REPORT OF THE PROVOST'S WORKING GROUP
ON DISTANCE LEARNING

December 7, 2009

Greg Freeze, Dean of Graduate School of Arts and Sciences
Laura Lorenz, Executive Education Program Manager, Heller School
Alyson Saykin, Director of Brandeis in the Berkshires/Presidential Briefing
Simon Sherrington, Director of Planning, Brandeis International Business School
Sybil Smith, Executive Director of the Division of Graduate Professional Studies, Rabb School
David Wedaman, Director for Research and Instructional Services, LTS
Elaine Wong, Senior Associate Dean of Arts and Sciences
Michaele Whelan, Vice Provost for Academic Affairs

Additional Members of the Webinar Subgroup
Matt Foster, Director of Corporate Education, GPS, Rabb School
Josh Wilson, Director for Integrated Services, LTS
Dave Wisniewski, Associate Director of Development, Web Services, E-Communications

Executive Summary

Charge

The Provost convened the Working Group on Distance Learning in July 2009 and charged the members to inventory existing and potential distance learning activities on campus, to analyze the administrative, technical and human resources needed to support such efforts, and to propose a business model(s) for moving forward by the end of the fall term. This work would be preparatory to a larger effort to expand, coordinate and set standards for the appropriate use of distance learning in both academic and non-academic programs.

Process

The Working Group met four times in the summer and then monthly in the fall. While individual members of the group had some experiences with distance learning, the group lacked a common understanding of electronically-mediated modes of learning. To that end, the group participated in a meeting via videoconferencing and an in-depth demonstration of a LATTE, text-based distance course used by Graduate Professional Studies (GPS), Rabb School. A demonstration of Elluminate, a synchronous audio-visual learning tool was canceled due to scheduling conflicts, but experienced by a subgroup. This report emerged from a series of consensus-based discussions, both in the main group, and in the two subgroups on hybrid learning and webinars.
Recommendations

The inventory on distance learning at Brandeis indicates two primary directions for the immediate future: webinars and enhanced capacity of our existing learning management system (LATTE), likely in the form of hybrid courses, based on the GPS model. Our general approach for hybrid/distance courses contains the following elements. The first five are derived from experience at GPS and the remaining two seem necessary given faculty cultures in the schools:

1. use existing systems and low-cost technology tools such as LATTE;
2. establish consistent, structured platforms for courses (common design template with interactive features like GPS);
3. require hands-on faculty involvement;
4. emphasize faculty support and student orientation;
5. build assessment into new distance ventures;
6. hire instructional designers, as needed, to help build courses;
7. identify new staffing resources in training, pedagogy, support and maintenance.

Altogether, the development and execution of on-line for-credit courses are complex matters, requiring designated pedagogical and technical support even for pilot courses.

Webinars, usually non-credit and created for alumni or for continuing education credits for professionals, are in a germinal stage at Brandeis. The Alumni Office has taken the lead in providing high-quality live-streaming video with Brandeis faculty and moderated Q&A. One difficulty with this approach is that it is both labor-intensive and costly; however, with only a few events a year and positive response from alumni, this may be sustainable. A less expensive option for webinars and synchronous learning involves a contract with Elluminate. Negotiations with this software proprietor in the spring will determine whether usage with an open-ended number of constituents could become part of the contract at a reasonable cost. Use of Elluminate by GPS and Heller may continue since this product works well with remote speakers and students in virtual classrooms. A matrix of options with accompanying costs for webinar video production has been developed by the subgroup, and this details three levels and costs for academic webinars.

In order to expand distance learning on a large scale, several elements are necessary: significant faculty leadership, university champions and resources. While there are university leaders with substantial distance-learning experience such as the Dean of IBS and the Executive Director of GPS, Rabb School, there are no resources and no clear drivers for a large-scale initiative at this time. Instead, this group envisions that distance learning will develop at Brandeis organically as it has within GPS, Rabb School: as faculty offer JBS options, explore LATTE and utilize more of its functionality, try Elluminate and participate in webinars, they will be willing to continue experimenting.

Growing the capacity of A&S faculty and some faculty in Heller and IBS will in turn lead to a new willingness to explore distance learning; individual courses may then lead to programs or
graduate certificates. Careful assessment will be necessary and will contribute to the growth of new pedagogies along with new technologies. To that end, we propose a provost’s Online Learning Advisory Committee that will articulate guidelines upholding Brandeis’ educational standards in the online environment. While curricular control will remain within traditional bodies in the schools and university, this committee will assess the design and pedagogy of online courses and programs and make recommendations to the faculty and the provost about best practices and university-supported technologies.

The following report provides short-term models for distance learning that may require some initial investment without any immediate return. Revenue generation is most likely to occur in the professional schools and in GSAS. Significant planning, along with a mandate from the university about a new direction and seed resources, would be needed to develop a viable long term distance learning effort. This could best occur after the pilot efforts described below provide some foundation for teaching and support and enhanced experiences by the full-time and tenured faculty.

1 Context

In an effort to develop a distance learning profile of peer and local schools, the Working Group asked Matt Foster, Director of Corporate Education in GPS, Rabb School to gather some information. Matt created a short questionnaire and reached out to 15 schools: BU, BC, Tufts, Babson, Bentley, Suffolk, Harvard Extension, Yale, Princeton, Brown, Cornell, Columbia, NYU, UMass, and Johns Hopkins. The data presented below reflect responses from schools, as well as his online research.

