we spoke were aware of rumours but felt anxious about their lack of knowledge of what is happening. We see no reason why students should not be informed and consulted during the GAMES proposal process.

ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted and in the process of implementation. The Committee believes that the Centre is best positioned to find a mechanism to accommodate changes of major between programs by a student and to develop a plan for communicating information about the IASC program to students.

Implementation Plan (Second Priority)

Responsible for approving:	Centre
Responsible for resources:	Centre
Responsible for implementation:	Centre
Timeline:	Dean of Humanities to report by end of academic year 2014/15

Actions Taken	Year Action Started	Year Action Completed
Action #1 Consult with Registrar and Academic Advisors	2014	2016
Action #2 Establish GAME Joint Steering Committee with Niagara College and negotiate necessary agreements with Niagara College	2014	2016
Action #3 Define and implement transfer mechanisms	2014	2016

Explanation of Actions Taken, Status and Results:

Action #1: The Registrar and Academic Advisors (in both the Faculty of Humanities and the Faculty of Math and Sciences) have been consulted by the Director of GAME on a regular basis.

Action #2: The GAME Joint Steering Committee, comprising faculty and administrative personnel from Brock and Niagara College, meets three or four times per year. Niagara College personnel also serve on the GAME Program Committee at Brock University. Brock University's GAME program MOU with Niagara College was signed by both institutions in 2015.

Action #3: In 2015 - 2016, in consultation with the CDH, Computer Science (COSC), the Registrar's Office, and Niagara College, the Director of the GAME program defined and implemented transfer mechanisms for interested students from the IASC to the GAME program. Two IASC students took advantage of the transfer mechanism.

Recommendation #6

Explore the possibility of creating a related graduate program that could encourage more academic research/creation into the digital humanities and games studies. A graduate program would raise the bar for faculty and provide them with enhanced Research Assistantships, as well as provide a model for undergraduate students who are considering continuing in academia.

ARC Disposition of the Recommendation

ARC considers this recommendation to be not accepted for the reasons stated above.
 (Note: "Reasons stated above" were: a robust and viable undergraduate program must be the first priority and foundation upon which to prepare a graduate proposal, and that an insufficiency of faculty and staff for the undergraduate program needed to be addressed first)

Implementation Plan

Recommendation NOT accepted.

Recommendation #7

Make a much more concerted effort to examine similarities and differences with an expanded list of comparators, both for the existing program and for the proposed GAMES program. We urge Brock to devote real resources to the comparison exercise, including possible travel funds for visits and funds to help in writing a more detailed report.

ARC Disposition of the Recommendation

ARC considers this recommendation to be not accepted as a wide-ranging and thorough comparison has been already completed.

Implementation Plan

Recommendation NOT accepted.

Recommendation #8

Establish stronger ties with Computer Science to facilitate exploration of overlapping interests and to explore the difficult communication issues inherent in these diverse cultures. Similarly, the links with Communication Studies seem tenuous at best and should be substantially reinforced.

ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted and in the process of implementation.

Implementation Plan (First Priority)

Responsible for approving:	Centre
Responsible for resources:	Centre
Responsible for implementation:	Centre
Timeline:	Dean of Humanities to report by end of academic year 2013/14

Actions Taken	Year Action Started	Year Action Completed
Action #1 Establish GAME program committee with formal ties to COSC	2014	2015
Action #2 Establish GAME Joint Steering Committee with Niagara College to coordinate and share information between GAME partners.	2014	2015
Action #3 Establish IASC curriculum committee and consult with Communications, Popular Culture and Film (CPCF)	2014	2015
Action #4 GAME program committee and IASC curriculum conduct consultation with CPCF	2014	2016

Explanation of Actions Taken, Status and Results:

Action #1: The GAME Program Committee, with representatives from the CDH, COSC, and Niagara College, was established in 2014. It meets at least once per term.

