

# **A Proposal for Implementing the Lincoln Program**

**Approved by the BRIDGE Implementation Committee  
December 2009**

## **BRIDGE Implementation Committee**

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## **INTRODUCTION**

The Lincoln Program is the name given to a new General Education program developed over the past several years by the SIUE BRIDGE (Baccalaureate Reform through the Integrated Design of General Education) Committee. The final Lincoln Program proposal was approved by the SIUE Faculty Senate in April 2008. However, final approval of the Lincoln Program by the Provost's and Chancellor's Offices requires understanding how and over what time frame the Lincoln Program might be implemented and estimating costs associated with this implementation.

The BRIDGE Implementation Committee (BIC) charge was to develop an implementation plan that would describe the time frame over which components of the Lincoln Program could be implemented, and to estimate costs associated with each phase of implementation. To that end, the BIC has examined (a) how overlaps between the current General Education program and the Lincoln Program reveal effort that is already being expended institutionally and that could be redirected toward implementation; (b) how changes in the requirements and curricular timing of freshman-level "Foundations" courses will affect personnel and space requirements of the affected Departments; (c) how new distinctions between the Bachelor of Arts and Bachelor of Science degrees and refinements to the New Freshman Seminar can be integrated into the Lincoln Program; and (d) how logistical challenges associated with implementation of the Lincoln Program will affect timing of this task.

This document proposes an implementation plan for the Lincoln Program based on these considerations. The proposal is organized so as to provide a structural comparison between the two general education programs and then to discuss implementation of the major components of the Lincoln Program.

## **EXECUTIVE SUMMARY**

**Recommendation 1:** The BRIDGE Implementation Committee (BIC) recommends that the Faculty Senate adopt the following implementation proposal as an addendum to the Lincoln Program proposal, which was approved by the Faculty Senate in April 2008. The BIC Implementation Proposal includes the following main elements:

- a schedule for implementing the main components of the Lincoln Program, by semester and year;
- a plan for hiring additional instructional staff in the Departments of Foreign Languages and Literature, Speech Communication, Mathematics and Statistics, and Philosophy;
- considerations for planning teaching reassignments necessary to encourage faculty to offer sections of IS and NFS courses;
- minor changes to the original Lincoln Program proposal, including changing the Foundations Sequencing requirement and changing the name of QL 101 (Quantitative Literacy) to QR 101 (Quantitative Reasoning);
- a plan to bypass many of the committee review requirements for Form 90C requests that do not include changing any academic aspect of particular courses during transition to the Lincoln Program.

**Recommendation 2:** The BIC recommends adopting the following timetable for implementing the shift in charge and composition of the General Education Committee (Faculty Senate Curriculum Council) as stipulated in the Lincoln Program Proposal:

- Spring 2011 (and each Spring thereafter): Members of GEC selected as per composition specified in the Lincoln Program proposal;
- Fall 2011: Newly constituted GEC convenes, operating as specified in current (pre-Lincoln Program) GEC operating papers but working with Director of General Education (and BIC equivalent) to specify and operationalize roles of each with respect to the Lincoln Program;
- Spring 2012: Final roles of GEC and Director of General Education formalized; GEC operating papers amended and approved as necessary;
- Fall 2012: GEC assumes Lincoln Program role according to amended GEC operating papers while also considering changes to Current Program;
- Spring 2013: Requests for changes to the Current Program (e.g., Form 90 series) that do not directly affect Lincoln Program elements no longer accepted after Spring 2013; GEC membership for Fall 2014 named in light of Lincoln Program Review to begin in Fall 2014;

Fall 2014: First Lincoln Program review process begins under direction of the GEC (examining Foundations courses); Fall 2014 will be three years after first implementation of any Lincoln Program requirement.

The Lincoln Program proposal specified a shift in the composition of the GEC, proposed amendments to the GEC operating papers, and called for the creation of a Director of General Education. All three of these provisions have been approved. However, the Lincoln Program proposal did not specify the role of the Director of General Education with respect to the Lincoln Program. The BIC recommends that the General Education Committee (Faculty Senate) work with the new Director of General Education (Office of the Provost) to determine the exact roles of each with respect to administering, maintaining, and assessing the Lincoln Program so that no unnecessary duplication of effort occur and so that no necessary tasks be overlooked.

**Recommendation 3:** The BIC recommends that the Faculty Senate and the Office of the Provost create a new implementation committee, to be chaired by the Director of General Education, the charge of which will be to oversee and organize implementation of the Lincoln Program. The rationale for this recommendation is presented below under “Lincoln Program Implementation: Logistics, Personnel/Committees.”

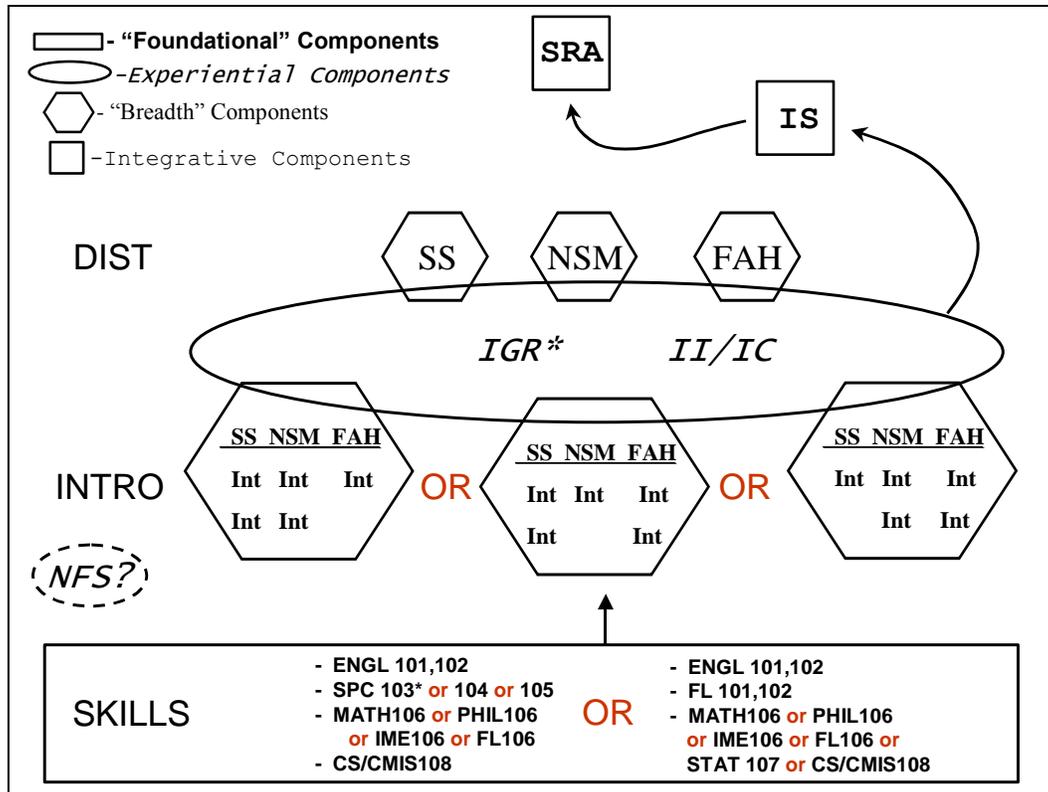
### **COMPARISONS: STRUCTURES AND TERMS**

The current SIUE General Education Program has no specific moniker; thus, to facilitate discussion concerning comparisons and implementation, the general education program currently in effect will be referred to as the Current Program. Both the Current Program and the Lincoln Program are comprised of “components,” which are curricular modules that are at least somewhat functionally independent of each other. These components are in turn comprised of “elements,” curricular requirements that work with, and are defined relative to, each other.

The structure of the Current Program is shown in Figure 1 (see Appendix A for a list of acronyms). Recognizable components of the Current Program include the Skills component (which includes two parallel tracks of courses), the Introductory/Distribution component, the Experiential component, and the integrative Interdisciplinary Studies (IS)/Senior Assignment (SRA) component. The New Freshman Seminar (NFS) requirement is also shown in Figure 1 as part of the Current Program. This is a relatively new requirement, however, and its implementation and refinement are proceeding in conjunction with definition and implementation of the Lincoln Program. Thus, it is not shown as tightly integrated into the structure of the Current Program.

The structure of the proposed Lincoln Program is shown in Figure 2. Components of the Lincoln Program include the Foundations component (equivalent to the Skills component of the Current Program, but now consisting of only one set of courses), the Breadth Component (with six course areas instead of three as in the Current Program), the Experiential component (with five elements instead of two as in the Current Program), and the integrative IS/SRA component. (While the IS element has been discussed as being part of general education and is considered as such in the Lincoln Program, it should be recognized that SRA falls somewhat outside the usual discussion of general education because of its explicit tie to completion of major requirements.

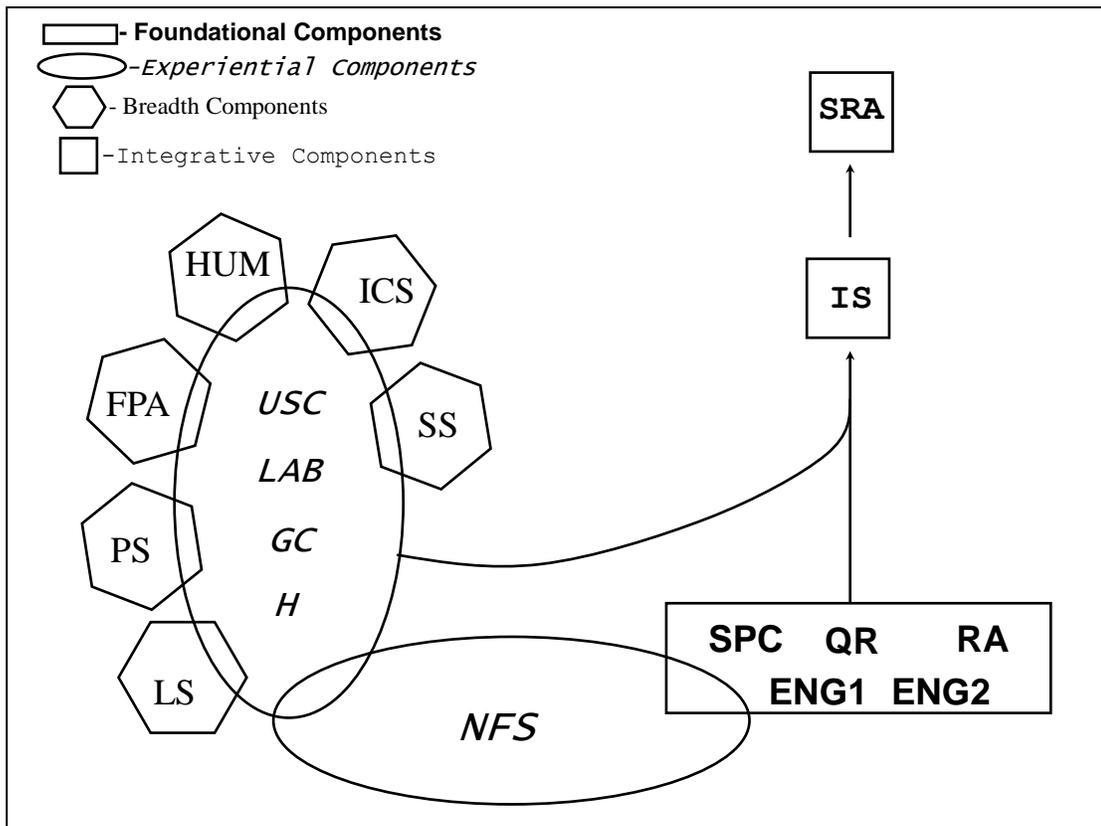
The SRA is not addressed in the Lincoln Program and so will not be referred to as part of general education for the remainder of this document.) Note that the NFS requirement is now shown as an integrated Experiential element in the Lincoln Program that can be satisfied within the Breadth Component or the Foundations Component.



**Figure 1.** Diagrammatic representation of the Current Program. Polygon shapes and font faces denote various components and elements of the program, and are designed to be equivalent to those in Figure 2. Terms in the legend match those terms describing equivalent levels of organization in the Lincoln Program. See Appendix A for a list of acronyms.

An additional structural change specified by the Lincoln Program but not shown in Figure 2 is the clarified distinction between Bachelor of Arts and Bachelor of Science degrees; implementation of this component will be discussed along with other components of the Lincoln Program.

The reader is encouraged to recognize that there are undoubtedly many ways to visualize the Current and Lincoln Programs; these diagrams are provided simply as a way of focusing the reader’s attention on key differences between the two programs.



**Figure 2.** Diagrammatic representation of the Lincoln Program. Not shown in this diagram is the BA/BS distinction. Polygon shapes and font faces as in Figure 1. Foundations Component: SPC, Speech 101; QR, Quantitative Reasoning 101 (this represents a change from the Lincoln Program proposal – see justification pg. 19 under “QR 101-Quantitative Reasoning”); RA, Reasoning and Argumentation 101; ENG1, ENG2, English 101 and 102. Breadth Areas: LS, Life Sciences; PS, Physical Sciences; FPA, Fine and Performing Arts; HUM, Humanities; ICS, Information and Communication in Society; SS, Social Sciences. Experiential Requirements: NFS, New Freshman Seminar; H, Health; GC, Global Cultures; LAB, Laboratory; USC, United States Cultures. Integrative Requirements: IS, Interdisciplinary Studies; SRA, Senior Assignment.