In short, 11 of the 15 schools offer degrees utilizing at least some form of distance learning, Princeton and Brown do not, and there was no definitive information for BC or Yale. Tuition charges for distance learning courses are either the same as on-campus courses or higher. Of the schools that utilize distance learning, the majority offer graduate courses and these are blended (some courses online/some face to face), or full distance learning; very few offer undergraduate distance programs, and these are either degree completion after a residential component, courses integrated with on-campus degrees, or specific advanced courses.

The following table summarizes the schools utilizing DL; detailed information is presented thereafter. Yale, Tufts, Johns Hopkins, MIT, and several other well-known schools offer free online course content as part of an open courseware project. However, these courses offer neither credit, nor access to professors.

<table>
<thead>
<tr>
<th>Offer Degrees w/ DL</th>
<th>Cost of DL Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>BU</td>
<td>DL courses are +$50 p/credit per course for a “technology fee” (i.e. 4 credit grad course is an additional $200).</td>
</tr>
<tr>
<td>Tufts</td>
<td></td>
</tr>
<tr>
<td>School</td>
<td>Tuition</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Babson</td>
<td>$50 additional cost per DL course</td>
</tr>
<tr>
<td>Harvard Extension</td>
<td>Same tuition as on-campus</td>
</tr>
<tr>
<td>Cornell</td>
<td>Same tuition as on-campus</td>
</tr>
<tr>
<td>UMass</td>
<td>Same tuition as on-campus</td>
</tr>
<tr>
<td>Johns Hopkins</td>
<td>Same tuition as on-campus</td>
</tr>
<tr>
<td>NYU</td>
<td>Same tuition as on-campus</td>
</tr>
<tr>
<td>Columbia</td>
<td>Same with $375 &quot;access fee&quot;</td>
</tr>
<tr>
<td>Suffolk</td>
<td>$125 DL surcharge</td>
</tr>
<tr>
<td>Bentley</td>
<td></td>
</tr>
</tbody>
</table>

The survey consisted of the following questions:

1.) *Do you offer Master's degrees or Undergraduate degrees that can be completed fully online? (As in, enroll and graduate without ever visiting the campus).*

2.) *What course management system do you use for your DL courses?*

3.) *Do you use other online collaboration tools/software for your DL courses?*

4.) *Are your DL courses instructor led, primarily asynchronous text based?*

5.) *In terms of creating DL courses, do you require DL content to follow a predefined format (template or pedagogy) or is that left to the professor’s discretion?*

6.) *Do you retain ownership of course content or does that reside with the professor?*

7.) *Do you have dedicated course development or instructional designers?*
**BU**

- Can complete master’s fully online in Art Education, Criminal Justice, Music and Music Education, Computer Information Skills, Health Communication, Management and Occupational Therapy; can complete two PhD programs online in Music Education and Occupational Therapy.
- One undergraduate DL ‘degree completion’ (must complete at least 52 credits on-campus or have approved transfer credit) for Bachelor of Liberal Studies in Interdisciplinary Studies. [http://www.bu.edu/online/online_programs/undergraduate_degree/index.html](http://www.bu.edu/online/online_programs/undergraduate_degree/index.html)
- The size of a DL course can be 100+ (facilitator for every 20 students)
- Uses Blackboard Vista with Wimba add-on for Course Management System.
- One Instructional Designer assigned to each degree program that is being developed as an online program; the Instructional Designers work closely with faculty.
- BU owns the rights to the course; faculty cannot take the course to another school. Faculty have limited rights to the content they developed (i.e., they can modify course content and create a different course).
- Online courses are similar in format, but each is customized with the faculty member (i.e., some have more interactive multi-media, video conferencing, etc.)

**Tufts**

- Fletcher School offers the [Global Master of Arts Program](http://www.bu.edu/online/online_programs/undergraduate_degree/index.html) (GMAP), which combines three intensive two-week residency periods with extensive Internet-mediated study for mid-career professionals who are unable to spend an academic year studying on campus
- Offers no undergrad DL courses.

**Babson**

- Offers one blended master’s program for mid to senior professionals titled “Fast Track MBA”.
  - Asynchronous learning via Blackboard.
  - Similar to Rabb model, online template with discussion boards.
  - Some synchronous virtual meetings for teamwork.

**Bentley**

- Offers MS in Taxation, Financial Planning, and Human Factors in Information Design online through the McCallum School of Business. Students must login to the Course Management System at the same time campus based courses are running. Online courses are thus synchronous.
- Uses Centra Course Management System.
- Offers no undergraduate degrees online.
Suffolk

- Offers five MBA’s fully online through the Sawyer Business School. [http://www.suffolk.edu/business/1619.html](http://www.suffolk.edu/business/1619.html)
- While most work is asynchronous, each course requires 90 minutes per week of synchronous text based chat.
- Uses Blackboard Vista Course Management System.

Harvard Extension

- Distance courses can apply to degree (grad and undergrad), but each degree has a residency requirement.
- Some instructors use Elluminate and all instructors are encouraged to use a course website. The basic website template is set up through a system created by central Harvard.
- While they have a handful of courses that stream video real-time to students at a distance, the vast majority use recorded lectures posted along with slides and other course materials 48 hours after the on-campus lecture takes place. In some cases, they will re-run lecture videos from courses that have taken place in past years.
- They have some administrative staff members who can help with pedagogy recommendations and guide instructors new to distance education through the process. Admin staff can help point out the distinctive issues surrounding teaching at a distance, but the content format is primarily left to the professor’s discretion. Many have TA’s to manage the course website and other technical issues.
- Harvard retains ownership of videos.