Action #2: The GAME Joint Steering Committee with Niagara College has been established with representatives from the CDH, COSC, Brock senior leadership, Brock's Registrar's Office, Brock Recruitment, and Niagara College. It meets at least twice per year.

Action #3 / Action #4: The IASC Program Steering Committee meets at least once per term, reporting its recommendations to the CDH governance committee. Two faculty members from the Department of Communication, Popular Culture and Film serve as affiliated faculty on the CDH governance committee which provides academic oversight of the IASC and GAME programs.

Recommendation #9

Even within the context of flexibility for individual sessionals, a greater effort needs to be made to ensure consistency and cohesion across core courses. It would help to have a detailed list *across the curriculum* of which reading materials and which assignments contribute to which learning outcomes and ask sessionals to ensure that their course outlines are meeting specific criteria. Some coordination is urgent to reduce the duplication of reading materials (reported by students).

ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted and in the process of implementation.

Implementation Plan (First Priority)

Responsible for approving:	Centre
Responsible for resources:	Centre
Responsible for implementation:	Centre
Timeline:	Dean of Humanities to report by end of academic year 2013/14

Actions Taken	Year Action Started	Year Action Completed
Action #1 Revise Centre procedures requiring course outlines to include learning outcomes, core topics, reading and assignment and assessment methods.	2014	2016
Action #2 Share relevant course outlines with sessional instructors	2014	2015
Action #3 Provide orientation session for sessional instructors	2014	2015
Action #4	2014	2015

Monitor courses taught by sessional instructors and provide guidance and feedback at beginning and end of terms.		
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Explanation of Actions Taken, Status and Results:

Action #1: The CDH has established learning outcomes for the IASC program which are listed in the new IASC Program Handbook. All instructors of IASC core courses (in the revised program) are annually requested to link their courses to the relevant IASC program learning outcomes and cite them in their course outlines. Core topics, readings, and assignments, and assessment methods are also included in course outlines, following Brock policies.

Action #2: The IASC course outlines are housed in the departmental office and digitally on BrockBox. All instructors are welcome to access the course outlines.

Action #3: The CDH holds an annual all instructors orientation meeting in August of each year, prior to the beginning of the academic year.

Action #4: The CDH Director reviews the course evaluations for courses taught by sessional instructors and meets with sessional instructors to provide mentorship (per the CUPE agreement) as warranted.

Recommendation #10

The reliance on cross-listed courses has resulted in a high incidence of content redundancy. Students reported that they took courses for one aspect of the content it covered, but had to put up with other content components that were repeated (e.g. intro to HTML). Less reliance on cross-listed courses would allow the program to better coordinate its curricular offerings.

ARC Disposition of the Recommendation

ARC considers this recommendation to be an observation. No further action is required.

Implementation Plan

No further action required.

Recommendation #11

Basic business awareness should be a mandatory part of the curriculum (so that students are aware of what steps would be necessary to start their own company and run it efficiently).

ARC Disposition of the Recommendation

ARC considers this recommendation to be consistent with existing practice and no further action is required.

Implementation Plan

No further action required.

Recommendation #12

The emphasis on an e-portfolio seems present at times in the IASC program, but not systematically integrated - it should be.

ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted and in the process of implementation.

Implementation Plan (Second Priority)

Responsible for approving:	Centre
Responsible for resources:	Centre
Responsible for implementation:	Centre
Timeline:	Dean of Humanities to report by end of academic year 2014/15

Actions Taken	Year Action Started	Year Action Completed
Action #1 Undertake curriculum review process including the examination of areas that lend themselves to the use of electronic learning portfolios	2014	2015
Action #2 Develop e-portfolio policy relevant to emerging curricular revisions	2014	2015
Action #3 implement and assess use of e-portfolios	2014	2015

Explanation of Actions Taken, Status and Results:

E-portfolios are introduced to students in the first year IASC program intake course (IASC 1F01: Foundations of Interactive Arts & Science). In the third year, there is a dedicated half course which will include an e-portfolio requirement effective 2017 - 2018 (which is when the first cohort of students in the revised IASC program reaches third year). The required e-portfolio is integrated into the revised IASC program. It serves as the capstone assignment in the third year of the program, recognizing that not all IASC students go on to the fourth year (Honours) program.