## IMPLEMENTATION OF THE LINCOLN PROGRAM: CONSIDERATIONS

In designing an implementation plan for the Lincoln Program, the BIC has been considering several issues that emerge from consideration of the transition from the Current Program to the Lincoln Program. These issues come into focus when examining structural differences between the two programs and how the University as an institution will need to re-organize existing effort and support new effort if the Lincoln Program is to be fully implemented. These issues are:

- implementing the Foundations component;
- implementing the Breadth component;
- implementing the New Freshman Seminar (NFS) element;
- implementing the BA/BS Distinction component;
- refining and enhancing the IS element;
- elucidating and recognizing the logistical challenges of implementing the Lincoln Program.

In confronting these issues, the BIC has recognized that the NFS requirement is most similar in overall spirit to Foundations elements. It is for all practical purposes a new requirement of the general education program, and even though it is an Experiential requirement, it possesses curricular challenges similar to those of the Foundations courses (e.g., it specifies fixed section sizes, and students must complete the requirement early in their career). Thus, implementation of the NFS element will be considered in greater detail as part of the Foundations component.

Implementation of the BA/BS Distinction component will likely emerge fairly readily from implementation of the Breadth Component because of the way that courses will need to be redefined in terms of their attributes. Also, determining availability of seats for the IS requirement has been studied in the same way that seat availability has been studied for the new Breadth areas and Experiential designations. Thus, implementation of the BA/BS Distinction and the refined IS requirement will be discussed as part of implementation of the Breadth component.

Organizing the critical issues in this way leads to three distinct discussions: the logistical challenges of implementation; implementation of the Breadth component; and implementation of the Foundations component. Each will be presented separately below in terms of defining considerations, proposed timelines, and estimated costs.

## **LINCOLN PROGRAM IMPLEMENTATION: LOGISTICS**

### ***Personnel / Committees***

The BIC (or an equivalent committee) should continue to exist throughout the implementation process, and the Director of General Education, as Chair of this committee, should be responsible for organizing and overseeing the implementation process. Under this model, the BIC (or equivalent) will stand as a committee overseeing implementation and programmatic considerations of the Lincoln Program. It will thus operate in parallel with the current General Education Committee (GEC) of the Curriculum Council, which will continue to oversee operation of the Current Program.

Oversight of the Lincoln Program will eventually be incorporated into the charge of a restructured GEC as stipulated in the Lincoln Program proposal, assisted in this charge by the new Director of General Education. The specific relationship between the Director of General Education and the GEC in terms of roles and responsibilities is unknown at this time, but will likely be modeled on the relationship between the Director of Assessment and the Curriculum Council's Committee on Assessment. Regardless, Lincoln Program implementation will involve a large number of diverse, time-sensitive activities and decisions, and the BIC recommends that the BIC (or its equivalent) remain standing as the agent for implementation until the Lincoln Program is fully implemented.

### ***Target Enrollments***

Discussion with the Office of the Vice-Chancellor for Enrollment Management (Scott Belobrajdic) in Fall 2008 centered on estimating the number of new students entering SIUE per year during years of Lincoln Program implementation and establishment. This provided a target range of seats that would need to be offered in each element of each Lincoln Program component each year. This target is used to estimate costs for new Lincoln Program elements (e.g., the QR101 requirement) and also to determine if effort expended by SIUE in the Current Program can be productively redirected toward other Lincoln Program elements. It is assumed that once the Lincoln Program is fully implemented, continued growth in demand for general education seats will be accommodated using mechanisms already in place.

The target range the BIC has been considering is 1900 – 2600 students per year. Belobrajdic indicated that factors affecting actual number of students enrolling who require general education credits will include continuing increases in overall demand regionally, success being manifest in retention programs, and continued refinement of transfer and articulation programs in coordination with local community colleges. *For simplicity in estimating costs and required effort, this proposal assumes an enrollment target of 2000 students per year.*

### ***Organizational Challenges and Timeline Considerations***

Following is a list of tasks that will need to be completed in order to support successful implementation of the Lincoln Program. There is no additional cost to completing these tasks beyond a commitment to support the BIC and its original charge. The Chair of the BIC (or its equivalent) will work with BIC members and other University Department/Program Chairs and faculty as well as the Offices of Academic Advising and the Registrar to complete these tasks. Specifying these tasks is important to understanding the proposed timing of implementation of Lincoln Program components:

- Redefinition of course attributes to match Lincoln Program requirements: designing a course proposal/approval mechanism; soliciting new courses and/or redesigned courses from Departments/Programs; clarifying roles of BA vs. BS degrees within Departments/Programs;
- Communication with campus and regional community: updating undergraduate catalog; updating information for academic advisors; updating graduation check sheets; monitoring correspondence between IAI articulation agreements and redefined courses; maintain Lincoln Program web site that allows transparent inspection of implementation progress and needs;
- Designing oversight/assessment plan for the Lincoln Program, which is to be completed on a rotating 5-year basis beginning three years after implementation of the first Lincoln Program component;
- Developing proficiency/placement exams to reflect new Lincoln Program requirements and to provide data on how many seats will be required in certain elements during Lincoln Program establishment; designing a system to avoid double-standard of on-campus credit versus transfer credit for certain elements;

- Updating BANNER with respect to graduation audits: recognizing BA/BS distinction; awarding Experiential elements appropriately; recognizing what student/advisor intended versus what BANNER accepts.

It is expected that the bulk of these tasks could be completed during Summer 2009 though Summer 2010. This time period will also allow for identification of other implementation issues that may arise and that are not addressed in the remainder of this proposal.

### ***Granting Authority for Non-Curricular Course Attribute Changes***

The Current Program uses a series of attribute markers that indicate which courses satisfy certain general education requirements (e.g., Intro, Dist FAH, IGR, etc.). The structure of the Lincoln Program differs substantially from that of the Current Program in terms of the distribution of effort required of students to successfully complete their curricula. Therefore, all general education courses will need to have new attribute markers (e.g., HUM, USC, NSF, etc.) assigned to them during implementation of the Lincoln Program.

Ordinarily, changing a course's attribute would require submission of Form 90C by relevant faculty. These forms would be approved at the Departmental level by the Chair and/or Undergraduate (or similar) Committee before being submitted to the School or College Curriculum Committee and finally to the General Education Committee and the Curriculum Council (Faculty Senate). This process can result in long delays in course description or attribute changes becoming officially approved, entered into the Undergraduate Catalog, and becoming visible to undergraduate advisors.

The BIC expects, however, that the vast majority of course attribute changes required by the Lincoln Program will not be accompanied by any changes to the courses they are describing. Most cases of attribute changes will not be accompanied by any alteration of course coverage, course delivery, the role of the course in the Department's major program, or any other curricular variables. For example, BIOL 204 (Biotechnology and Society), which currently carries the attributes Dist NSM and II, will likely carry the new attributes LS and WC as Lincoln Program designators. There will be no changes in the description or delivery of BIOL 204 upon implementation of the Lincoln Program.

The BIC feels that it would be unnecessarily redundant to require the approval of School Curriculum Committees and the General Education Committee after the relevant Department and the BIC (or equivalent committee) had already approved such non-curricular attribute changes. Further, submitting such changes through School committees and the General Education Committee may greatly impede progress toward reclassification of general education courses. Current attributes have, by definition, already been approved by all relevant committees; for non-curricular attribute changes, the BIC will simply evaluate whether a given course meets the learning goals that define certain attributes and then recommend such changes to the Curriculum Council for approval.

It is thus expedient to grant the BIC authority to evaluate and recommend non-curricular attribute changes to general education course designators without specific approval of School curriculum

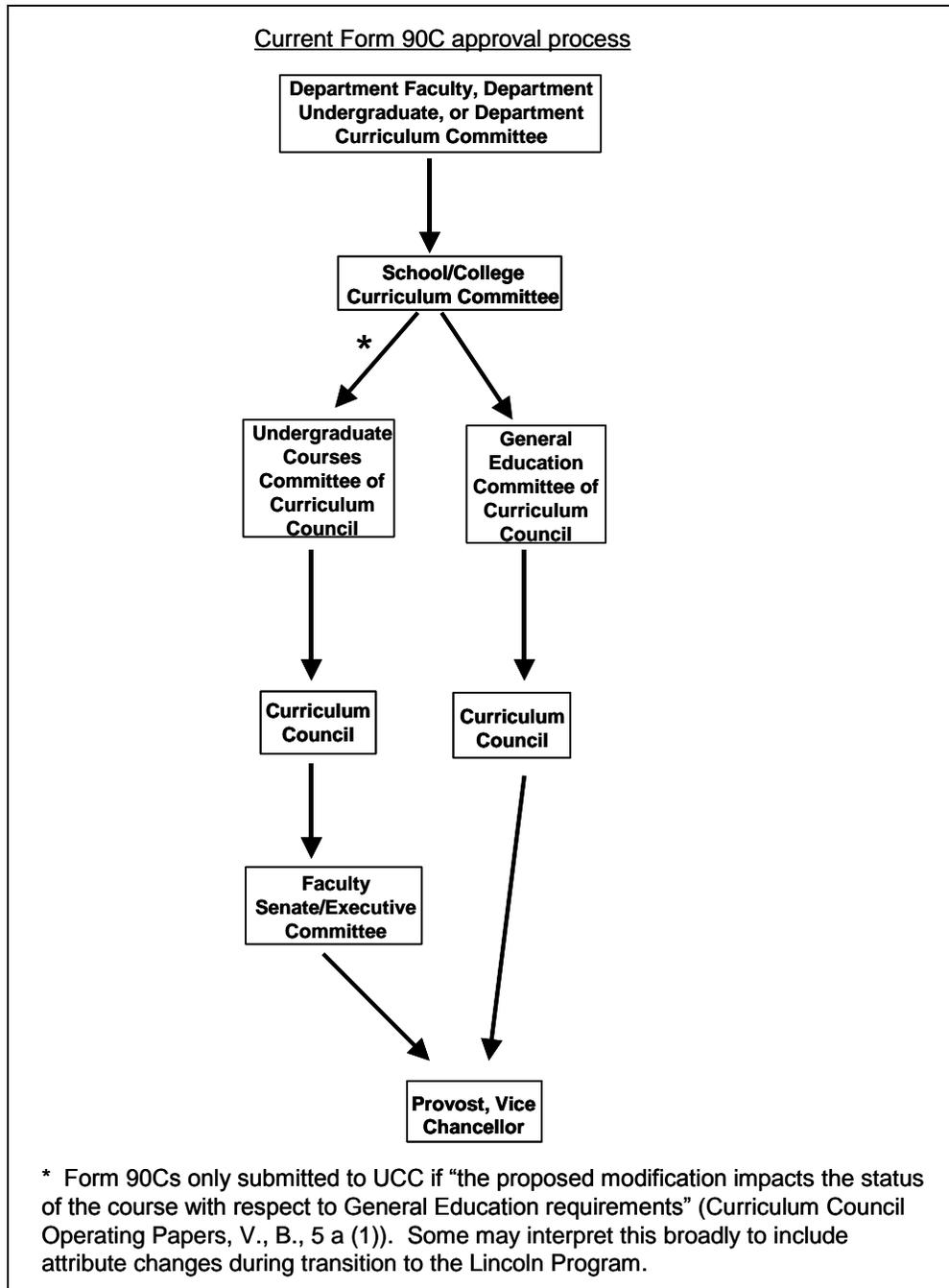
committees or the General Education Committee. This authority need only be in effect during the time that courses are being reclassified (e.g., Spring 2010 – Spring 2011). There will be a number of new courses that will be proposed for the Lincoln Program, and there will be courses that will change with respect to depth or focus of coverage; changes associated with these courses will be processed through the normal Form 90 process. Also, all proposed course changes, whether they be curricular or non-curricular, will be posted on the BRIDGE Blackboard site for inspection by the University community.

The BIC therefore proposes the following procedure be temporarily approved by the Faculty Senate for approving non-curricular attribute changes to general education courses. This process, restricted only to changes in attribute designation and not to include changes in course content, delivery or role, will greatly facilitate transition between the Current Program and the Lincoln Program:

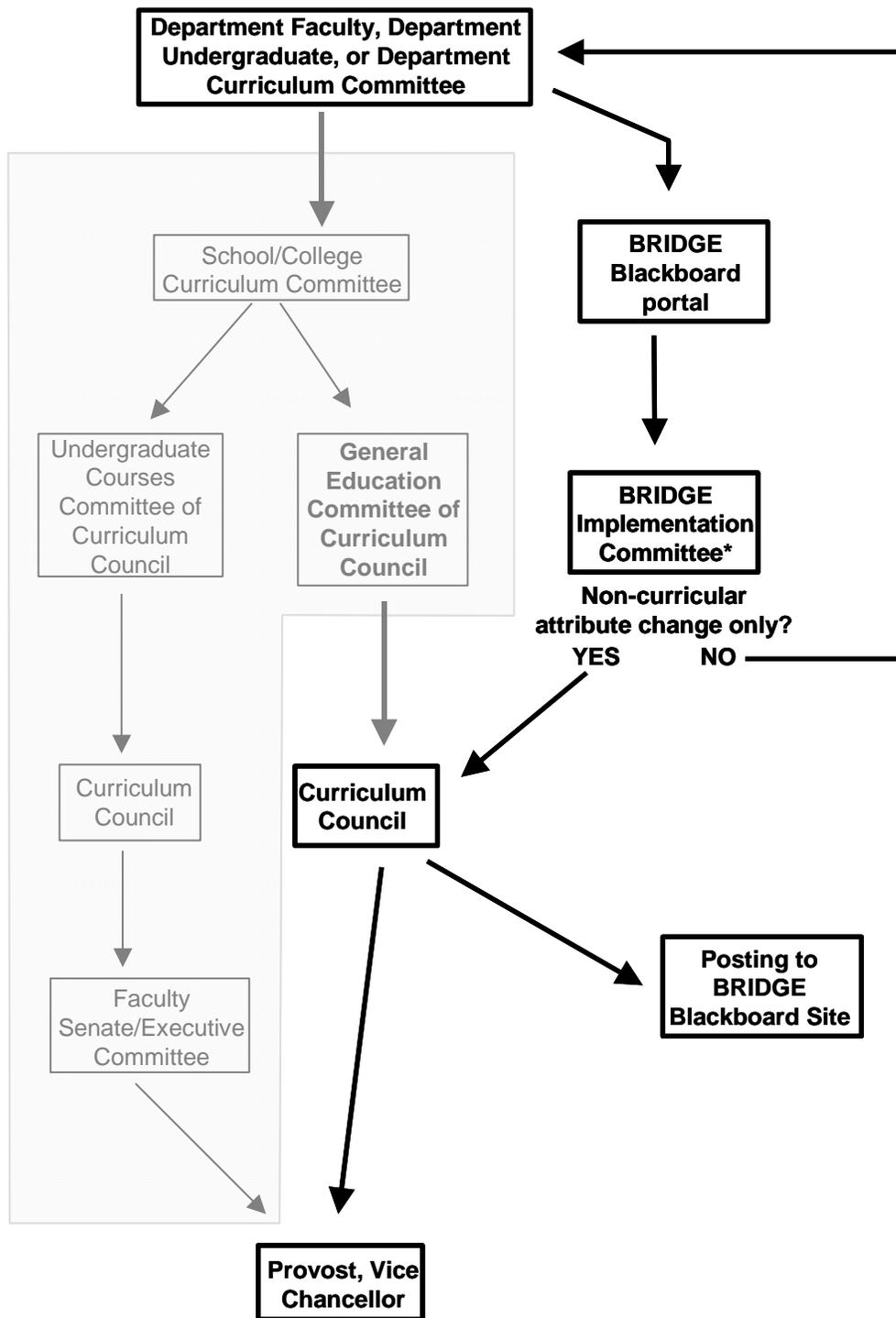
- BIC (or equivalent implementation committee) will establish an online mechanism for aligning courses with attributes of the Lincoln Program. The specific design is yet to be established, but the online interface (e.g., a form submission portal through Blackboard) will allow Departments and faculty to indicate how specific courses meet the learning goals of Breadth Area and Experiential attributes established in the Lincoln Program proposal. The interface will also allow submission of syllabi and other documents to support such alignment requests.
- BIC will generate a list of all general education courses currently offered by each Department and communicate these lists to each Department.
- Departments will be asked to indicate how they wish their courses to be classified in the new Lincoln Program (i.e., which Lincoln Program attributes they wish their courses to possess), and to demonstrate, through the online interface and submitted documents, that no curricular changes will be required for the course(s) to meet the appropriate learning goals. Course attribute modifications requiring curricular changes will be submitted through the existing Form 90 process.
- Departments will identify courses, through their own documented approval process, that they believe will require no curricular changes to receive particular Lincoln Program designators. These course proposals will be communicated back to BIC through the Blackboard portal with supporting documentation.
- BIC will evaluate whether these course proposals meet the learning goals stipulated for such designators in the Lincoln Program; course proposals that do not meet the learning goals will be returned to the Department for further consideration and possible resubmission through the existing Form 90 process.
- Courses that require curricular or programmatic changes to meet the learning goals for desired Lincoln Program attributes, or new courses proposed by the Department to satisfy Lincoln Program requirements, will be submitted through the existing Form 90 process.

- Non-curricular attribute changes recommended by the BIC will then be summarized and submitted to the Curriculum Council for final approval on a regular basis. The Curriculum Council will have final authority to approve or disapprove such changes. All approved changes will be posted on the BRIDGE Blackboard portal so that the University community can monitor the progress of implementation.

The following diagrams show this request graphically: first the current Form 90 process as stipulated in the Curriculum Council operating papers; second, the proposed approval process utilizing the BIC as it currently stands or an equivalent implementing committee.



Proposed Form 90C approval process



\* The BRIDGE Implementation Committee as it stands may be charged to begin the implementation process, perhaps in association with the new Director of General Education; or a new committee/council may be formed to assist the Director in implementation as it pertains to course reclassification.

Summary rationale for this request:

- Transition to the Lincoln Program will require changing the attributes of every course that serves a general education role; the majority of these changes will require no curricular change in the courses themselves.
- All relevant committees have, by definition, already approved all attributes currently held by general education courses. Lincoln Program attributes are more specifically and clearly defined than designations in the Current Program. The BIC is currently in the best position to evaluate reclassification requests with respect to Lincoln Program designators, and sending these requests through the BIC and then directly to the Curriculum Council will prevent existing committees from being flooded by what will be literally hundreds of non-curricular requests.
- The BIC recommends that the BIC or its equivalent committee continually retain a representative from the Faculty Senate Curriculum Council during the reclassification process, who can communicate concerns about the process directly back to the Faculty Senate.
- The procedure proposed above allows for Departments to modify courses to match Lincoln Program requirements, to develop new courses that align with Lincoln Program learning goals, and to appeal decisions made by the BIC by submitting course proposal through the existing Form 90 process.
- The BIC intends the reclassification process to be as transparent as possible by establishing a Blackboard site through which all requests are submitted and all approved attribute changes can be inspected by the University community.

## **LINCOLN PROGRAM IMPLEMENTATION: THE BREADTH COMPONENT**

### ***Breadth Areas and Experiential Elements***

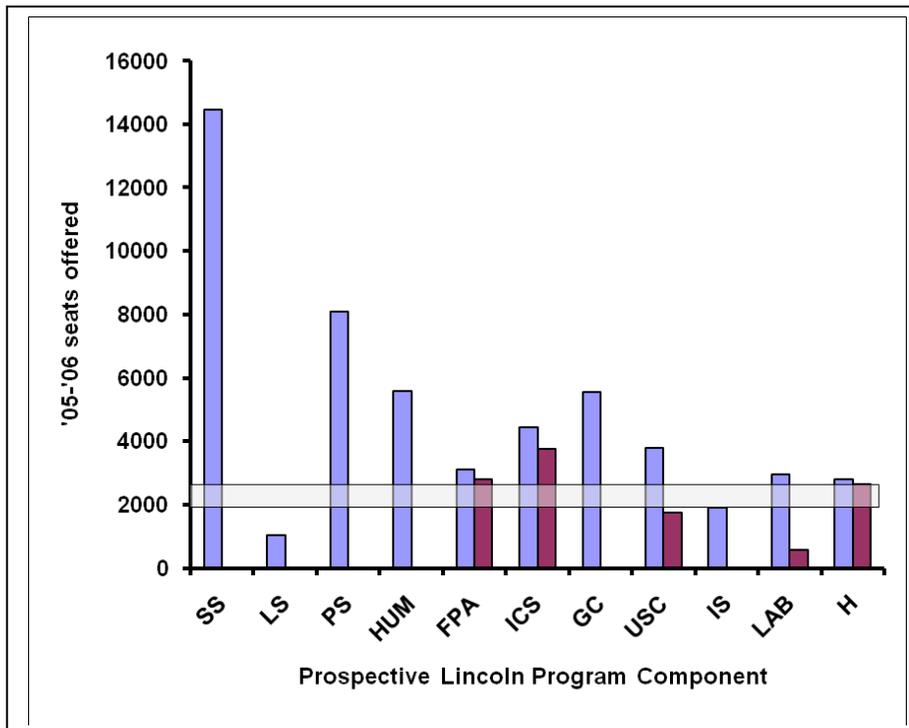
The Breadth component of the Lincoln Program differs from the Introductory/ Distribution component of the Current Program in terms of how required courses are organized and how many Experiential elements are required. The Current Program requires students to allocate effort among three intellectual areas: Natural Science and Mathematics (NSM), Social Science (SS), and Fine Arts and Humanities (FAH). The Lincoln Program more finely subdivides this effort and adds a new intellectual area, such that students will be required to take at least one course in each of six areas: Life Sciences (LS), Physical Sciences (PS), Social Sciences (SS), Fine and Performing Arts (FPA), Humanities (HUM), and Information and Communication in Society (ICS). In addition, where the Current Program requires students to augment their curriculum with only two Experiential requirements (International Issues/International Cultures and Inter-Group Relations), the Lincoln Program requires students to include five Experiential elements in their general education curriculum, including Global Cultures (GC), US Cultures (USC), Health (H), and Laboratory (LAB); the fifth Experiential element is the New Freshman Seminar experience (NFS).

The Breadth Areas define stand-alone courses that will be categorized into those six areas. Experiences, on the other hand, are layered on to existing courses as they are in the Current Program, and are meant to define courses that include certain Experiential learning goals as part of the overall description of the course. A course satisfying Breadth Area and/or Experiential requirements will carry appropriate attribute markers as part of their description, again as in the Current Program. Any given course satisfying any part of the Breadth component may have more than one Experiential attribute attached to it; however, any given course may only be classified within one Breadth Area.

Successful implementation of the Breadth component will require that enough seats be offered on a yearly basis in each of the Breadth Areas and in each of the first four Experiential elements (GC, USC, LAB, H). SIUE also will need to offer enough seats of the newly refined IS courses on a yearly basis, and we include analysis of that requirement here as well. In our analysis, we sought to determine how much effort SIUE is already expending in offering courses that could be provisionally defined into the Breadth Areas and Experiential elements.

As part of this analysis, the enrollment records for 2005 and 2006 of all courses satisfying the Introductory/Distribution and the Experiential components of the Current Program were obtained. Course descriptions were examined to determine into which Lincoln Program Breadth Area each of those courses could provisionally be classified (i.e., all NSM courses were classified as either LS or PS and all FAH courses were reclassified as either HUM or FPA; all SS courses retained that designation). Similarly, all courses with II/IC attributes were given the GC attribute, and all courses with the IGR attribute were given the USC attribute. Additionally, all courses in the SIUE catalog were examined to determine which general education-level courses could provisionally be given the ICS Breadth Area attribute as well as H and LAB Experiential attributes.

The average number of seats offered in all these courses, arranged by prospective Breadth Area and Experiential element, were then calculated (a copy of the master dataset is available for inspection). Results of this analysis are presented in Figure 3. Using the above stated enrollment goals of 1900-2600 seats per year, our analysis suggests that SIUE is already offering enough seats in courses provisionally classified in the SS, PS, HUM, FPA, and ICS Breadth Areas and that would satisfy the GC, USC, and H Experiential elements. Three major potential shortfalls exist in the LS Breadth Area, in the LAB Experience, and in the IS requirement. The reader should also recognize that the number of ICS seats is very provisional: this is a completely new Breadth Area, and not all Departments have not yet been approached to determine which of their courses will fit into the category.



**Figure 3.** Analysis of seats offered by SIUE in 2005 and 2006 in courses provisionally reclassified into the Lincoln Program Breadth Areas and Experiential Elements. Light shaded bars represent data taken with broad meanings to each category; dark shaded bars represent reductions in light of other considerations (FPA seats that could also not be classified as HUM, ICS seats not including foreign language courses, LAB seats not including CHEM or PHYS courses, and H seats not including some KIN courses). Shaded horizontal bar represents enrollment target of 1900 – 2600 seats per year.

The data in Figure 3 represent averages for the calendar years 2005 and 2006, and thus probably vary from actual numbers of seats offered in AY2008-2009. This analysis does, however, show us where relative effort is being expended so that we can estimate which Breadth Areas and Experiential elements will need to be buttressed before full implementation of the Breadth component can be accomplished. The data presented here initially suggest that additional effort will need to be expended institutionally in the LS Breadth Area, the LAB Experiential element, and in the IS element. This conclusion, however, neglects another important likely effect of implementation of the Breadth component, an effect the BIC has referred to as the “Breadth deficit.”

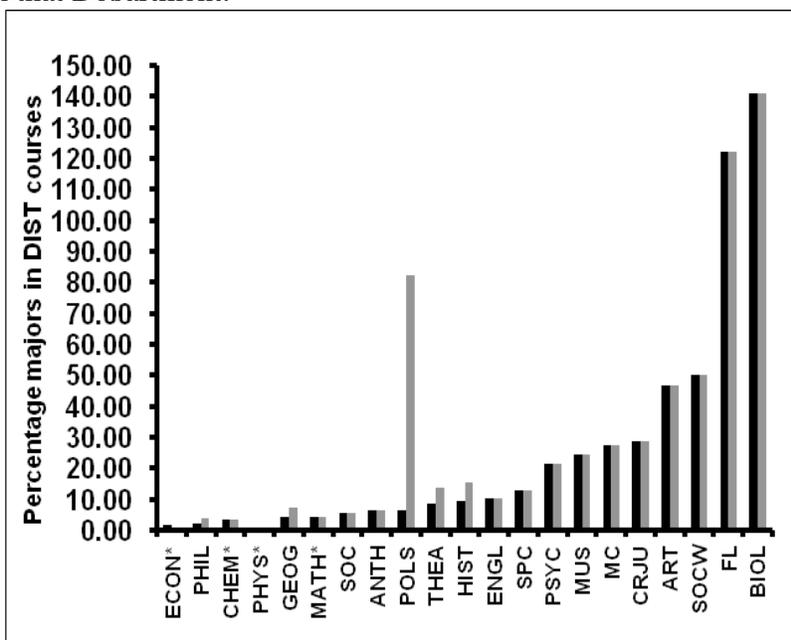
The Breadth deficit emerges as a consequence of an important structural difference between the Current Program and the Lincoln Program (see Figures 1 and 2). In the Current Program, students are required to take five Introductory courses (typically numbered as 111 by Departments) spread across the three intellectual areas (NSM, FAH, and SS). Students are then required to take one additional Distribution course from each area for a total of eight courses. Several Departments offer 200- and 300-level Distribution courses that have only their 111 as a prerequisite; one intention of this curricular design is to allow students to satisfy their Introductory/Distribution requirement for a given area within a single Department.