Princeton

- Offers no DL of any kind (grad or undergrad).

Brown

- No DL courses for undergrad or MS degrees; offers certificate courses online as part of the Center for Alcohol and Addiction Studies and the Program in Public Health within the Alpert School of Medicine.

Cornell

- Offers a blended Master's degree in Systems Engineering (9 credit hours face to face, 21 credit hours online). [http://www.sce.cornell.edu/dl/programs.php#moese](http://www.sce.cornell.edu/dl/programs.php#moese)
- Primarily uses Blackboard Vista for Course Management System, but faculty are free to use whatever tools work best for them.
- Some faculty use wikis and video streaming external to Blackboard.
• DL courses involve direct and asynchronous interaction (usually with video) with Cornell faculty and TA’s.
• Offers extensive support for DL course creation through Continuing Education unit; see http://www.sce.cornell.edu/dl/resources.php
• There is also an “eCornell”, a wholly-owned subsidiary of Cornell University offering non-credit DL courses, usually to alumni. See http://www.sce.cornell.edu/dl/other.php

Columbia

• Offers dozens of MS degrees fully online (no residency requirement) through Columbia University's School of Engineering & Applied Science. MS degrees include Computer Science, Physics, Biomedical Engineering, Electrical Engineering, and Mathematics. http://www.cvn.columbia.edu/
• GSAS does not offer any DL courses.
• Continuing Education unit does not currently offer any online programs.
• Other Columbia “affiliates”, such as the Teachers College and Jewish Theological Seminary, offer blended DL programs.

NYU

• Offers blended and fully online DL grad and undergrad programs through the McGhee Division within Continuing and Professional Studies.
• Undergraduate DL ‘degree completion’ (must complete at least 40 credits on-campus or have approved transfer credit) for B.A. in Social Sciences with a concentration in Organizational Behavior and Communication or B.S. in Leadership and Management Studies with a concentration in International Business, Human Resource Management, or Organizational Management and Development.
• McGhee students can also integrate online coursework into their existing program of study, in consultation with an academic advisor. The following degree programs offer online courses: B.A. in Social Sciences, B.S. in Healthcare Management, B.S. in Leadership and Management Studies, B.S. in Real Estate, and A.A.S. in Business. http://www.scps.nyu.edu/areas-of-study/mcghee/mcghee-online/
• Offers online or blended master’s in Human Resource Management and Development; Management and Systems; and graduates certificates.
• Class size is 15-20.
• DL courses are instructor led, primarily asynchronous text based.
• Instructors are free to create content, dedicated DL department formats the content for DL delivery.
• Professors retain ownership of course content unless the university pays them for development.
• NYU has a dedicated department to support professors in DL development and conversion.
• Offers MS degrees in Biotechnology, Bioscience Regulatory Affairs, Bioinformatics, Computer Science, Environmental Planning and Management, and Systems Engineering fully online.
• Offers blended Master’s degree in Public Health through the Bloomberg School of Public Health; requires at least 20% face to face (80% can be completed online).
• Uses Blackboard Vista Course Management System.
• Offers a handful of undergrad distance courses, primarily in the sciences: Bioinformatics, Bio-Organic Chemistry, Advance Biochemistry, Advanced Cell Biology and Microbiology. These courses are designed to be intensive and for students who have scheduling difficulties; there are no cumulative certificates or degrees.
http://webapps.jhu.edu/jhuniverse/admissions/distance_education/

UMass

• UMass offers several Master’s degree programs online. The Management of Aging Services and the Applied Linguistics degrees are fully online. The Counseling and Instructional Design degrees require a 2 week face to face program on Nantucket in the summer. The Special Education Vision Studies degrees are just for New England teachers who are invited to come to campus or meet together on occasion. See http://ccde.umb.edu/dl
• UMass does not offer a full bachelor’s degree online; they do offer a 30 credit/10 course degree completion option fully online.
• Uses Blackboard Vista 8 Course Management System.
• DL courses are instructor led, primarily asynchronous text based. All instructors are required to hold 2 synchronous (real time) sessions in their online courses. Most use Horizon Wimba Live Classroom. They are beginning to build “Nings” (social networking service similar to MySpace) for the degree programs. They have a “Second Life” island (user created online virtual world) that is open to faculty for experimentation. One of the music faculty has students build musical instruments there. They also have a virtual embassy for international relations and a language café.
• UMass trains professors in the technology of the Course Management System and in course design. They currently use the Quality Matters template as a guide for course design.
• UMass acknowledges a professor’s claim to content by paying a $500 royalty if someone else teaches a course they have developed.
• Have many dedicated instructional designers.

2 Inventory at Brandeis: An Overview

The Working Group first established some common terminology, drawing on the Sloan Consortium Report: Staying the Course, Online Education in the U.S. (2008). (See Appendix 1) Traditional or face-to-face courses have no online components. Web-facilitated courses are those currently using a learning management system, such as LATTE, to post syllabi and assignments, pose questions, etc. . . . Hybrid or blended courses combine face-to-face meetings between faculty and students with online components. Online courses are those in which most or all of
the content is delivered online. The following findings from the Sloan Report provided some context for the group.