Recommendation #13

Students complained extensively about scheduling conflicts that prevented them from taking courses in their other areas of interest (such as English). This is a perennial problem of

course, but given how frequently it was mentioned, any and all remedial strategies should be considered.

ARC Disposition of the Recommendation

ARC considers this recommendation to be worthy of consideration. Although IASC has no control over the scheduling of courses homed in other units, the unit and its academic adviser are best placed to consider reasonable solutions on behalf of its majors. ARC believes that this process will continue through normal channels of advocacy.

Implementation Plan (Second Priority)

Responsible for approving:	Centre
Responsible for resources:	Centre
Responsible for implementation:	Centre
Timeline:	Dean of Humanities to report by end of academic year 2014/15

Actions Taken	Year Action Started	Year Action Completed
Action #1 Collaborate with Brock Scheduling to minimize impacts of scheduling on student access to courses	2014	2016

Explanation of Actions Taken, Status and Results:

The Centre has no direct power to fully implement this recommendation. Scheduling is complex and it is impossible to accommodate all elective credit options for all students. The IASC Academic Advisor is familiar with the scheduling barriers that may affect individual students and continues to assist students in this regard. However, the CDH has no sustainable means to influence the schedule of cross-listed courses which are housed in other departments. Course scheduling is determined by multiple factors and constraints of which the requests of the CDH are only one consideration and realistically not the priority.

Recommendation #14

The disconnect between digital literacy and traditional humanities curricula continues to grow - there may be an opportunity to develop a large-format course to deliver some introductory concepts (possibly through a Massively Open Online Course (MOOC)).

ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted. The Committee believes that the Centre is best positioned to determine strategies to move forward on this issue.

Implementation Plan (First Priority)

Responsible for approving: Centre
 Responsible for resources: Centre
 Responsible for implementation: Centre
 Timeline: Dean of Humanities to report by end of academic year 2013/14

Actions Taken	Year Action Started	Year Action Completed
Action #1 Undertake curriculum review process including the examination of areas that lend themselves to alternative delivery models including online, large-format and blended formats.	2014	2015
Action #2 Develop and test alternative delivery format course	2015	2016

Explanation of Actions Taken, Status and Results:

During the Fall of 2014, the IASC Program Steering Committee spearheaded a successful program renewal process. Among the outcomes:

- In 2015 - 2016, the CDH launched the highly subscribed IASC 1F02: Being Human in a Digital World course which is a large enrolment online context credit course. In both of the years it has now been offered, the course has attracted enrolments in the hundreds with many additional students on the waiting list.
- In 2016 - 2017, the CDH launched the IASC 2P01: Foundations of Project Management course which is a large enrolment online course that is open to all second year students (and higher) at Brock. In its first year, the course has attracted 140+ enrolments from across all of Brock's undergraduate faculties.

Recommendation #15

The initial work on integrating internships in a more organized and sustainable way seems very promising - this needs to be a priority. Internships were a primary reason for some of the students to choose the IASC program.

ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted but not yet implemented.

Implementation Plan (First Priority)

Responsible for approving:	Centre
Responsible for resources:	Centre
Responsible for implementation:	Centre
Timeline:	Dean of Humanities to report by end of academic year 2013/14

Actions Taken	Year Action Started	Year Action Completed
Action #1 Undertake curriculum review process including the examination of areas that lend themselves to internship and service learning.	2014	2015
Action #2 Consult with Co-op office and Centre for Pedagogical Innovation regarding expanded options for internships and service learning.	2014	2015
Action #3 Develop and test new internship and service-learning options	2015	2016

Explanation of Actions Taken, Status and Results:

Representatives of the CDH have consulted with the Co-op Office and the Service Learning Office to discuss strategies for enhancing internship options for students. (The Centre for Pedagogical Innovation was not consulted as internships and service learning are not among their areas of focus.) In 2016 - 2017, the responsibility for the administrative oversight of the CDH's 80-hour internship course transferred from the Co-op Office to the CDH. With this change, the CDH is currently seeking to expand the internship options for students in 2017 - 2018 through the addition of Fall internships to the already in place Winter term internship options. In terms of supporting internship placements, we continue to work closely with the Generator at One, one of the CDH's key industry partners.