The Lincoln Program, however, more finely divides general education courses into six Breadth Areas, and students are required to have only one course from each area. Thus, the two-tiered

Introductory/Distribution model is replaced by a one-tiered model. Distribution courses in the Current Program that rely for their enrollment on students who have recently taken that Department's 111 course will potentially see dramatic declines in enrollment under the Lincoln Program. In other words, once a student has taken a HUM course, they may not need another HUM course as part of their degree requirements, and may therefore not register for another course from a Department which focuses on HUM courses.

Departments most likely to be affected by the Breadth deficit would be those which serve a relatively high number of students in Distribution courses (as defined in the Current Program) compared to the number of majors in that Department. To identify these Departments, we gathered data on the number of majors declared by degree program within Departments and Programs for 2005 and 2006. The average number of majors in a Department was then divided by the average number of students served in Distribution courses by that Department; low values would indicate a Department likely to see major shifts in course demand under the Lincoln Program.

Results of this analysis are shown in Figure 4. Departments to the left along the horizontal axis are those expected to see large shifts in enrollment demands, especially in any courses that have their own 111 as a prerequisite. It should be noted that even though ECON, CHEM, MATH, PHYS, and POLS have relatively low numbers of majors *per se*, these Departments serve a large number of students from other programs which include courses from these Departments as part of their degree requirements. In Figure 4, light bars represent the percentage of Distribution seats occupied by that Department's majors, and dark bars represent the percentage of Distribution seats occupied by that Department's majors plus students from other programs that require courses in that Department.



**Figure 4.** Analysis of the Breadth Deficit (see text for definition). Vertical axis values obtained by dividing the average number of majors in 2005 and 2006 by the number of students enrolled in Distribution courses offered by Departments shown on the horizontal axis. Low values indicate Departments that may experience major shifts in enrollment demand in courses currently classified as Distribution courses (with the exception of ECON, CHEM, MATH, PHYS, and POLS – see text for details).

Several Departments within CAS then have an incentive to reorganize and reprioritize courses that they offer to serve the general education program as a way of overcoming the potential effects of the Breadth deficit. The BIC (or its equivalent) should work with these Departments to help insure that effort which is directed toward Lincoln Program implementation could be done in such a way as to strengthen the Breadth Areas and Experiential elements anticipated to be most in need of strengthening (e.g., LS, LAB, IS). If this can be orchestrated carefully, then the cost of implementing the Breadth component is greatly reduced since institutional effort already being expended in the Current Program can be channeled toward efforts necessary for a successful transition to the Lincoln Program.

### ***The IS Requirement***

From the point of view of implementation, the only major change to the IS requirement in the Lincoln Program is the specification that enrollment in these courses be capped at 25 students per instructor. As discussed in more detail above, the BIC hopes to work with Departments likely to be affected by the Breadth deficit to insure that adequate IS courses are offered. It is important to note that while IS courses can carry Experiential attributes (e.g., H, LAB, GC, USC) as they do in the Current Program, they cannot carry Breadth Area attributes because of their definition of being “interdisciplinary”. This limits the ability of IS courses to be designed to “double-dip” in Lincoln Program requirements.

In Summer 2008, Fall 2008 and Spring 2009, a total of 2160 IS seats were offered across 35 sections (1904 students enrolled). This represented the efforts of 43 different instructors filling 67 different instructor “slots” over the course of that year. Each section of IS typically represents the effort of two instructors (in Summer 2008 – Spring 2009, three smaller IS sections were taught by a single instructor, and several instructors taught an IS section in multiple semesters). Thus, the 67 slots were not filled by 67 different SIUE faculty.

Achieving an initial implementation goal of offering 2000 IS seats per year and limiting enrollment in each section to no more than 25 students per instructor (assuming two instructors per section) would require 40 sections, requiring the efforts of 80 “instructors” per year. While it is true that many of these instructors may participate in more than one IS section per year, thus reducing the number of individual instructors needed, it is clear that several more faculty will need to be encouraged to teach IS courses.

Another way of looking at the data above for the current year is to recognize that instructor slots are only about 65% “saturated” (43 individual instructors divided by 67 slots required to be filled = 0.64). Assuming a similar saturation rate under the Lincoln Program would then imply a need for approximately 9 more IS instructors (0.65 x 80 slots requires 52 instructors). However, a recruitment effort among existing faculty will likely by definition yield instructors for whom IS is a new experience and perhaps not a priority, and who thus may only teach one IS section per year (or even more rarely). In this case, the saturation rate will need to be higher (i.e., more unique instructors required to fill the required 80 slots).

It has been proposed in discussions surrounding New Freshman Seminar implementation that insuring an adequate number of NFS seats offered per year could be achieved by making the

offering of a certain number of such seats a scheduling requirement of various Departments. NFS is defined by a series of experiences that do not define the specific academic content of any course carrying the NFS attribute. Therefore, it is conceivable that Departments could have rotating requirements of offering a certain number of NFS seats in lower-division, general education-oriented courses without necessarily incorporating major changes to the academic content of those courses. Instructors assigned to those sections would then simply alter the timing and pace of material coverage to incorporate NFS experiential goals. Thus, a section of a course may conceivably be designated as NFS in one semester and not in another, while maintaining its Breadth or Foundations designation throughout.

Such a model will not work for IS courses, however. IS courses are content-based, interdisciplinary courses that require development of unique curricular material, syllabi that reflect the learning goals of an IS course within the context of the disciplines examined, and close collaboration between individual faculty members in different Departments. Since IS is not an experiential designation, an IS course either has to be offered with those two individual faculty as instructors (or other colleagues who were part of the design from the beginning) or not offered at all (i.e., a course cannot be “IS” in one semester and not “IS” in another semester). Offering an IS course then becomes a commitment on the part of two instructors to make that course part of their teaching assignment.

Considering that IS instructors may not be able to offer IS sections every year, perhaps due to demands in their own Departments, sabbatical leaves, retirements, etc., insuring that 80 IS instructor slots can be filled each year may require developing a pool of instructors that saturates at a rate even above 100 percent. In other words, it may be necessary to encourage 80 or 100 or 120 instructors to commit to teaching IS sections on some rotating schedule to insure that 2000 students can be accommodated each year. The BIC recommends expanding the current IS instructor pool by at least 10 individuals from existing faculty, phasing this expansion in over the first years of implementation. Additional faculty can likely be recruited into teaching IS courses from Departments affected by the Breadth deficit.

### ***The BA/BS Distinction***

Under the Lincoln Program, students seeking a Bachelor of Science degree are required to have a second LAB course and a total of eight courses in the social, physical, and life sciences; students seeking a Bachelor of Arts degree are required to have eight courses in the humanities and fine and performing arts, including as part of those courses a two semester sequence of a foreign language. These requirements are distinct from (but can overlap) requirements for completing the Breadth component of the Lincoln Program.

There are two challenges with respect to implementing this component. First, courses in a student’s curriculum must be designated as coming from the intellectual areas listed above (life, physical, social sciences; humanities; fine and performing arts). But these are not the same as the Breadth Area designations; these designations are much broader, and can be applied to courses that a Department may not even want to consider as part of general education. Thus, there must be a two-tiered system that designates courses first as being from one of these intellectual areas and then as to whether or not it satisfies one of the Breadth Area requirements.

For example, courses designated by a Department as being in the humanities intellectual area but not satisfying the HUM Breadth Area may be given the catalog attribute “HUM;” but a course from the same Department that satisfies both may be given the attribute “HUMGE.”

This process of categorizing courses into appropriate intellectual areas will be taking place as Departments and Programs also decide how their courses are allocated to the Breadth Areas, and so from this point of view there will be no additional cost associated with implementing the BA/BS Distinction component.

The second challenge lies in the fact that a new emphasis on the distinction between BA and BS degrees means that many more students will complete a foreign language sequence as part of their degree program. This will likely occur because either students in some majors will not want to take a second LAB course or eight sciences courses, or because some Departments that currently offer the BS may drop that option to focus effort on their BA program. In looking across degree programs, the Departments ART, ENGL, FL, HIST, PHIL, THEA, MC, and SOC offer BS degrees that could potentially be dropped in favor of focusing effort on their BA degrees only because completion of the BS in those Departments would require students to complete additional LAB courses and/or because completion of a year of foreign language already aligns closely with the Departments’ goals. Many of the majors in those Departments may already be completing a year of foreign language as part of their degrees, and some of those Departments may still retain their BS option.

However, the BA/BS distinction will likely result in an increased demand for FL courses than is currently seen. Using major declaration data from 2005-2006 and scaling estimated demand to 2000 students per year, we estimate a maximum increase of 275 students needing FL courses over and above what FL is already expected to serve. The BIC therefore recommends hiring one additional tenure-track faculty member and one additional instructor in FL to satisfy this demand and thus to strengthen commitment to the BA/BS distinction. Note from Figure 4 that FL is not expected to experience a shift in enrollment demand due to the Breadth deficit.

### ***The LAB Experience***

The Lincoln Program will require all students to complete one LAB experiential course as part of their curriculum and all BS students to complete two LAB courses. While the majority of BS programs already require students to complete at least two laboratory-based courses as part of their curricula, most BA programs and some BS programs do not already have laboratory requirements. Students enrolling in these latter programs will thus present a new demand on LAB courses over and above what is currently being offered. In addition, LAB courses are projected to be in short supply based on data from 2005 and 2006 (see Figure 3).

We can roughly estimate how many additional LAB-classified seats will be required per year under the Lincoln Program by combining the efforts of three exercises: analyzing major declaration data from 2005-2006 and scaling expected demand to 2000 students per year; making reasonable predictions as to which courses currently offered would be classified as LAB courses; and examining current degree requirements as published in the SIUE catalog.

Results of this analysis are shown in Table 1. These data suggest that approximately 400 seats of LAB-classified courses would be required over and above those currently offered to satisfy predicted demand coming from students enrolled in BA programs that do not already require a single LAB course. Some of these programs (ART, FL, HIST, PHIL, and THEA) also offer BS degrees for which students would require two additional LAB courses (124 expected students); it is not possible at this time to separate out exactly how many students in those programs would be completing the BS versus the BA. Finally, there are three programs (MC, SOC-CJ, and SOC) that offer the BS degree but for which students would need one additional LAB course (127 expected students).

Several factors make estimating the actual number of additional LAB seats needed for the Lincoln Program difficult. First, the analysis in Table 1 assumes which current courses could be classified as LAB courses, but the actual list of LAB courses may change during the actual reclassification process. Also, some programs offering the BS degree may drop it in favor of focusing on the BA degree, and some programs may develop and offer their own LAB courses for their majors by utilizing effort redirected from the Breadth deficit. Finally, shifts in enrollment patterns over the past several years may be directing relatively more students into majors which already require two LAB courses (e.g., increased demand for pre-medical, pre-pharmacy, and pre-nursing programs), in which case the growth in LAB courses will already be accommodated by growth in those majors.

Dept./Program	Require 1 more LAB course (BA)	Require 1 more LAB course (BS)	Require 2 more LAB courses (BS)
ANTH	12		
ART	56		17
ECON	6		
ENGL	64		
FL	16		16
HIST	63		63
MC		58	
MUSIC	28		
PHIL	8		8
POLS	39		
SOCW	38		
SOC-CJ		27	
SOC		42	
THEA	20		20
CS (ENG)	48		
<b>TOTALS</b>	<b>398</b>	<b>127</b>	<b>124</b>

**Table 1.** Number of students (out of 2000) predicted to be enrolled in degree programs which will require either one additional LAB course for a BA, one additional LAB course for a BS, or two additional LAB courses for a BS, under the requirements of the Lincoln Program.

The LAB designation has been broadly defined so as to not limit its application to only courses in the laboratory-based sciences (e.g., biology, physics, chemistry). Several Departments could offer new LAB courses or expand current offerings (e.g., ANTH, GEOG, PSYC, SOC) which would help to insure that enough LAB courses are offered to meet Lincoln Program requirements. Because identifying, developing, and offering these courses will by necessity be a product of negotiation with a variety of individual Departments, it is difficult to estimate specific costs associated with implementing the LAB requirement.

### ***The Health Experience***

Like the LAB requirement, the Health Experience represents a new experiential requirement of the Lincoln Program. The Health Experience requirement has been broadly defined in line with the US Cultures and World Cultures Experiences to include approved projects and activities in addition to courses so as to increase the flexibility of the Lincoln Program. A number of courses currently offered appear to be able to satisfy the experiential goals of the Health Experience, at least according to their catalog descriptions: BIOL 111, 140, 203, 205; DANC 114; KIN 113, 114, 115, 117, 118, 119, 120, 121, 122, 123, 200, 201, 203, 204, 205, 206, 207, 208, 209, 220, 243, 270, 318; HED 201; MSC 122, 301; PSYC 206; SOC 300; and THEA 235. The total number of seats offered in these courses from Fall 2007 through Summer 2008 was 3582; if all KIN courses except for 205, 270, 318 are removed from this list, there were still 2662 seats offered (see also Figure 3) in that academic year.

The Lincoln Program will bring a new focus to students' perceptions of healthy living through the Health Experience, and in doing so will strengthen general education's role in meeting the SIUE Objectives for the Baccalaureate Degree. If offerings of the courses listed above can be maintained, the BIC feels that implementing the Health Experience requirement will be accomplished through existing effort.