- Over 3.9 million students were taking at least one online course during the fall 2007 term; a 12 percent increase over the number reported the previous year. (1)

- The 12.9 percent growth rate for online enrollments far exceeds the 1.2 percent growth of the overall higher education student population. (1)

- Over twenty percent of all U.S. higher education students were taking at least one online course in the fall of 2007. (1)

- The number of students taking at least one online course continues to expand at a rate far in excess of the growth of overall higher education enrollments. The most recent estimate, for fall 2007, places this number at 3.94 million online students, an increase of 12.9 percent over fall 2006. (5)

- The overwhelmingly majority (over 80 percent) are studying at the undergraduate level with only 14 percent taking graduate level courses and the remainder in some other for-credit course. (5)

- Online learning is not evenly distributed across the higher education universe. Those with the greatest concentration of online include public institutions, associate’s level schools, and the very largest institutions as measured by overall enrollments. (7)

- Online education is most important to the long-term strategy of public institutions, and least important to the private nonprofits. (11)

- For all types of institutions, Carnegie Classifications, and size of institutions, the current geographic reach of schools is predominately local with over 85 percent of all online students coming from the within 50 miles of campus (local) or from within the state or surrounding states (regional). Institutions believe that online will open up their enrollments to more students from outside of their normal service area; however, the reality is that this has not yet occurred in any large numbers. (15)

With some sense of the broader world of distance learning, the Working Group sought to establish what kinds of existing and potential distance learning activities were on campus. Two questions were asked:

1) How are you using on-line technology in a learning context? Some examples include: LATTE, video-conferencing, streaming media, social networking.

2) What type of online learning do you envision in the future? (Do you see any realistic potential for some kind of distance learning in a graduate program? Asked only of GSAS graduate chairs) What types of technology and resources would be required?

The inventory was gathered by school. (See Appendix 2) The dean of GSAS reached out to graduate chairs; IBS surveyed its faculty; Heller contacted faculty program leaders; A&S faculty who were known to experiment with technology were contacted by the senior associate dean; and the Executive Director of Rabb answered for GPS. Aside from GPS which offers text-based
asynchronous master’s and graduate certificates, there were no other fully online or hybrid courses. Many faculty have web-facilitated courses through LATTE, and some used video-conferencing and social networking. Several indicated that online courses seemed to be very time-consuming, and all who envisioned some type of more ambitious technology stipulated that technology support and training were necessary. Many saw online technology as a means of highlighting or enriching current traditional or web-facilitated courses. Video-conferencing was frequently mentioned, but the difficulty of having two rooms fully equipped in different locations seemed to be a real obstacle. The Working Group surmised from the inventory that webinars (or a video/audio presence of a speaker in a classroom) and hybrid courses were most often cited by faculty as potential options, and therefore these would be the two primary areas for investigation.

3 Recommendations for Hybrid Learning

The Working Group first turned to Graduate Professional Studies, Rabb School, to get a better understanding of how distance learning works. A brief context of online course development and lessons learned in that unit follows.

Distance learning and online learning programs at GPS have evolved over seven or eight years, starting with two or three adventurous pilot courses carefully monitored and assessed, progressing through the beginnings of consistency such as structured syllabus and course templates, instructor training, and early discussion of course and program outcomes, and finally arriving at the current status. The process is never static, always evolving as new tools appear in the market, new instructors join, and new ideas come to the fore. At this time, GPS offers five out of its six, ten-course, part-time, graduate professional master’s degree programs entirely online. (Three of these five are offered in the classroom as well, along with one entirely classroom-based degree program.) The unit has evolved to employ finely tuned standards and best practices, a seven-week online instructor training program, and fully developed course audit and outcomes assessment processes for all courses. These practices facilitate the documentation of continuous improvement in degree programs for accreditation.

The online courses are offered in a text-based, electronic environment using LATTE, modified appropriately, as the online learning management system (LMS). Online courses are limited to 20 students per class, taught directly by the instructor of record, and use additional synchronous electronic tools such as Elluminate, integrated into the LMS, for greater effectiveness and course enrichment. (These tools never replace the instructor or the instructor’s central teaching and facilitation role in the course.) This gradual expansion has been undertaken in a careful, thoughtful manner, with adjustments and improvements made as needed and as assessments and experience have dictated. The programs were specifically noted in the 2006 NEASC Report as being careful and of high quality.

The Working Group identified several elements from the GPS experience as the foundation for future online or hybrid efforts at the University:

- **Online standard course template;**
- **Interactive online pedagogy;**
• Learning outcomes by course and program;
• Established DL (distance learning) standards and best practices;
• Use of established systems and low-cost technology tools;
• Faculty development and support for online teaching;
• Support services for students studying online;
• Appropriate assessments for courses.

What follows are lessons learned from GPS and distilled by the Executive Director.

GPS found that consistency in course presentation, i.e., a standard course template in LATTE and standard expectations, across programs was crucial for a number of reasons:

- Students became accustomed to and comfortable with a consistent look, feel, and navigation, and therefore were happier in their courses, felt more in control of their work, and were not distracted by the quite simple but potentially intimidating mechanics of participation in the course. They only had to learn it once. (An area of new development for GPS this year is the creation and provision of an upfront, in-depth student orientation to online learning at GPS, for new students.)