In 2015, the CDH launched the Brock University Design Studio (BUDS) which provides students across Brock with course-based opportunities to practice and hone their knowledge and skills within a real-world, collaborative, project-based production studio context that incorporates a service-learning orientation. To date, BUDS has pursued project partnerships with the charitable wing of IBM Canada and the St. Catharines Museum.

Recommendation #16

Our assessment of the course outlines and feedback from students suggest that many of the courses were either practical or theoretical, but rarely blended, leaving a gap for students to fill. Efforts need to be made to integrate praxis into the curriculum, even when the theoretical components encounter resistance from the students. Similarly, the proposed partnership with Niagara for the GAMES program is exciting, but we anticipate the same tensions around students' desire for applied knowledge and university standards for more holistic and critical knowledge. What is planned to avoid an "us" (academic) vs. "them" (practical) dichotomy, with the resulting pushback on "us"?

ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted and in the process of implementation.

Implementation Plan (First Priority)

Responsible for approving:	Centre
Responsible for resources:	Centre
Responsible for implementation:	Centre
Timeline:	Dean of Humanities to report by end of academic year 2013/14

Actions Taken	Year Action Started	Year Action Completed
Action #1 Undertake curriculum review process including the examination of how praxis will fit into revised or expanded curriculum.	2014	2015
Action #2 In consultation with CPI, develop resources and best practices to assist faculty in integrating practice elements into theoretical courses and the reverse .	2014	2016
Action #3 Evaluate success of praxis learning through student, faculty and employer surveys.	2015	2016

Explanation of Actions Taken, Status and Results:

Action #1: In the Fall of 2014, the CDH undertook a full curriculum review of the IASC program which has resulted in all new core courses (from Years 1 to 3), four new concentrations in which students can elect to focus their coursework (Digital Expression, Digital Prototyping, Digital Scholarship, and Instructional Design), and the CDH's first large enrolment context credits (IASC 1F02 and IASC 1P06). The new core courses were designed to integrate praxis. For example, the new IASC 2P01: Foundations of Project Management course draws on the professional standards for project management (theory) which students then apply to their experiences leading and/or participating in projects (practice). The students in this course also draft a project proposal for their final assignment.

Action #2: CDH instructors routinely liaise with CPI in an effort to enhance their teaching and course planning. For example, CPI played key roles in supporting the development of the large enrolment online courses IASC 1F02: Being Human in a Digital World and IASC 2P01: Foundations of Project Management. Although not part of their official CPI duties, two CPI staff members serve as sessional instructors in the IASC program. One of these sessional instructors also serves as a member on the CDH governance committee. In IASC instructor's meetings, both CPI staff members have shared the concrete ways in which they integrate theoretical and practical elements into their IASC courses.

Action #3: The CDH conducted its first recent IASC student survey in April, 2016 requesting anecdotal feedback on the program. Future student surveys will be conducted on an annual basis with the results serving as input for programming planning by the IASC Program Steering Committee. The survey results show strong support for the IASC program and the recent program revisions noted under Action #1 above (i.e., the vast majority of Year 2 and higher respondents indicated that they would recommend the IASC program to others). In terms of faculty and employer feedback, the CDH has found that liaising directly with faculty and employers is an effective strategy for soliciting feedback. The CDH has done so in both formal meetings and also more informally at networking events.

Recommendation #17

Consider implementing a laptop purchase program (with software licensing arrangements) to help alleviate uneven configuration of workstations within the existing labs. Licensing could also include access to a software tutorial service such as Lynda.com.