### ***The US Cultures and Global Cultures Experiences***

These experiential requirements are modifications of the IGR and II/IC requirements of the Current Program. The Lincoln Program creates a more coherent set of learning outcomes (experiential goals) for these experiences than currently exists, while at the same time maintaining close alignment with transfer credit articulation (IAI requirements of an Intergroup Relations experience). Most current IGR courses will likely be classified as USC courses and most II/IC courses will likely be classified as GC courses, but the Lincoln Program also specifies that approved projects or activities can be used to satisfy this requirement.

There appear to be routine offerings of a sufficient number of potential USC and GC seats (see Figure 3), and the BIC believes that implementing these requirements can be accomplished through existing effort.

### ***The Breadth Component: Cost Summary and Timeline Considerations***

The BIC believes that the majority of "costs" associated with implementing the Breadth Component will be offset by judiciously reallocating effort currently expended toward the Current Program. New costs will likely arise in insuring that enough LAB seats are offered to cover the Lincoln Program requirement of one LAB course for all students and a second LAB course required of all BS students. Depending upon how Departments elect to design LAB courses, there may be a keen need for additional computer labs on campus for courses to handle data analysis and presentation. Additional computer lab space may be created in spaces made available by the opening of the Student Academic Success Center in Summer 2009; whether this is considered a cost associated with implementation of the Lincoln Program is unclear. It is thus

difficult to estimate specific costs associated with implementing the LAB requirement at this time.

Additional costs associated with implementing the Breadth Component will come from hiring additional faculty in FL to support the BA/BS distinction element, and from supporting tenure-track faculty commitments to teaching in IS courses (i.e., by providing for instructor reassignments). These costs are summarized in the Lincoln Program Implementation Cost Tables (Appendix C).

The BIC recommends that the Breadth component be the first component of the Lincoln Program to be implemented, and that it be implemented separately from the Foundations component. There are several reasons for this. First, implementing the Breadth component separately from the Foundations component lowers the impact of implementation on the logistical infrastructure that will need to be constructed (see “Organizational Challenges” above). Changes to course attributes and the undergraduate catalog, patterns of communication between advisors, faculty and students, and execution of BANNER degree auditing will all need to be carefully monitored during implementation to insure that loopholes are not overlooked and that degree auditing proceeds accurately. Implementing only one component at a time allows more time for identifying any problems that arise in that component, and allows for the future General Education Committee and Director of General Education to make allowances for and rectify such problems.

Second, implementing the Breadth component will likely result in lower overall cost, require less dramatic shift in effort at an institutional level, and result in fewer direct personnel and scheduling changes than will implementation of the Foundations component, regardless of when it is implemented. Implementing the Breadth component first then allows the University to continue preparing for implementation of the Foundations component while still getting a major portion of the Lincoln Program underway sooner.

Third, student completion of the Breadth requirement is not subject to a time constraint as is the Foundations requirement. Implementing the Breadth component first would mean that new students entering SIUE would enter subject to a relatively flexible Skills requirement and a relatively flexible Breadth requirement. If the Foundations component were implemented first, then new students would be subject to a time constrained Foundations requirement and a flexible Introductory/Distribution requirement.

See Appendix B for a recommended phased timing of implementation of elements of the Breadth Component and Appendix C for cost estimates associated with Breadth implementation.

## **LINCOLN PROGRAM IMPLEMENTATION: THE FOUNDATIONS COMPONENT**

The Foundations component of the Lincoln Program comprises five courses which all students are required to complete (or receive credit for) as part of general education. This differs from the Current Program (see Figures 1 and 2) which has a Skills component designed around two parallel tracks of courses from which students choose one track. Discussion of implementing the

Foundations component will be presented for each element separately, as each presents its own challenges and opportunities.

### ***ENG 101 – English Composition I / ENG 102 – English Composition II***

This requirement remains unchanged from the Current Program.

### ***SPC 101 – Public Speaking (currently SPC 105)***

The Lincoln Program requires that all students complete a Public Speaking course as part of general education. This differs from the Current Program wherein students are required to take either SPC 103 (Interpersonal Communication), 104 (Oral Argumentation) or 105 (Public Speaking) in one of the two Skills tracks, or no Speech Communication course at all in the other track. The Department of Speech Communication has agreed to renumber its SPC 105 course to SPC 101, and to offer this course as the one that satisfies this Foundations element.

There are some challenges to implementing this requirement, even though SPC already enrolls a very large number of students in their courses, especially SPC 103, every year. First, SPC 105 is currently articulated with the Illinois Articulation Initiative (IAI), and it is the intent of the Lincoln Program for the course to retain this articulation when changed to SPC 101. The articulation specifies five different speeches to be delivered and critiqued by students and the instructor; including this number of speeches per student as well the academic information that the instructor must provide realistically limits section sizes of this course to 24 students. SPC 103 sections can have more than 24 students; thus, shifting the SPC requirement to SPC 101 will require additional instructional effort.

Additionally, the Department of Speech Communication has indicated that different teaching skills are required to successfully execute a section of SPC 105 as compared to those required to effectively teach SPC 103. Skills for teaching SPC 105 are more likely to be found in full-time instructors than in the adjunct lecturers and graduate teaching assistants that SPC now makes use of in delivering many sections of SPC 103. Thus, additional instructional staff will be needed to implement this requirement, even after accounting for effects of the Breadth deficit on SPC (see Figure 4). The BIC recommends hiring one additional tenure-track faculty and two new full time instructors in the Department of Speech Communication to satisfy these personnel needs.

Finally, effectively teaching SPC 105 requires the use of equipment not needed in SPC 103 or SPC 104. This equipment includes digital video cameras for recording student speeches and mass digital storage devices to store and retrieve these files. Implementing the requirement of SPC 101 will thus require purchase of digital recording equipment. Discussion with SPC has indicated that this can be in the form of either ceiling-mounted cameras integrated to smart-classroom workstations or portable, tripod-mounted digital USB cameras plus portable mass storage external disk drives. Also, it is expected that responsibility for managing the new Speech Center in the recently opened Student Success Center will shift from Speech Communication (in CAS) to Instructional Services. The BIC recommends hiring a full-time coordinator and student worker, as well as purchase of digital recording and storage technology, to manage and

accommodate the large increase in demand on the Speech Center anticipated under the Lincoln Program.

### ***RA 101 – Reasoning and Argumentation***

The Reasoning and Argumentation requirement in the Lincoln Program is a modification to the Critical Thinking requirement of the Current Program. Currently, students can satisfy this requirement by taking either PHIL 106, FL 106, IME 106, or MATH 106 in either Skills track; PHIL 106 handles the majority of these seats, serving 1472 out of 1842 students (~ 80%) enrolled in all four courses combined in the 2008-2009 academic year.

The BRIDGE committee recommended modifying the Critical Thinking requirement due to a great deal of intellectual drift that had occurred among the four courses, and even among sections of PHIL 106, with respect to how critical thinking was defined and discussed. To refocus this element on the spirit of critical thinking and what it means to a general education program, the Department of Philosophy was approached and asked to develop learning goals for a course that centered on the identification, evaluation, and construction of argument and reasoned statements, particularly in the context of written text. These goals were developed by Philosophy in Fall 2007 and are included in the final draft of the BRIDGE proposal.

With respect to the RA 101 requirement, the BRIDGE proposal was written in such a way that other departments and programs could design and offer RA 101 themselves; in other words, RA 101 need not be offered exclusively by the Department of Philosophy. However, the BRIDGE proposal does recommend that the Department of Philosophy, either through membership on the future General Education Committee or through a RA 101 faculty coordinator in the Department, act to insure that all sections of RA 101 conform to the learning goals agreed upon in Fall 2007. It is the expectation of the BIC, given that the learning goals for RA 101 were developed by the Department of Philosophy and that Philosophy already handles the vast majority of students satisfying the critical thinking requirement, that Philosophy will likely be the only Department offering RA 101, at least during the initial phases of Foundations implementation.

To that end, the Department of Philosophy will require an increase in the number of instructional staff assigned to teach sections of RA 101. The Department has indicated that Instructor-level staff are preferred to Lecturers, since Instructors sign one-year contracts and are therefore more reliably committed to teaching assigned sections than are Lecturers. The BIC recommends hiring one additional tenure-track faculty and two new full time instructors in the Department of Philosophy to satisfy this increased instructional need.

### ***QR 101 – Quantitative Reasoning***

(The BIC recommends that the Foundations course QL 101 - Quantitative Literacy described in the Lincoln Program proposal be renamed to QR 101 – Quantitative Reasoning. During discussions about the learning goals for this course and in developing the QR diagnostic exam [see below], it became clear that “literacy” means different things to different people. For some, “literacy” implies a focus on knowledge of specific quantitative information [e.g., population of

the US, distance between the Earth and the Sun, current US budget deficit] and/or utilization of specific techniques, neither of which was an intended focus of the original course description in the Lincoln Program proposal. The BIC feels that replacing “literacy” with “reasoning” conveys a closer match to original intent.)

There has been a systematic movement to include aspects of quantitative reasoning as an important part of general education at many colleges and universities around the United State in recent years. A quantitative reasoning course is not a “Math” course in the conventional sense. A math course typically focuses on training students in the use of a mathematical tool that is used for problem solving in a particular context (e.g., an algebra course, a calculus course, etc.). Such a course, even though it may include creative approaches to problem solving within that context, focuses on technique.

A quantitative reasoning course, on the other hand, focuses on developing more generalized critical thinking and problem solving skills in students, using quantitative tools that they already possess. A QR course focuses on developing skills to approach quantitative problems that students will face regardless of their chosen major field of study, problems such as working with ratios and percentages, understanding interest rates, recognizing statistical relationships and inferences, distinguishing correlation versus causality, utilizing basic geometric relationships, and understanding voting and representation. The BRIDGE Committee included the quantitative reasoning requirement of the Foundations component to complement the written (ENG 101/102) and oral (SPC 101) communication skills and textual critical thinking (RA 101) skills present in the other Foundations courses.

Whereas the other Foundations courses have a long history at SIUE (considering that ENG 101/102 remain unchanged, SPC 101 is simply SPC 105 renumbered, and RA 101 will replace effort expended on PHIL 106), QR 101 represents an entirely new course. And whereas we can estimate institutionally how well our incoming students are prepared (either as new students or as transfer students) with respect to the skills developed in ENG 101/102, SPC 101, and RA 101, no such information is available for estimating our students’ QR skills. Several years ago, the Department of Mathematics and Statistics administered a QR quiz to many SIUE students in various MATH and 111 courses across campus to assess QR skills of new students; more than 50% of the students taking the quiz received failing grades, suggesting a need for a QR course at the general education level.

However, concerns have been raised about the data obtained from the results of that quiz. The quiz was administered to many students with the assurance that their performance on the quiz would in no way affect their grade in the class in which they took the quiz. While this is academically a sound policy for such an exercise, it undoubtedly created an environment of relatively low motivation for individual students to perform to the best of their abilities on the quiz.

Reliable data concerning the QR skills of our incoming students will be particularly important to have for successfully implementing QR 101. Estimating how many incoming students might be expected to be able to earn credit for QR 101 through a proficiency exam will affect, for example, our estimate of how many seats will need to be offered in QR 101 each year, and

subsequently how many QR 101 instructors will need to be hired. We are not confident at this point that data obtained in the Math Department QR quiz study sufficiently addresses this issue because of the motivation problem.

To that end, the BIC will design and administer a new QR quiz to a selection of first-year SIUE students during the Spring 2010 semester as part of the Lincoln Program implementation process. This exam will be longer than the original QR quiz and will be designed by Math department faculty and BIC committee members. The goal will be to administer the exam to students in MATH 120, MATH 125, and MATH 150, as well as to students in a selection of 111 courses taught by instructors who agree to participate in the process. The content of the exam will be consistent with the goals of a modern Quantitative Reasoning course (perhaps even to the extent of soliciting feedback on its design from researchers familiar with QR curricula; e.g., Dr. Linda Sons at Northern Illinois University, Dr. Bernard Madison at University of Central Arkansas).

The purpose of the exam will be carefully explained to the students, and a mechanism will be developed on a course-by-course basis to raise student motivation to perform to the best of their abilities on the exam. Such mechanisms will be developed in conjunction with the instructor of the course and will only be executed upon receiving permission from the Provost's Office. The exam will be given relatively early in the semester (e.g., within the first four weeks) so as to not interrupt flow in courses later in the semester. The exam will be administered, and the resultant Scantron-based data analyzed, by the Chair of the BIC (or Committee volunteers) so that course instructors are not burdened by this exercise beyond giving up one lecture period for the administration of the exam.

These data will be important to determining an estimate of how many students might be able to receive credit for QR 101 through proficiency exams in future years, which will in turn allow estimation of the number of seats to be offered every year. For the purposes of this proposal, we estimated costs for implementing the QR101 requirement assuming that MATH would be offering the required 2000 seats per year during a three year phased implementation. The BIC recommends hiring one additional tenure-track faculty and three new full time instructors in the Department of Mathematics and Statistics to satisfy this increased instructional need.

### ***New Freshman Seminar***

New Freshman Seminar (NFS) is a requirement of the Current Program but is currently only serving about half of incoming students. It is not a graduation requirement; thus, enforcing the requirement that it be taken within the first 30 hours of coursework is difficult except through the recommendations of advisors. The structure and implementation of NFS, considered in parallel with but outside of the BRIDGE process *per se*, has been a subject of ongoing discussion for several years. The Lincoln Program proposal makes specific recommendations about the structure of the NFS Experience and echoes the original intent that students be required to take a NFS course within their first 30 hours.