- A specific course template and standard expectations and best practices supported instructors as they built courses without in any way interfering with or directing the actual content of a course. There were designated sites in the LMS template for various course elements, and building courses became much easier over time, particularly in the organization of course material. Instructors often could help each other with technicalities.

- Presentation standards and expectations were easier for both instructors and students to follow and meet in using a standard course template, even though the template itself is in no way involved with the content of the course. It is simply a highly adaptable, technical road map of sorts for a course.

- Division-wide assessment of online learning was greatly enhanced by the use of a consistent online course template. “Apples to apples” course audits became easier to achieve, and learning outcomes were easier to assess. Demonstration of quality for outside parties (NEASC, for instance) was greatly eased and better understood.

GPS found that, contrary to many expressed fears and doubts, that interactive online pedagogy between students and instructors, as well as students together, results in extensive, very frequent and meaningful contact and discussion with one another over the course material, and that there were specific course designs and teaching techniques which enhanced this desirable reality. (There are also specific designs and techniques which do not enhance effective participation, and we actively sought and still seek to discern among them and eliminate less successful activities.) In an online course, no student “lurks” in silence in the sense that some students do, in the back row of a lecture classroom. Overt, regular participation
at a specifically defined minimum and frequency is required, and its quality evaluated, as part of a student’s grade. (Timely and good participation in the course constitutes at least 30% of a student’s final grade and often more.) Students must exchange ideas with each other and the instructor clearly, online, via threaded discussions and other tools, all the while growing their independent critical thinking, articulation and writing skills. Online courses present by definition a writing intensive environment.

A critical component of this online pedagogy is **timing which is central to successful online teaching and learning**. The incorporation of the course schedule, broken out in considerable detail in both the course template in LATTE and the syllabus template, is essential to student success in any course. Whatever the subject or schedule, this is true. Most GPS courses have 10 sections, or modules, corresponding to our standard 10 week term. Each weekly module runs from Wednesday at 12:01 AM to Tuesday at midnight, Eastern Time, because our adult working population completes much of its work on the weekend, and students need time to focus during that period. The very explicit timing avoids confusion when time zones are involved. The work for each weekly period, or module, is very clearly spelled out: instructor’s “lecture,” resource readings and/or research, discussion questions, requirements for written primary responses and responses to other students’ written answers, individual homework, work on individual and/or group projects, quizzes, exams, etc.

Within a given week, the work is broken down even further and attached to dates and times, so that students know that their first response to a discussion question in a particular module is due on Friday night by midnight (for example—although there is considerable flexibility by instructor in this process.) This helps students to establish a working rhythm to keep up with their work, to accomplish their reading, research and homework on time, and to complete projects before the end of the term. **The rhythm of an online course is different in this way from a ground-based course. Work needs to be done very regularly, usually some each day, both by students and faculty, and the pace can feel intense and demanding, especially to younger students. It is essential to student well-being for them to understand before starting a course that they MUST stay abreast of the work in the course modules every week, by participating virtually every day, in order to be successful!**

As online learning expanded with increasing numbers of instructors participating, **GPS found that the articulation of course and program outcomes was intimately tied to effective, consistent expansion in the programs.** Outcomes naturally followed from the identification of standard principles and best practices and became essential in the context of consistent assessment of teaching and learning, and of overall quality.

**Established DL standards and best practices** enabled GPS to develop high-quality courses and degrees.

- **GPS limits online course section size to 20 students.** A number larger than 20 is generally unmanageable for one instructor in an online course. (In other schools such as Boston University, a central faculty person delivers the course to a large number of students in whatever medium is chosen, while discussions and other teaching functions
are handled by the equivalent of T.A.’s, roughly 15 to 20 students per T.A.. GPS has consistently chosen NOT to use this model for a variety of value-oriented reasons.)

-Successful online learning by definition requires course programming and design which specifically address skills in critical thinking, the ability to develop and articulate ideas and the expression of ideas well in writing, whatever the subject. It also allows for the use of many tools, resources and teaching techniques which enrich and enhance learning.

-The Division deliberately moved from courses already offered successfully on campus into a DL version, following the same pattern of a given course, using the same text materials and resources, homework, projects or papers, collaborative efforts, quizzes and exams. While elements of classroom teaching experience do indeed translate into the electronic setting, online teaching and learning media present perspectives, opportunities and challenges in some cases different from those in classroom teaching. In every case, our goal was to present courses as close as possible to what had been offered in the classroom while exploring, utilizing and enhancing the special benefits and opportunities implied in online learning and avoiding the pitfalls. This approach was well received by NEASC.

GPS identified the many benefits of simplicity in technology early on. Bells and whistles are intriguing, but they frequently distract students in their study, break down, need to be updated or changed often and require students to have higher technology for their reception than many students have. Using the University platform, first WebCT Campus Edition, then WebCT Vista and now Moodle/LATTE, has assured that GPS teaching and learning is completely in synch with the University’s systems. Also, modifications to LATTE for GPS benefit the entire campus. Early adopter user of synchronous technology such as Elluminate may also prove to be helpful to the campus, as the next section on webinars illustrates.