ARC Disposition of the Recommendation

ARC believes this recommendation is worthy of consideration but not accepted as it lies outside of the Committee's jurisdiction.

Implementation Plan

Recommendation NOT accepted.

Recommendation #18

Students reported problems with concurrent use of lab licenses - these need to be addressed. In the context of learning concepts rather than specific applications (as one

might in a college), the IASC program might consider making much greater use of free and open source software.

ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted and believes that the Centre is best positioned to determine strategies to move forward on this issue.

Implementation Plan (Second Priority)

Responsible for approving:	Centre
Responsible for resources:	Centre
Responsible for implementation:	Centre
Timeline:	Dean of Humanities to report by end of academic year 2014/15

Actions Taken	Year Action Started	Year Action Completed
Action #1 The problem of concurrent use of lab licenses in September to November of 2012 was investigated and resolved.	2014	2014
Action #2 The Centre will evaluate software requests made by faculty and advise where appropriate on the substitution of open source software.	2014	2015

Explanation of Actions Taken, Status and Results:

Action #1: In the Fall of 2012, the CDH Manager (now called the CDH Technical Associate) migrated perpetual Autodesk licenses to subscription and outfitted the CDH's labs with the appropriate number of licenses. All labs are now uniformly outfitted with necessary licenses for instruction and are audited twice per year.

Action #2: The CDH Technical Associate is in regular contact with faculty and instructors about software requirements, advising them about free and open source alternatives where appropriate. The CDH makes extensive use of free educational software (e.g., Arduino, Unity, Autodesk, Hansoft, Wwise, Visual Studio, Axure, 123Design, and Sketchup Make) and installs open source software (i.e., Blender, OBS, TortoiseSVN) as part of the lab images. As well, IASC 1P02 incorporates the GIMP image editor into its course work.

Recommendation #19

Create a dedicated, shared office for Centre faculty (especially sessionals) the current situation where students can meet sessionals at a single desk in the open administrative office is awful.

ARC Disposition of the Recommendation

ARC believes this recommendation is worthy of consideration but not accepted as it lies outside of the Committee's jurisdiction. The Committee expects that the Centre will proceed through normal channels of advocacy for space resources.

Implementation Plan

Recommendation NOT accepted.

Recommendation #20

Formally expand the target digital technologies available to students and taught in courses to include physical computing (e.g. arduino, wearables, etc.), and other non-screenbased applications. This has an obvious counterpart in curriculum development.

ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted and in the process of implementation.

Implementation Plan (First Priority)

Responsible for approving: Centre

Responsible for resources: Centre

Responsible for implementation: Centre

Timeline: Dean of Humanities to report by end of academic year 2013/14

Actions Taken	Year Action Started	Year Action Completed
Action #1 The Centre has taken steps to purchase tools and technologies to support such learning in courses it currently offers.	2014	2015
Action #2 The Centre has agreed to cross-list a new course being offered by the Department of Visual Arts in interactive media that meets the aims of this recommendation.	2014	2015

Explanation of Actions Taken, Status and Results:

In Winter 2016, the CDH launched IASC 3P03: Prototyping with Micro Controllers and Mobile Technologies, focusing on physical computing (i.e., Arduino technologies). In July 2016, the CDH appointed a new faculty member who specializes in Digital Prototyping. Digital Prototyping is also one of the four new IASC program concentrations.

Recommendation #21

The exact lines of responsibility for maintaining and evergreening the labs were not quite clear to us, so those responsibilities should be formalized if they are not already, and as much as possible of the hardware and software maintenance should shift to central computing (for economies of scale) to ensure full attention can be given to the special needs of the program.

ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted and in the process of implementation. The Committee believes that the Dean should establish (in conjunction with ITS) a long-term plan for the replacement of computing equipment given that IT infrastructure is essential to the delivery of this program.