The BIC recommends that modification and implementation of the NFS requirement lag behind implementation of the Lincoln Program to some degree. The advent of the Lincoln Program will

bring many changes to patterns of enrollment by SIUE students, some of which can be anticipated with some degree of confidence, and some of which will undoubtedly be unanticipated. Because the Lincoln Program involves changes to the entire general education program, and because the NFS experience is not tightly integrated into the Current Program, the BIC recommends implementing the major changes associated with the Lincoln Program first (e.g, at least the Breadth Area and Foundations requirements through Spring 2013) to determine the most productive avenues for full implementation of the NFS requirement.

It is important to note that the requirement for NFS-designated sections to have a 25 student enrollment cap coincides with the same enrollment cap recommended for all Foundations courses. This would tend to focus the search for NFS seats on Foundations courses as an efficient way for students to satisfy multiple requirements in a single course. One way to recruit instructors and Departments into supporting the NFS requirement, however, is to offer sections of some historically high enrollment Breadth-oriented courses as NFS sections, and to offer those instructors the option of teaching to a much smaller number of students. A number of degree programs leave room for Breadth Area requirements to be met during a student's first 30 hours (see Sample Programs of Study in Appendix A of the Lincoln Program proposal), and the NFS requirement can be met through such designated Breadth Area courses.

There are thus a plurality of ways that the NFS requirement might be implemented, and the most efficient way to do so will be best visualized after students have begun enrolling in Lincoln Program components through Spring 2013. The BIC recommends that the NFS program be administered and offered in the way that it has been for several years now through the initial stages of Lincoln Program implementation, and that the GEC and the Director of General Education then identify the most productive opportunities for full NFS implementation beginning in Spring 2013.

Two considerations regarding costs of implementing NFS can be outlined here. First, any time a section of a normally high enrollment course is designated NFS, additional sections of that or other courses will need to be taught to make up for the 25 student enrollment cap in NFS. This will be manifest in hiring additional instructional staff within those Departments to either teach NFS sections or to make up for other course offerings that might otherwise be lost from that Department. While it may be true that designating sections of Foundations courses as NFS sections becomes a cost effective way to have students satisfy two Lincoln Program requirements in one course, it was not the intent of the Lincoln Program proposal to have NFS limited to Foundations sections.

Second, the Lincoln Program proposal calls for specific types of activities to be included in NFS courses, some of which may incur extra cost above what any Department has budgeted for course expenses. These activities may require off-campus travel and/or additional materials not normally used in the course. Estimating \$200 per NFS section to cover such expenses and recognizing the need for 80, 25-student sections to be offered each year yields an estimate of \$16,000 per year to cover the activities requirements of NFS courses. This value is added into our cost estimates starting in Fall 2013, and will be required regardless of how instructional needs are met in NFS (see Appendix C).

## APPENDIX A: LIST OF ACRONYMS USED IN THIS PROPOSAL

The following table lists the acronyms used in this proposal in alphabetical order. Items specific to the Current Program and items specific to the Lincoln Program are indicated as such; items that will remain unchanged or that apply to both general education programs have no specific indication. Abbreviations for Departments and degree programs used in this proposal are as specified in the SIUE catalog.

<b>BIC</b>	BRIDGE Implementation Committee
<b>FAH</b>	Fine Arts and Humanities (Current Program)
<b>FPA</b>	Fine and Performing Arts (Lincoln Program)
<b>GC</b>	Global Cultures (Lincoln Program)
<b>GEC</b>	General Education Committee (Faculty Senate)
<b>H</b>	Health Requirement (Lincoln Program)
<b>HUM</b>	Humanities (Lincoln Program)
<b>ICS</b>	Information and Communication in Society (Lincoln Program)
<b>IGR</b>	Intergroup Relations (Current Program)
<b>II/IC</b>	International Issues/Cultures (Current Program)
<b>IS</b>	Interdisciplinary Studies
<b>LAB</b>	Laboratory Requirement (Lincoln Program)
<b>LS</b>	Life Sciences (Lincoln Program)
<b>NFS</b>	New Freshman Seminar
<b>NSM</b>	Natural Sciences and Mathematics (Current Program)
<b>PS</b>	Physical Sciences (Lincoln Program)
<b>QR</b>	Quantitative Reasoning (Lincoln Program)
<b>RA</b>	Reasoning and Argumentation (Lincoln Program)
<b>SRA</b>	Senior Assignment
<b>SS</b>	Social Sciences
<b>USC</b>	United States Cultures (Lincoln Program)

## APPENDIX B: TIMING TABLES FOR IMPLEMENTATION

### Lincoln Program Implementation Timing Tables

The following tables present proposed timing schemes for implementing the various components of the Lincoln Program. These are presented to show the timing of the events and activities necessary to support full implementation of the program. For the sake of efficiency in terminology, the following convention is used to indicate academic years during the process (with “Year 1” being the earliest year that any component of the Lincoln Program can be implemented):

<b>Lincoln Program “Year”</b>	<b>Academic Year</b>
Pre-Year 2	Fall 2009 – Summer 2010
Pre-Year 1	Fall 2010 – Summer 2011
Year 1	Fall 2011 – Summer 2012
Year 2	Fall 2012 – Summer 2013
Year 3	Fall 2013 – Summer 2014
Year 4	Fall 2014 – Summer 2015

Tables 1 through 4 propose a phasing schedule for implementation of the Sequencing, QR 101, SPC 101, and RA 101 requirements, respectively. Tables 5 through 10 then show activities necessary to implement each component of the program by semester and year. Major activities that represent a phase of implementation of a component are shown in bold face type; once a component is fully implemented, it is no longer shown in the tables.

Estimated costs for each Lincoln Program year are shown at the bottom of each table. Note that all estimated costs include personnel costs from the previous year (i.e., costs for Year 4 include salary paid to new personnel hired in Year 4 as well as salary paid in Year 4 to all personnel hired in Years 2 and 3). Note, however, that no benefit costs (e.g., for retirement, health insurance, etc.) have been included in these estimates.

Estimated costs are derived from Tables 11 – 14 in Appendix C: Cost Estimates for Implementation.

Table 1. Foundations Sequencing Table

The Lincoln Program specifies that the Foundations elements are to be completed within a certain time frame upon a student’s registration in their first semester at SIUE. Specifically, ENG 101, ENG 102, SPC 101, and RA 101 are to be completed within the first 30 hours, and QR 101 is to be completed within the first 60 hours. We recommend scaling in this requirement in conjunction with phased implementation of the Foundations elements as shown in the table below, with a final configuration that differs from the final BRIDGE proposal. In particular, we recommend that students be required to complete NFS, SPC 101, and ENG 101 within the first 30 hours, RA 101 and ENG 102 within the first 45 hours, and QR 101 within the first 60 hours. This still requires student to complete all Foundations requirements by the end of 60 hours (end of sophomore year for a student entering as a freshman), and provides a more structured schedule for completing the Foundations requirements than we currently have for the Skills requirements. But this change provides some flexibility for students who, for whatever reasons, register for their first semester late in the registration cycle, and who might find sections of ENG 101 and RA 101 closed. “1<sup>st</sup> XX” indicates the number of semester hours within which a student who matriculates in the semester shown must complete that requirement.

The exact nature of each Foundations element in terms of how it may be satisfied over the same time frame is shown on subsequent tables.

Y E A R 2				Y E A R 3 (and thereafter)			
Fall 2012		Spring 2013		Fall 2013		Spring 2014	
Element	Requ'mnt	Element	Requ'mnt	Element	Requ'mnt	Element	Requ'mnt
NFS	1 <sup>st</sup> 30	NFS	1 <sup>st</sup> 30	NFS	1 <sup>st</sup> 30	NFS	1 <sup>st</sup> 30
ENG 101	1 <sup>st</sup> 30	ENG 101	1 <sup>st</sup> 30	ENG 101	1 <sup>st</sup> 30	ENG 101	1 <sup>st</sup> 30
SPC	1 <sup>st</sup> 30	SPC	1 <sup>st</sup> 30	SPC	1 <sup>st</sup> 30	SPC	1 <sup>st</sup> 30
ENG 102	1 <sup>st</sup> 45	ENG 102	1 <sup>st</sup> 45	ENG 102	1 <sup>st</sup> 45	ENG 102	1 <sup>st</sup> 45
RA	1 <sup>st</sup> 60	RA	1 <sup>st</sup> 60	RA	1 <sup>st</sup> 45	RA	1 <sup>st</sup> 45
QR	1 <sup>st</sup> 60	QR	1 <sup>st</sup> 60	QR	1 <sup>st</sup> 60	QR	1 <sup>st</sup> 60

Table 2. QR Implementation Table

The QR 101 course is a new course to the general education program at SIUE with no established history by which to predict patterns of need or demand. Therefore, we recommend a phased implementation of the QR 101 requirement so as to allow for the Department of Mathematics and Statistics to absorb the increased demand for general education credit hours in a controlled fashion, both in terms of student demand as well as hiring of personnel. The table below shows the proposed implementation plan for QR 101.

“Requirement” shows what students enrolling in the given semester would be required to take to satisfy the QR requirement of the Lincoln Program. According to stipulations in the Lincoln Program, student must complete their QR requirement within their first 60 hours at SIUE; however, it must be remembered that a student is always subject to the catalog requirements in effect at the time they matriculate. Therefore, even though a student might enroll in, for example, Spring 2013, they have until Fall 2014 to complete the QR requirement, which can be satisfied at that time by taking any MATH course numbered 125 or above. In this context, “Holdover” cells show courses that may still be serving Lincoln Program Foundations students in the semester indicated.

Semester/Year	Y E A R 2		Y E A R 3	
	Fall 2012	Spring 2013	Fall 2013	Spring 2014
Requirement	QR 101 (or Proficiency) or MATH $\geq$ 125	QR 101 (or Proficiency) or MATH $\geq$ 125	QR 101 (or Proficiency) or MATH $\geq$ 150	QR 101 (or Proficiency) or MATH $\geq$ 150
Holdover			MATH $\geq$ 125	MATH $\geq$ 125

Semester/Year	Y E A R 4		Y E A R 5	
	Fall 2014	Spring 2015	Fall 2015	Spring 2016
Requirement	QR 101 (or Proficiency)	QR 101 (or Proficiency)	QR 101 (or Proficiency)	QR 101 (or Proficiency)
Holdover	MATH $\geq$ 150	MATH $\geq$ 150		

Table 3. RA Implementation Table

RA 101 presents a new manifestation of the spirit behind the critical thinking requirement of the Current Program, currently represented by PHIL 106, FL 106, IME 106, and MATH 106. While other Departments will be allowed (and encouraged) to offer sections of RA 101, we anticipate that demand for RA 101 will fall on the Department of Philosophy, at least for the first several years of the Lincoln Program. We recommend a phased implementation of the RA 101 requirement so as to allow for the Department of Philosophy to absorb the increased demand for general education credit hours in a controlled fashion, both in terms of student demand as well as hiring of personnel. The table below shows the proposed implementation plan for RA 101, assuming full implementation of the requirement and assuming adoption of the phased Sequencing requirement as shown in Table 1.

“Requirement” shows what students enrolling in the given semester would be required to take to satisfy the RA requirement of the Lincoln Program. Students enrolling in Year 2 will need to satisfy the RA requirement within 60 hours, and students enrolling in Year 3 and thereafter will need to satisfy the RA requirement within 45 hours. It must be remembered that a student is always subject to the catalog requirements in effect at the time they matriculate. Therefore, even though a student might enroll in, for example, Spring 2013, they would have until Fall 2014 to complete the RA requirement, which can be satisfied at that time by taking RA 101 or PHIL 207, 213, or 233. In this context, “Holdover” cells show courses that may still be serving Lincoln Program Foundations students in the semester indicated.

Semester/Year	Y E A R 2		Y E A R 3	
	Fall 2012	Spring 2013	Fall 2013	Spring 2014
Requirement	RA 101 or PHIL 207, 213, or 233	RA 101 or PHIL 207, 213, or 233	RA 101 or PHIL 213, or 233	RA 101 or PHIL 213, or 233
Holdover			PHIL 207	PHIL 207

Semester/Year	Y E A R 4		Y E A R 5	
	Fall 2014	Spring 2015	Fall 2015	Spring 2016
Requirement	RA 101	RA 101	RA 101	RA 101
Holdover	PHIL 207, 213, 233	PHIL 213, 233		

Table 4. SPC Implementation Table (\*Note: there is no equivalent “ENG Implementation Table,” since ENG 101 and ENG 102 are the only courses that will satisfy the written composition element of the Foundations requirements.)

The SPC 101 course is simply the Public Speaking course (SPC 105) renumbered as SPC 101. In this proposed implementation plan, we recommend a phased implementation of this requirement; note that in Table 1, we do not phase in the Sequencing Requirement for SPC 101 (i.e., all students must complete the SPC requirement within the first 30 hours of their curriculum). The table below shows the proposed implementation plan for SPC 101, and assumes full implementation of the requirement. It must be remembered that a student is always subject to the catalog requirements in effect at the time they matriculate. Therefore, even though a student might enroll in, for example, Spring 2013, they would have until Fall 2013 to complete the SPC requirement, which can be satisfied at that time by taking SPC 101, 103, or 104. In this context, “Holdover” cells show courses that may still be serving Lincoln Program Foundations students in the semester indicated.