Online Learning and Distance Education, done well, are neither cheaper nor less time consuming than traditional ground-based programming. Their benefits include the ability to reach beyond the traditional geographical area both to students and to potential faculty (whose presence on campus is not necessarily required), the ability to enlarge the student population by offering more courses without impacting the physical plant, the ability to target and serve specific populations with specific programming whether on campus or at distance, the ability to draw traditional students together around a virtual class or topic and the ability to be more flexible in academic offerings. However, courses take considerable time and expertise to develop, whatever the medium. A 2009 APLU-Sloan National Commission on Online Learning Benchmarking Study indicates that 65% of faculty report that an online course takes more effort to teach and 85% report that an online course takes more effort to develop.

GPS found it necessary to provide its instructors with pedagogical training in LATTE as the LMS for distance learning. This training augments the general orientation to LATTE provided by LTS. It now includes the seven-week training course for new online instructors, which is currently targeted to GPS’s particular approach to distance learning. In Appendix 3, a detailed chart addresses the amount of time faculty could spend in preparing to offer an existing course online. If an instructional designer were provided from LTS, faculty time would range
from 41-57 hours of preparation. (Note: LTS is not currently resourced to include instructional designers on staff). Without an instructional designer and this is currently the GPS model, the range grows to 89-128 hours. This model in which faculty create a DL version of a course is alien to the culture of the main campus where faculty will look for support and guidance with what may be perceived as the “mechanics’ of the course. To see the components of the online training course, consult Appendix 4.

GPS also found that support services needed by students studying online are different from those studying in the classroom, although perhaps less different for resident online students who can visit an instructor or counselor in person, than for those truly at distance. Online study requires virtually flawless technical support (of the LMS and course production in the web) all the time. The instructor’s participation in the course on a very regular basis is important to the sense of connection and successful participation in online discussion for each student. Essentially, the instructor is the face of Brandeis, who invites students into a virtual space for a particular shared experience. Further, students need to be able to reach a specific person, a counselor or other support staff person, at any reasonable time. The person in the office provides the answers/solutions or refers the student as appropriate. Topics generally concern course registration, application for admissions, academic counseling as to appropriate courses, questions around graduation, and the occasional personal problem or problem with a course.

Building on this for the campus, LTS indicated that faculty and student technology support would need to be expanded, with a corresponding increase in staffing (that is currently unfunded). Orientation and guidelines for technical requirements would need to be developed and help desk hours and other support services would need to be augmented. A significant increase in online courses would also require new investment in technology infrastructure, additional development of LATTE, and additional staffing resources related to these areas.

Assessment of courses is crucial for understanding whether successful teaching and learning online occurs. GPS has developed course outcomes and program outcomes that are reviewed during the academic year. Suggestions for improvement are made to instructors, and program directors closely monitor how courses are meeting established outcomes.
**Hybrid Pilot Recommendations**

Begin with JBS and add select GSAS, IBS and Heller faculty → offer workshops → develop faculty cohort. Develop learning outcomes assessment process.

**Pilot Proposal Overview:**

- Pilot a small group of hybrid JBS DL courses using existing systems
- Use this pilot to develop familiarity with DL pedagogy and tools
- Use pilot as a basis to develop a longer-term plan for a viable DL program

Survey GSAS inquiries and large number of PT GSAS students (increase from 5 to 45) about whether they’d be interested in distance courses. Identify specific departments/courses in Graduate Professional Schools and GSAS and offer online orientation/pedagogy/course development, along with the JBS cohort. The following may be good starting points.

- GSAS: Psychology//Politics//Sociology
- Heller hybrid graduate certificate in aging
- IBS: hybrid courses in MSF (cannot scale until more faculty resources are secured)

**Details:**

- Identify 3-4 hybrid DL courses to pilot
- Designate an oversight team to coordinate and assess
- Hire an instructional designer in LTS to build the courses and additional LTS Technology Staff to coordinate increased student technology support
- Hire additional PT staff in Rabb GPS to provide DL pedagogical training
- Host courses in unchanged LATTE environment
- Assess pilot before continuing DL offerings

**Costs:**

- PT Instructional Designer: est. $35,000 salary / year plus $8k benefits
- Additional GPS staff for pedagogy: est. $16.5 for 3 semesters
- Student/Faculty Technology Support: est. $12k (20% of staff time)
- Technology Support in Summer: $6.5k for expanded hours
- *Expansion of Elluminate license: if desired, from $11k to ~$50k for campus

For specifics on JBS, see Appendix 5.
4 Recommendations for Webinars

The Alumni Office produces webinar programs with Brandeis faculty that are available to alumni, BNC members, friends and the University community. Live streaming video via QuickTime is used with a live question and answer session via email and instant messenger. The video recording is posted following the live program on the Brandeis alumni website. Technical requirements and staffing are extensive:

- Live streaming video requires a streaming station and live video production equipment;
- Additional bandwidth needs to be purchased if the audience is expected to exceed the Brandeis server capacity;
- Web management: connecting the live stream video, posting information and forms gathering survey data, troubleshooting accessibility issues, receiving and processing incoming questions during the event via email and IM and communicating those via monitor to the forum moderator;
- Technical staffing (camera, audio, direction);
- Non-technical staffing: Staff to organize, register, promote and manage the events.

Costs include an annual service contract for increased bandwidth for $1450, as well as $1122 per event to cover Media Technology Services’ equipment, studio, and labor. With three to five events per year, costs are manageable for a high-quality ‘t.v-like’ production.