Implementation Plan (First Priority)

Responsible for approving:	Centre, Dean of Humanities, ITS
Responsible for resources:	Centre, Dean of Humanities, ITS
Responsible for implementation:	Centre, Dean of Humanities, ITS
Timeline:	Dean of Humanities to report by end of academic year 2013/14

Actions Taken	Year Action Started	Year Action Completed
Action #1 The Centre has effectively shifted responsibility to ITS for the evergreen replacement of computers in teaching labs within the Centre	2014	2015
Action #2 The Centre will work with ITS to develop and implement a plan, including lines of responsibility, for new and replacement equipment, maintenance, and IT infrastructure for the delivery of the IASC and GAME programs	2014	2016

Explanation of Actions Taken, Status and Results:

Action #1: Subsequent to the IASC program review in 2012, the Centre considered the recommendation and determined that shifting responsibility to ITS entirely to refresh the CDH's lab computers would not be the best strategy for meeting the needs of the CDH due to the specialized and continually updated requirements for the CDH lab computers. The CDH nevertheless works closely with ITS to make effective use of Brock's existing labs (outside the CDH), thus preserving highly sought after dedicated lab space (often available as open access for IASC/GAME students) within the CDH. The specialized requirements of the CDH lab computers have and will continue to require annual budgetary support in consultation with the Dean of Humanities, ITS, and Finance.

Action #2: In consultation with ITS, the CDH now formally manages its labs downstream from ITS. The CDH Technical Associate works closely with ITS to support the specialized requirements of the IASC and GAME programs. ITS manages group policy (security and UI), AD, and university-wide software licensing, while the CDH Technical Associate manages software that is specific to the GAME and IASC programs, as well as computer imaging, student software requests, local policy, door access, local security camera hardware, and warranty repair requests. This ensures that the specialized needs of the CDH are met while aligning to university-wide policies and procedures. The CDH Technical Associate is responsible for rolling out IT infrastructure for the delivery of the IASC and GAME programs, including installing new server-based software. Consultations with ITS for leveraging cloud-based computing resources (e.g., Office 365) and centralized deployment of software (e.g., KACE and SCCM) are ongoing. Hardware replacement is evaluated on a per case basis due to the changing technology requirements and budgetary constraints.

Recommendation #22

Coordinate library services with Niagara College if the GAMES program proceeds.

ARC Disposition of the Recommendation

ARC considers this recommendation to be not applicable to the review of the IASC program.

Implementation Plan

Recommendation NOT accepted.

Recommendation #23

A partnership with the library to acquire and maintain digital works (e.g. notable games for historical or conceptual reasons) - the library could be a more central part of the IASC planning processes in general (invited at least annually to meetings, for instance).

ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted. The Committee believes that the Centre is best positioned to determine strategies to move forward on this issue.

Implementation Plan (First Priority)

Responsible for approving:	Centre
Responsible for resources:	Centre

Responsible for implementation:	Centre
Timeline:	Dean of Humanities to report by end of academic year 2013/14

Actions Taken	Year Action Started	Year Action Completed
Action #1 The Centre will invite the Library Liaison to attend Centre Committee meetings to discuss future acquisitions policy.	2014	2015
Action #2 The Centre will appoint a faculty representative annually to work with the Library to enhance Library holdings	2014	2015

Explanation of Actions Taken, Status and Results:

The CDH Library Liaison joined the CDH governance committee as a permanent member in 2014. The Library Liaison contributes a written report to most CDH governance committee meetings and regularly engages CDH personnel in discussions re. future library acquisitions policies that will support the IASC and GAME programs. The CDH's Project Coordinator serves as the CDH's representative on the Brock Library Liaison Committee.