Semester/Year	Y E A R 2		Y E A R 3	
	Fall 2012	Spring 2013	Fall 2013	Spring 2014
Requirement	SPC 101, 103, or 104	SPC 101, 103, or 104	SPC 101, or 103	SPC 101, or 103
Holdover			SPC 104	

Semester/Year	Y E A R 4	
	Fall 2014	Spring 2015
Requirement	SPC 101	SPC 101
Holdover	SPC 103	

Table 5. Lincoln Program Implementation -- Pre-Year 2 (Fall 2009 – Summer 2010)

Component	Pre Year 2		
	Fall 2009	Spring 2010	Summer 2010
Sequencing			
Foundations	<ul style="list-style-type: none"> <li>- Initiate Form 90 process to approve changes to SPC 105, and RA101, QR101 as new courses</li> </ul>	<ul style="list-style-type: none"> <li>- Administer QR Exam</li> <li>- Analyze QR Exam data</li> </ul>	
Breadth	<ul style="list-style-type: none"> <li>- Initiate Form 90 process to add new courses as necessary to address Breadth deficits</li> <li>- Initiate Form 90 process to change attributes attached to current courses</li> <li>- Initiate Form 90 process to approve new ICS courses</li> </ul>	<ul style="list-style-type: none"> <li>- Establish central information source for advisors re: course attributes and Lincoln Program requirements</li> </ul>	
Experiences	<ul style="list-style-type: none"> <li>- Initiate Form 90 process to approve new courses and/or change existing courses for LAB</li> <li>- Initiate Form 90 process to change attributes attached to current courses</li> </ul>	<ul style="list-style-type: none"> <li>- Establish central information source for advisors re: course attributes and Lincoln Program requirements</li> </ul>	
Interdisciplinary Studies			<ul style="list-style-type: none"> <li>- Solicit commitments to teach IS courses</li> </ul>
BA/BS Distinction	<ul style="list-style-type: none"> <li>- Solicit departments for classifying courses re: BA-BS</li> </ul>	<ul style="list-style-type: none"> <li>- Establish central information source for advisors re: course attributes and Lincoln Program requirements</li> </ul>	
Logistics	<ul style="list-style-type: none"> <li>- Initiate process to have BANNER recognize both Intro/Dist attributes and Breadth attributes</li> <li>- Begin creating central database showing Current and Lincoln Program and IAI attributes for all courses</li> </ul>	<ul style="list-style-type: none"> <li>- Continue soliciting departments for needed courses</li> <li>- Continue catalog editing</li> <li>- Accumulate finalized Form 90s into central database</li> <li>- Finalize text for Fall 2011 catalog with Lincoln Program description and Breadth requirements</li> <li>- Design curriculum progress/graduation check system that will distinguish Skills/Intro/Dist from Skills/Breadth/BA-BS requirements</li> </ul>	<ul style="list-style-type: none"> <li>- Edit Fall 2011 catalog with new attributes on existing courses and new courses as final Form 90 approvals come in</li> <li>- Edit approved course changes as attributes on BANNER</li> </ul>
Estimated Costs			

Table 6. Lincoln Program Implementation -- Pre-Year 1 (Fall 2010 – Summer 2011)

Component	Pre Year 1		
	Fall 2010	Spring 2011	Summer 2011
Sequencing	- Design system for enforcing timeline requirement	- Faculty Senate approval of timeline enforcement mechanism	- Final approval for timeline enforcement mechanism
Foundations	- Final Form 90 approval of all course changes and new courses - Design system for enforcing timeline requirement	- Begin designing online proficiency tests, especially for QR101 - Faculty Senate approval of timeline enforcement mechanism - Request instructors for PHIL, MATH, SPC	- Solicit instructor position requests from MATH, PHIL, SPC - Final approval for timeline enforcement mechanism
Breadth	- Final Form 90 approval of all course changes and new courses - Design system to accommodate Fall 2011 transfers partly done with Gen Ed	- <b>New students enroll for Fall 2011 under Skills/Breadth requirements</b>	- Evaluate enrollment patterns; insure that availability of Current Program requirements mesh with those of Lincoln Program
Experiences	- Final Form 90 approval of all course changes and new courses	- <b>New students enroll for Fall 2011 under Skills/Breadth requirements</b>	- Evaluate enrollment patterns; insure that availability of Current Program requirements mesh with those of Lincoln Program - <b>New students enroll for Fall 2011 under Skills/Breadth requirements</b>
Interdisciplinary Studies	- Solicit commitments to teach IS sections beginning Fall 2012	- Recruit at least 5 new faculty to teach IS sections beginning Fall 2012	- Begin Form 90 process for new courses
BA/BS Distinction	- Final Form 90 approval of all course changes and new courses - Design system to accommodate Fall 2011 transfers partly done with Gen Ed	- <b>New students enroll for Fall 2011 under new BA-BS distinction</b>	- <b>New students enroll for Fall 2011 under new BA-BS distinction</b>
Logistics	- Final approval of catalog edits for Lincoln Program description and Breadth Requirement - Final editing of course attributes on BANNER for Breadth and BA-BS as well as Current Program - Develop communication with academic advisors re: course attributes and requirements that lag catalog/BANNER edits - Begin search for FL instructors	- Fall 2011 catalog released with Breadth Area/BA-BS requirement and Skills options - Communication with academic advisors/faculty re: lagged catalog/ BANNER edits - Edit Fall 2012 catalog for Foundations requirement - Newly structured GEC membership named	
Estimated Costs			

Table 7. Lincoln Program Implementation -- Year 1 (Fall 2011 – Summer 2012)

Component	Year 1		
	Fall 2011	Spring 2012	Summer 2012
Sequencing		- New students for Fall 2012 enroll under Foundations Sequencing requirement, Year 2	- New students for Fall 2012 enroll under Foundations Sequencing requirement, Year 2
Foundations		- New students for Spring 2012 and Summer 2012 enroll under current Skills tracks - New students for Fall 2012 enroll under Foundations requirement, Year 2	- New students for Summer 2012 enroll under current Skills tracks - New students for Fall 2012 enroll under Foundations requirement, Year 2 - Solicit instructor requests from MATH, PHIL
Breadth	- All new Fall 2011 students (and hereafter) enroll under Breadth - FULLY IMPLEMENTED		
Experiences	- All new Fall 2011 students (and hereafter) enroll under Breadth - FULLY IMPLEMENTED		
Interdisciplinary Studies	- Complete form 90 process for new courses - Coordinate faculty requests for teaching IS into teaching assignments	- Recruit 4 new faculty to teach IS sections beginning Fall 2013	- Begin form 90 process to approve new courses
BA/BS Distinction	- All new Fall 2011 students (and hereafter) enroll under BA-BS - FULLY IMPLEMENTED		
Logistics	- Final approval of Fall 2012 catalog edits for Foundations requirement, Year 2 - Communication with advisors/faculty re: Year 2 Phase of Foundations timing and requirements - Begin instructor searches in PHIL, MATH, SPC - New GEC convenes (under current GEC operating papers) - Appointments start for faculty in FL - Begin search for Speech Center supervisor	- Fall 2012 catalog released with Foundations and Sequencing requirements, Year 2 - Communication with advisors/faculty re: Year 2 Phase of Foundations timing and requirements - Final definition of roles of GEC and Dir. Gen. Educ. / Amendments to operating papers	
Estimated Costs	<b>\$75,540</b>		

Table 8. Lincoln Program Implementation -- Year 2 (Fall 2012 – Summer 2013)

Component	Year 2		
	Fall 2012	Spring 2013	Summer 2013
Sequencing	- New students for Fall 2012 or Spring 2013 enroll under Foundations Sequencing requirement, Year 2	- <b>New students for Fall 2013 enroll under Foundations Sequencing requirement, Year 3</b>	- <b>New students for Fall 2013 enroll under Foundations Sequencing requirement, Year 3</b>
Foundations	- <b>New students for Fall 2012 or Spring 2013 enroll under Foundations Year 2</b>	- New students for Spring 2013 or Summer 2013 enroll under Foundations Year 2 - <b>New Students for Fall 2013 enroll under Foundations Year 3</b>	- New students for Summer 2013 enroll under Foundations Year 2 - <b>New students for Fall 2013 enroll under Foundations Year 3</b> - Solicit instructor requests from PHIL, MATH
Breadth			
Experiences			
Interdisciplinary Studies		- Recruit at least 1 new faculty to teach sections beginning Fall 2014	- Begin form 90 process to approve new courses
BA/BS Distinction			
Logistics	- Final approval of Fall 2013 catalog edits for Foundations requirement, Year 3 - Begin instructor searches in PHIL, MATH - Appointments start for new instructors: 1 in PHIL, 3 in SPC, and 1 in MATH - Communication with advisors/faculty re: Year 2 and 3 Phases of Foundations timing and requirements - GEC assumes Lincoln Program operating papers - Appointment begins for Speech Center supervisor	- Fall 2013 catalog released with Foundations requirements, Year 3 - Communication with advisors/faculty re: Year 2 and 3 Phases of Foundations timing and requirements	
<b>Estimated Costs</b>	<b>\$ 388,292</b>		

Table 9. Lincoln Program Implementation -- Year 3 (Fall 2013 – Spring 2014)

Component	Year 3		
	Fall 2013	Spring 2014	Summer 2014
Sequencing	- New students for Fall 2013 enroll under Foundations Sequencing requirement, Year 3 <b>– FULLY IMPLEMENTED</b>		
Foundations	- New students for Fall 2013 or Spring 2014 enroll under Foundations Year 3	- New students for Spring 2014 or Summer 2014 enroll under Foundations Year 3 <b>- New Students for Fall 2014 enroll under final Foundations requirement Year 4</b>	- New students for Summer 2013 enroll under Foundations Year 3 <b>- New students for Fall 2014 enroll under final Foundations requirement Year 4</b>
Breadth			
Experiences			
Interdisciplinary Studies			
BA/BS Distinction			
Logistics	- Final approval of Fall 2014 catalog edits for final Foundations requirements - Begin instructor searches in PHIL, MATH - Appointments start for new instructors: 1 in PHIL, and 1 in MATH - Communication with advisors/faculty re: Final Foundations timing and requirements	- Fall 2014 catalog released with final Foundations requirements; <b>COMPLETE, FINAL LINCOLN PROGRAM REQUIREMENTS PUBLISHED HEREAFTER</b> - Communication with advisors/faculty re: Final Foundations timing and requirements	
<b>Estimated Costs</b>	<b>\$ 491,729</b>		

Table 10. Lincoln Program Implementation -- Year 4 (Fall 2014 – Spring 2015)

<b>Component</b>	<b>Year 4</b>		
	<b>Fall 2014</b>	<b>Spring 2015</b>	<b>Summer 2015</b>
Sequencing			
Foundations	- New students for Fall 2013 or Spring 2014 enroll under Foundations Year 4 – FULLY IMPLEMENTED		
Breadth			
Experiences			
Interdisciplinary Studies			
BA/BS Distinction			
Logistics	- Appointments start for new instructors: 1 in PHIL, and 1 in MATH - First Lincoln Program review process begins	- Communication with advisors/faculty re: Final Foundations timing and requirements	
<b>Estimated Costs</b>	<b>\$ 613,730</b>		

## **APPENDIX C: COST ESTIMATES FOR IMPLEMENTATION**

### **Lincoln Program Implementation Cost Tables**

The following tables show approximate costs associated with implementing the various components of the Lincoln Program, by semester and year. Each table shows a proposed scheme whereby the requirement can be phased in so as to build to providing 2000 seats per year. Personnel costs were provided by Mark Bacus from the Office of the Provost, and increase at 3% per year; personnel costs do not include any costs associated with benefits (retirement, health care, etc.). Each table includes “New costs” (new costs incurred during that year of implementation) and “Ongoing Costs” (costs that carry over from the previous year). Costs incurred after full implementation of the element are not shown, but again are assumed to increase at 3% per year.

Tables 11 - 13 focus on implementation of elements of the Foundations requirement. Instructional staff shown as new hires for the QR 101, SPC 101, and RA 101 requirements are limited to tenure-track faculty or full-time instructors; we did not attempt to model costs associated with lecturers or graduate teaching assistants. Costs for SPC 101 include hiring a coordinator and student worker help for the Speech Center.

For each year and semester for each Foundations element, the proposed number of sections and seats per section are shown. The number of faculty/instructors is then shown, assuming a tenure-track faculty functioning as a coordinator within the Department and teaching two sections of the course per term (except Summer), and assuming a teaching load of four sections per term per full-time instructor (or instructor equivalent). The “Totals” column shows number of sections, students per section, and number of seats offered per year in the course as well as costs associated with that level on implementation for that year.

Table 14 summarizes estimated costs by program implementation year, and includes costs associated with implementing the Breadth Component in terms of FL faculty and IS course reassignments (estimated at \$3500 per instructor for ease of estimation). As argued previously, the diversity of strategies by which the LAB element might be implemented by individual Departments makes estimating specific costs of this requirement difficult.

## **Analysis of QR Implementation Costs, by Year of Implementation**

In examining implementation of the QR 101 requirement, it is clear that some effort currently expended by the Department of Mathematics and Statistics on an annual basis can be redirected toward making the necessary QR 101 seats available. It is likely that MATH 106 and MATH 111 will no longer be offered by the Department after implementation of QR 101; these courses serve almost exclusively a SKILLS-oriented general education purpose now, a purpose to be taken over by the design of QR 101. Another course that will likely see a great drop in demand will be STAT 107. This course appears in the curriculum guides to several majors on campus (notably MC, KIN/HED, SOCW, NURS and SPE); however, it is likely the case that this course appears as part of these degree programs simply to satisfy that portion of the SKILLS track toward which these students are advised. It is likely that STAT 107 will be replaced by QR 101 in these curricula upon implementation.

If the QR 101 requirement is phased in as proposed in Table 2, then only those students who do not have a specific MATH requirement as part of their major would be required to take QR 101 initially. If we assume an incoming population of 2000 students per year at the time of implementation, roughly distributed among majors as represented by data from 2005 – 2006, then 1333 of those students will be in majors that already require a MATH course of some kind. An additional 418 students will be in degree programs which specify STAT 107 as a course in their curricula, and assuming that this requirement is replaced by QR 101, that means a total of 1085 (= [2000-1333] + 418) students would be required to take QR 101 upon implementation.