In their Executive Education program, Heller has used Elluminate, a synchronous audio/visual software, that permits interaction between the speaker and participants and among the participants as well. Powerpoint or other audio-visuals can be used simultaneously. GPS, Rabb School also uses Elluminate, but embedded within the online courses to provide opportunities for team-projects, special live discussions, and to enhance the overall online text-based experience. The license for Elluminate for unlimited use by Heller and Rabb with support and troubleshooting is $11,400; campus use which is based on numbers of users could be $50,000. The technical requirements are fairly basic; most laptops come with cameras, but small ones can be purchased for minimal cost (about $50), as can headsets ($30). DimDim offers a free competing product, but limits the number of participants to 20. For access comparable to Elluminate, the cost is $75 per month, but the audio and video quality is mediocre and there is no technical support. As an occasional option, it is functional, but not for consistent, high-quality learning.

As indicated by the inventory, centers/institutes as well as faculty are interested in inviting distant speakers into their classrooms and broadcasting their events through live streaming video. The demand for webinar-type services and software will continue to grow, since this is a fairly simple, low-cost way to enhance classes and share events. LTS, in conjunction with the webinar subgroup produced a matrix of video production levels (basic, enhanced and best) and costs with the goal of providing some guidance both to this committee and to interested campus groups who inquire with LTS. The basic option is best suited for bringing a remote speaker into a Brandeis classroom or for virtual ‘seminar-style’ discussion in a small, virtual class. The enhanced option could include a presentation of a pre-recorded event on campus with a facilitated follow-up discussion, online video tutorials for science laboratory programs, and delivery of live or pre-recorded lectures. Best is the option currently used by the Alumni Office for their faculty series.
If the volume of webinars increases dramatically, the University will need to determine what investments in bandwidth, software, equipment and staffing would be most useful for the campus. See Appendix 6.

5 Structural Recommendation: Online Learning Advisory Committee (OLAC)

Rationale for committee:

• Most faculty are new to online/hybrid teaching. Even if enthusiastic, they will need advice on how to do it effectively, and do so from the outset.

• A significant well of expertise exists in the University, but in relatively few hands. Need to put in place a mechanism for sharing that expertise effectively and without dilution.

• Need to maintain quality of Brandeis education in online learning and to show that we are doing this, in order that it is not perceived as second-class.

• Support from the center sends an important message about the institution's commitment to the endeavor and sustaining it in the long term.

Nature of committee:

• Advisory, not prescriptive, not a policing body. But working to a series of well articulated guidelines that seek to uphold Brandeis educational standards in the online space.

• Course assessment limited to design of online and hybrid pedagogy (content to be approved through the same channels as all other courses, but courses with online content will be sent to this body for review and feedback). Curricular control to remain the prerogative of individual academic units and designated standing committees.

• Not a policy-making committee; tasked to recommend both to the standing committees such as the Undergraduate Curriculum Committee, the Graduate Council and the Graduate Professional School Council, as well as to the Provost.

• Function and scope of the committee to be communicated clearly to the community, in particular its advisory nature.
Responsibilities of the committee:

1. To draw up and promulgate guidelines for best practices in online learning.
   - Deploying the collective expertise of the University, in particular Graduate Professional Studies.
   - Regularly reviewing the guidelines in light of experience, trends and university-supported technology.

2. To assess pedagogy of proposed online courses and advise faculty on implementation of best practices.
   - Scrutinizing design of individual courses proposed for online/hybrid treatment.
   - Advising faculty on implementation of best practices.
   - Advising faculty on training opportunities.

3. To act as an advisory body to the administration on the future development of online learning at the University.
   - Drawing on experience of faculty interactions, course scrutiny, student feedback etc. to gain insight into trends, faculty interests, motivations, involvement, opportunities for structured growth.
   - Monitoring effectiveness of academic, training, and technology resources available to faculty teaching online.

Membership of the committee:

- Representative of University central administration (Provost's Office)
- Representative of Graduate Professional Studies
- Representative of LTS
- Faculty representatives from A&S and each of the professional schools (with experience and/or training in online pedagogy)
  - A&S and professional school faculty representatives will act as liaisons with faculty of their units on online learning. They will be responsible for presenting new online and hybrid courses to the committee for assessment of their online design and for passing feedback and advice to the faculty members in question. Formal proposals with online content will be referred by the faculty standing committees and again the faculty representatives will act as liaisons.

In time, this committee may need to become a standing committee comparable to those in the faculty handbook, or its function may be subsumed by the traditional curricular committees as faculty interest and knowledge grows.

Avenues to Alerting the committee about DL courses:

The committee spent some time discussing the processes by which it would hear about DL courses. Since DL is expected to evolve organically, there is a variety of methods by which such
a new course could come to the committee’s attention. All listed below could function as sources for referrals to the committee:

- Memo from provost to the community about the committee’s formation
- Deans who are often first approached about new curricular ideas
- Chairs in A&S present 3-year curricular plans
- Traditional bodies such as UCC, the Graduate Council, the Graduate Professional School Council
- Registrar’s form indicating what kind of classroom is sought for the following year (perhaps a section could be added indicating hybrid, DL, etc.)
- LTS contacted by faculty for help with software.

In all cases, faculty should be asked to describe to the committee the type of DL effort involved, how this integrates with the course, and what type of support and software they are expecting. For a new course or program, ideally this process of consulting with the committee should occur sooner in the process rather than at the end. In addition, there will need to be a way to code a course as DL within Peoplesoft so that tracking and archiving of courses can occur. In keeping with GPS policy, a course should not be distinguished as DL on the transcript since the delivery mode does not change the quality and type of course. Over time, the committee itself could report out to the community about the number and type of DL or hybrid courses or webinars occurring across the University.