C. Unit Summative Analysis and Evaluation

The Unit will answer the following questions:

1. To what extent has the Unit achieved the improvements suggested by the reviewers?
 2. What overall impact has it had on the Unit's programs?
 3. Is the Unit adopting a process of continuous quality improvement for its programs?
 4. How well do the programs now align with Brock University strategic priorities?
 5. How does this review and its results position the programs as the Unit moves into the next review cycle?
1. The IASC program review served as a springboard for the Fall 2014 renewal of the IASC program which was led by the IASC Program Steering Committee. The revised program has helped the CDH to achieve the improvements suggested by the reviewers. Among the highlights:

- four new concentrations within which IASC students can choose to focus their studies: Digital Expression, Digital Prototyping, Digital Scholarship, and Instructional Design);
- all new core courses in Years 1, 2, and 3 of the IASC program, each designed to effectively integrate theory and practice (praxis) and scaffold learning from year to year;
- the CDH's first large enrolment courses: IASC 1F02: Being Human in a Digital World (context credit); IASC 1P06: History and Future of Storytelling (context credit); and IASC 2P01: Foundations of Project Management;
- the development of program learning outcomes which are included in course outlines and the new IASC Program Handbook;
- the successful Fall 2016 launch of new IASC courses as part of the new GAME program in partnership with COSC and Niagara College.

The faculty complement in the CDH has grown from 1.0 appointed faculty at the time of the IASC program review to 2.5 appointed faculty. There are also now nine CDH affiliated faculty members who serve on the CDH governance committee from across the university, as well as student, sessional instructor, and library representatives. This has significantly strengthened the oversight of the IASC and GAME programs.

2. The results of the April 2016 IASC student survey demonstrate the overall impact of the changes prompted by the IASC program review. For example, the survey results show strong support for the IASC program and the recent program revisions (i.e., the vast majority of Year 2 and higher respondents indicated that they would recommend the IASC program to others).

Anecdotally, we have heard from IASC graduates that the revised IASC program addresses many of the concerns they have had about the IASC program. So too, our industry partners have responded positively to the program revisions, indicating that the revised IASC curriculum more directly integrates requisite industry skills and knowledge areas (e.g., project management skills in IASC 2P01: Foundations of Project Management and user interface design skills in IASC 2P03: Interaction and Interface Design).

3. The need for continuous quality improvement is addressed by regular CDH governance committee meetings, an annual beginning-of-academic-year IASC instructors' meeting/orientation, and, most importantly, an annual IASC student survey.

4. The IASC program remains congruent with Brock's strategic priorities. For example:

- Putting Student Needs First: e.g., conducting an annual IASC student survey; including a CDH student representative on the CDH governance committee;

- Bridging Tradition and Innovation: e.g., new large enrolments courses which look backwards and forwards, including IASC 1F02: Being Human in a Digital World and IASC 1P06: History and Future of Storytelling;
 - Fostering a Trusting Respectful Community for Collaborative Growth: e.g., expanded membership on the CDH governance committee, including faculty affiliates from across Brock and student, sessional instructor, and library representatives;
 - Leveraging Relationships with University and External Partners: e.g., the new GAME program, a partnership with COSC and Niagara College;
 - Creating Opportunities for 21st Century Learning and Development: e.g., the Brock University Design Studio which provides students across Brock with course-based opportunities to practice and hone their knowledge and skills within a real-world, collaborative, project-based production studio context that incorporates a service-learning orientation.
5. In terms of the next review cycle, the IASC program review and its results positively position the CDH, both in terms of the new formal oversight processes that have been established (e.g. new faculty, an expansion of membership on the CDH governance committee, and annual instructors' meeting, and student survey) and the revised IASC curriculum (e.g., new core courses in Years 1 to 3). Moreover, the new large enrolment courses have expanded the CDH's outreach to students across the university, helping to familiarize Brock students (who might otherwise not come into contact with the CDH) with the IASC program and the option of pursuing a combined major.

D. ARC Final Summary

In final summary of the 2012/13 cyclical academic review of the programs offered by the Department of History, ARC has determined the following:

1. The Reviewers' Recommendations have been addressed satisfactorily.
2. The Unit has established a direction for next steps as it prepares for the next review cycle.
3. The Unit has achieved a broad-based, reflective and forward-looking self-assessment.