For the purposes of estimating costs here, we assume full implementation of the QR 101 requirement by Fall 2015. Such an assumption does not take into account any relaxation of the requirement that may be suggested by results of the QR exam to be administered in Fall 2009/Spring 2010.

In Summer 2008, Fall 2008, and Spring 2009, the Department of Mathematics and Statistics offered 968 seats in MATH 106, MATH 111, and STAT 107, at an average section size of 40 students per section, representing approximately 25 sections worth of “effort” across these three courses. This represents approximately 6 instructors worth of “effort” already budgeted within Mathematics and Statistics, which is taken into account in the following table.

In the table below, we project costs associated with implementing the QR 101 requirement. We include the hiring of one full-time, tenure-track member to serve as a coordinator of all QR 101 sections. Other personnel necessary to offer enough QR 101 seats are proposed to be full-time instructors, with a new instructor hired for Fall 2014 and two additional instructors hired for Fall 2015. Note also in the scheme below that section sizes are scaled down from 35 students in Year 2 to 25 students in Year 4.

Table 11. Year-by-year costs of QR 101 Implementation

	<b>Year 2</b>			<b>Totals</b>
	<b>Fall 2012</b>	<b>Spring 2013</b>	<b>Summer 2013</b>	<b>For Year</b>
# of sections	16	12	4	<b>32</b>
Seats / section	35	35	35	<b>35</b>
Total # seats	560	420	140	<b>1120</b>
Faculty	1 @ 58621 (2 sec + coord.)	1 (2 sec + coord.)	0	
Instructors	3 – 4 (14 sec)	2 – 3 (10 sec)	1 (4 sec)	
Lecturers				
New Costs	58621			<b>58621</b>
Ongoing Costs				

	<b>Year 3</b>			<b>Totals</b>
	<b>Fall 2013</b>	<b>Spring 2014</b>	<b>Summer 2014</b>	<b>For Year</b>
# of sections	24	18	8	<b>50</b>
Seats / section	30	30	30	<b>30</b>
Total # seats	720	540	240	<b>1500</b>
Faculty	1 (2 sec + coord)	1 (2 sec + coord.)	0	
Instructors	5-6 (1 new) (22 sec)	4 (16 sec)	2 (4 sec)	
Lecturers				
New Costs	38188			<b>38188</b>
Ongoing Costs	60380			<b>60380</b>

	<b>Year 4</b>			<b>Totals</b>
	<b>Fall 2014</b>	<b>Spring 2015</b>	<b>Summer 2015</b>	<b>For Year</b>
# of sections	38	30	12	<b>80</b>
Seats / section	25	25	25	<b>25</b>
Total # seats	950	750	300	<b>2000</b>
Faculty	1 (2 sec + coord)	1 (2 sec + coord.)	0	
Instructors	9 (2 new) (36 sec)	6 (24 sec)	3 (12 sec)	
Lecturers				
New Costs	2 x 39334 = 78668			<b>78668</b>
Ongoing Costs	101,525			<b>101,525</b>

## **Analysis of SPC Implementation Costs, by Year of Implementation**

The SPC 101 course will simply be the existing SPC 105 course renumbered for the Lincoln Program. The Department of Speech Communication already plays a huge role in the Current Program, in that many students already take either SPC 103, 104 or 105 to satisfy the SKILLS portion of the program. Thus, the Department is well aware of the responsibility for taking on such a large role in the Lincoln Program.

In Summer 2008, Fall 2008, and Spring 2009, Speech Communication offered 1843 seats in SPC 103 (71 sections) and 778 seats in SPC 105 (36 sections). This is a total of 2621 students accommodated between these two courses. The implementation scheme we propose below attempts to keep this number of students roughly constant through the initial phases of implementation. SPC 103 is currently a very high demand course because it satisfies the oral communication element of the SKILLS requirement in the Current Program, and it satisfies the IGR experiential requirement. SPC 101 will not satisfy the USC requirement of the Lincoln Program, although SPC 103 will continue to do so. A high fraction of the total effort required to implement the SPC 101 course can be derived from redirecting effort from SPC 103 toward SPC 101, and the implementation scheme proposed below draws heavily on that strategy. Several other courses around campus will be available to satisfy the USC requirement. Also, a number of the degree programs around campus which currently list SPC 103 in their curriculum guides will likely replace that with SPC 101.

We believe that Speech Communication will still be well served to continue offering a significant number of seats in SPC 103, even after implementation of the Lincoln Program. Some programs may still require the specific content of SPC 103 as part of their degree curricula, and SPC 103 should still be available for students to take as a USC experiential course. In the scheme below, we propose phasing in the SPC 101 requirement as per Table 4 while capping enrollment in SPC 103 at gradually decreasing levels to a minimum of 520 seats per year. In so doing, instructional effort currently directed toward SPC 103 can be shifted over to SPC 101.

We recommend the hiring of one new tenure-track faculty member who would serve as a coordinator in Speech Communication for all SPC 101 sections. Instructional balance is then made up by hiring full-time instructors. Note that since instructors are hired to one-year contracts, shifting the instructional expertise from SPC 103 toward SPC 101 simply requires replacing current SPC 103 instructors with qualified SPC 101 instructors under existing budget lines, and only hiring new instructor positions as necessary. In the following table, we do not incorporate costs associated with the hiring and supervision of any graduate teaching assistants. The Department of Speech Communication makes heavy use of graduate TAs in delivering its 100-level courses, and incorporating TAs into the scheme presented would of course reduce costs.

Section sizes are held to the long-time tradition of 24 students per section. Because of the discrete nature of time required for students to give their speeches during the semester, in line with both long history in the Department and in line with IAI specifications, this is the maximum section size that can be accommodated in a 15 week term.

Also note that costs estimated for Fall 2012 and for Fall 2013 include equipment costs. These costs are for digital technology required for recording, storing, distributing, and viewing student speeches. Costs are for self-contained, hard-drive based camera recording devices (Flip Mino, by Pure Digital Technologies, Incorporated, or similar) (~ \$200 each) and for desktop computers with external hard drives for long-term archiving of student products (~ \$2000 each).

Table 12. Year-by-year costs of SPC 101 Implementation

	Year 2			Totals
	Fall 2012	Spring 2013	Summer 2013	For Year
# of sections	22	16	4	<b>42</b>
Seats / section	24	24	24	<b>24</b>
Total # seats	528	384	96	<b>1008</b>
Faculty	1 @ 52615 (2 sec + coord.)	1 (2 sec + coord.)	0	
Instructors	5 (2 new) (20 sec)	3 - 4 (14 sec)	1 (4 sec)	
Speech Ctr. Sup.	27930			<b>27930</b>
Student Wages	2400			<b>2400</b>
New Costs	52615 + 2 x 32002 = 116619 + plus equipment = 4000			<b>120619</b>
Ongoing Costs				

NOTE: SPC 103 capped at 1612 seats in 62 sections @ 26 students/section

	Year 3			Totals
	Fall 2013	Spring 2014	Summer 2014	For Year
# of sections	34	21	8	<b>63</b>
Seats / section	24	24	24	<b>24</b>
Total # seats	816	504	192	<b>1512</b>
Faculty	1 (2 sec + coord.)	1 (2 sec + coord.)	0	
Instructors	8 (32 sec)	4 - 5 (19 sec)	2 (8 sec)	
Speech Ctr. Sup.	28768			<b>28768</b>
Student Wages	2400			<b>2400</b>
New Costs	Equipment 4000			<b>4000</b>
Ongoing Costs	54194 + 2 x 32962			<b>120118</b>

NOTE: SPC 103 capped at 1108 seats in 43 sections @ 26 students/section

	Year 4			Totals
	Fall 2014	Spring 2015	Summer 2015	For Year
# of sections	42	33	9	<b>84</b>
Seats / section	24	24	24	<b>24</b>
Total # seats	1008	792	216	<b>2016</b>
Faculty	1 (2 sec + coord.)	1 (2 sec + coord.)	0	
Instructors	10 (40 sec)	4 - 5 (19 sec)	2 - 3 (9 sec)	
Speech Ctr. Sup.	29631			<b>29631</b>
Student Wages	2400			<b>2400</b>
New Costs				
Ongoing Costs	55820 + 2 x 33951			<b>123722</b>

NOTE: SPC 103 capped at 520 seats in 20 sections @ 26 students/section

## **Analysis of RA Implementation Costs, by Year of Implementation**

Even though the BRIDGE proposal was written to indicate that other Departments would be encouraged to offer sections of RA 101 as they saw fit, we anticipate that the Department of Philosophy will be offering the bulk of RA 101 sections. Indeed, in the implementation scheme below, we assume full responsibility for 2000 seats per year to be taken by Philosophy.

In Summer 2008, Fall 2008, and Spring 2009, the Department of Philosophy offered 1472 seats in PHIL 106, the course to be replaced by RA 101. Thus, an additional ~ 530 seats would need to be offered per year of RA 101 to be combined with effort already expended by Philosophy toward PHIL 106.

However, an important consideration is that the Department of Philosophy is potentially going to be heavily affected by the Breadth Deficit. In 2005 – 2006, Philosophy offered an average of ~500 seats in courses numbered at the 200 – 300 level, that did not have any prerequisites, and that did not include PHIL 320 or PHIL 323 (required by other degree programs). According to 2005 – 2006 data, Philosophy has only ~ 30 majors in its program, implying that a large fraction of students in these 200 – 300 level courses are taking these courses to satisfy the Distribution requirement of the Current Program. Shifts in enrollment demand will likely mean that many of these sections will not be offered on an annual basis, thus freeing up some instructor/faculty time that could be directed toward RA 101.

This shift in enrollment demand is taken into account in the following implementation scheme. We propose the hiring of one tenure-track faculty member who would serve as a coordinator of the RA 101 sections, and then additional instructors as necessary. Note also in the scheme below that section sizes start at 40 students per section in Year 2 (the current size of PHIL 106 sections), reducing to 25 students per section in Year 4. Sections of RA 101 that also serve as New Freshman Seminar sections would be further reduced to 25 students per section.

Table 13. Year-by-year costs of RA 101 Implementation

	Year 2			Totals
	Fall 2012	Spring 2013	Summer 2013	For Year
# of sections	26	14	4	<b>44</b>
Seats / section	40	40	40	<b>40</b>
Total # seats	1040	560	160	<b>1760</b>
Faculty	1 (2 sec + coord.) + 2 from Breadth Deficit (6 sec)	1 (2 sec + coord.) + 2 from Breadth Deficit (6 sec)	0	
Instructors	4 - 5 (18 sec)	1 - 2 (6 sec)	1 (4 sec)	
Lecturers				
New Costs	49916			<b>49916</b>
Ongoing Costs				

Note: Assumes 80 seats in each of PHIL 207, 213, 233, which can also satisfy RA101 requirement this year

	Year 3			Totals
	Fall 2013	Spring 2014	Summer 2014	For Year
# of sections	32	20	8	<b>60</b>
Seats / section	30	30	30	<b>30</b>
Total # seats	960	600	240	<b>1800</b>
Faculty	1 (2 sec + coord.) + 2 from Breadth Deficit (6 sec)	1 (2 sec + coord.) + 2 from Breadth Deficit (6 sec)	0	
Instructors	6 (1 new) (24 sec)	3 (12 sec)	2 (8 sec)	
Lecturers				
New Costs	27322			<b>27322</b>
Ongoing Costs	51413			<b>51413</b>

Note: Assumes 80 seats in each of PHIL 213, 233, which can also satisfy RA101 requirement this year

	Year 4			Totals
	Fall 2014	Spring 2015	Summer 2015	For Year
# of sections	40	28	12	<b>80</b>
Seats / section	25	25	25	<b>25</b>
Total # seats	1000	700	300	<b>2000</b>
Faculty	1 (2 sec + coord.) + 2 from Breadth Deficit (6 sec)	1 (2 sec + coord.) + 2 from Breadth Deficit (6 sec)	0	
Instructors	8 (1 new) (32 sec)	5 (20 sec)	3 (12 sec)	
Lecturers				
New Costs	28142			<b>28142</b>
Ongoing Costs	52956 + 28142			<b>81098</b>

Note: There will remain some Foundations enrollment demand for PHIL 207, 213, and 233 in this year due to students who enrolled earlier but who had not yet completed their RA 101 requirement (see Table 3).

**Table 14. Foundations Implementation: Cost Summary Table**

This table summarizes estimated costs for personnel and equipment needs by Lincoln Program year. Total costs for each year include personnel costs from previous years as well as new costs incurred in that year, but do not include any estimates of benefits or costs associated with personnel searches. From Year 4 to Year 5, and for each year thereafter, professional personnel costs increase by 3%, a standard pay raise increase as currently exists.

		<b>Lincoln Program Year</b>				
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Faculty</b>	MATH		58621	60380	62191	64057
	SPC		52615	54194	55820	57495
	PHIL		49916	51413	52956	54545
	FL	43260	44558	45895	47272	48690
<b>Instructors</b>	MATH			38188	118002	121542
	SPC		64004	65924	67902	69939
	PHIL			27322	56284	57973
	FL	32280	33248	34245	35272	36330
<b>IS reassignments</b>			35000	63000	70000	70000
<b>Speech Center</b>			30330	31168	32031	32920
<b>Speech Equipment</b>			4000	4000		
<b>NFS Activities</b>			16000	16000	16000	16000
<b>Totals</b>		<b>\$75,540</b>	<b>\$388,292</b>	<b>\$491,729</b>	<b>\$613,730</b>	<b>\$629,491</b>