6 Revenue Generation

One of Brandeis’ fundamental challenges is that we are a major research university operating at a scale below that of any other institution that shares that aspiration. The quality of both our undergraduate and graduate programs is high and labor-intensive. Given the plan to add more undergraduates while reducing faculty, the curriculum will be strained to meet students’ needs. Quality distance education, as conceived and practiced by Graduate Professional Studies, is also labor intensive, but their low-cost model of having instructors develop their own online courses during their own time in order to increase their teaching opportunities is not transferable to the other schools. Our conclusions then are as follows:

- Brandeis is, at least initially, not likely to conduct online learning on scale that will generate substantial incremental revenue for the University. Model will be organic, gradualist, consensual and can be expected to incur increased costs in support and infrastructure as it grows.

- This approach is likely to remain unchanged, absent significant growth in faculty interest, backed by institutional commitment at highest levels, and manifested by increased support and infrastructure.

- Organic growth, with robust central support for limited initiatives, may sow seeds for growing faculty interest and expansion in longer term.
Most probable short-term models are more likely to enrich existing/emerging programs (e.g. JBS); less likely are new, stand-alone ventures generating considerable additional income.

Tentative ideas for revenue generation include:

- Midyears begin 2 intensive courses and orientation at the end of the summer and then continue with 2 online courses through the fall. (hybrid model)
- In GSAS, Sociology and Politics may be able to increase the number of master’s students by adding a few entry-level courses online and reducing full-time students on campus. A workshop would need to be held for the chairs and graduate chairs of these departments to introduce them to the GPS text-based model and see if they were interested. (Half to three-quarters of GSAS master’s programs have some capacity to add students.)
- Genetic counseling which has online courses for a certificate could offer these nationally, if they adjusted their internship model as follows: students would propose an internship for approval, but these would not be able to be selected and matched by the department.
- The Mandel Center for Studies in Jewish Education would be interested in a hybrid certificate program in Teacher Leadership that would occur on campus for 2 summers and in between would be distance courses.
- The Heller School is interested in webinars for executive education alumni and webinars for continuing education credits for surgeons and physicians. Also a hybrid model for a graduate certificate program in aging and long-term care that would bring students to campus at the beginning and end of the academic year with online courses in between. Perhaps a hybrid MBA would be possible with the right incentives. All these may attract additional students, generating incremental income.
- The International Business School could consider hybrid courses in Master's (e.g. IBS MSF) that might make programs marginally more attractive to some students, but not substantially increase their size. Given current constraints on faculty, this is not likely in the immediate future.
- GPS (Rabb School) will work to expand its markets for existing online degrees, whether nationally or internationally.

In any revenue model, we need to take into account incentives – wholly or partly financial – for faculty to develop and teach online/hybrid courses and the upfront start-up costs (for training, course development, LTS infrastructure, other support). Dean Magid notes that the 2-year APLU-Sloan National Commission Benchmarking Study Report, which he co-chaired with Jack Wilson, provides a useful roadmap on best practices used by public universities to build up their online learning programs. One immediate barrier to ramping up a major online learning initiative is the start-up cost and the 2-3 year lag before revenues exceed expenditures. Some universities carved off part of their endowment to fund the initial start-up costs; other pursued donors who are intrigued by an online global footprint. [http://www.aplu.org/NetCommunity/Page.aspx?pid=282](http://www.aplu.org/NetCommunity/Page.aspx?pid=282).
In the longer term, any drive for significant revenue generation would have to address questions of:

1. Brandeis educational mission, culture, learning goals
2. Commoditization of learning, with quality and branding implications
3. Faculty capacity and incentives
4. Costs of LTS infrastructure expansion: both hardware and staffing
5. Support Services for students
6. Marketing resources to reach national or international target audiences
7. High-level institutional commitment

See Appendix 7 for estimated costs and categories for a large scale distance learning initiative. Since so many of the parameters for such an efforts are currently unknown, this chart’s value lies in identifying types of costs and areas that would need to be addressed, if such an initiative were launched.

### Conclusion

This committee’s inventory of existing and potential distance learning activities on campus and subsequent investigation of distance learning modes and approaches were educational experiences; we learned from experts and from each other. This report provides an analysis of the administrative, technical and human resources needed to support hybrid courses and webinars on campus. While we explored revenue-generating ideas, all of these would require substantial discussion, workshops and buy-in by the units before business models could be proposed. We see our work here as preparatory, a foundation for another body, such as the Online Advisory Committee, that would coordinate and set standards for the appropriate use of distance learning in both academic and non-academic programs.

**Immediate Next Steps:**

1) Constitute Online Learning Advisory Committee (OLAC)

2) GPS and CST should sponsor a spring 2010 workshop for JBS faculty who have an internship component in their courses to learn about text-based pedagogy via the Rabb template and Elluminate. 1 or 2 faculty from Politics, Sociology, IBS and Heller should be invited as well.

### Appendices

Appendix 1: Sloan Report
Appendix 2: Inventory
Appendix 3: Time Estimates for Faculty to Build an Online Course
Appendix 4: GPS, Rabb: Designing and Teaching DL Course
Appendix 5: JBS model
Appendix 6: Video production levels for academic webinars
Appendix 7: Costs for Larger Scale Distance Learning