Goal 1: Enhance Foundational Skills

A rapidly changing world needs flexible, critical thinkers who are collaborative problem solvers and communicate well. Enhancing our focus on foundational skills (i.e., writing, speaking, and quantitative reasoning) aligns our academic goals with external needs and prepares our students for life after Hamilton.

The intent of our recommendations is first to create a culture of teaching and learning at Hamilton that seamlessly incorporates an emphasis on developing strong writing, speaking, and quantitative reasoning skills through repeated exposure to and assessment of those skills throughout the curriculum. The long-term goal is to develop national recognition for building a curriculum that teaches students these skills and trains faculty effectively. The committee believes that failure to implement these actions could result in Hamilton losing its competitive place among our peers. The repercussive effects could be observed in student yield, retention, and post-Hamilton outcomes. We would also be less prepared to support the success of an increasingly diverse student body.

Below, we identify specific goals for enhancing foundational skills; provide background information comparing Hamilton to its peer institutions in its integration of and support for writing, speaking, and quantitative reasoning skills within the curriculum; and recommend actions for Hamilton to accomplish the stated goals.

GOALS
Build a national reputation of excellence in teaching our students to master foundational skills, training our faculty to integrate the teaching of foundational skills within their disciplines, and serving as a resource and training ground for other institutions by:

1. Enhance student engagement within foundational skills to ensure our students are optimally prepared in these fundamental areas
2. Promote lifelong learning by developing students’ metacognitive awareness of growth in foundational skills
3. Support faculty at Hamilton and across the country in incorporating the teaching of these skills in their fields

BACKGROUND
An overall review of the data indicates that none of our peer institutions provide robust support—in the form of curricular requirements and dedicated academic resource centers to support those requirements—across all three of these foundational skills. Thus, Hamilton stands to become a leader in this area through a curricular emphasis that integrates all three skillsets across disciplines, the combination of which is crucial for preparing our students to succeed after graduation.

Below is a summary of how Hamilton compares to 25 peer institutions with regard to curricular requirements and academic support centers.

Written Communication – Our current curricular requirement is fairly standard, though it appears that Hamilton falls within the upper range of Writing Intensive (WI) requirements among peer institutions. Most require 1-3 writing courses, although 20% have no writing requirement at all. All peer institutions have academic resource support for writing. In most cases, this is in the form of a discrete Writing Center; in a few cases it falls under a center for teaching and learning-type setting. While Hamilton appears to have a distinctively strong peer tutor program, we are lagging behind in terms of professional support: the centers at most peer institutions have a director, an assistant/associate director, and/or separate Writing Program Administrator who is responsible for monitoring the quality and effectiveness of the writing program in the curriculum and for offering regular faculty development (often a faculty position).

Oral Communication – We appear to be ahead of most other institutions in this area, particularly in terms of student support. Of our peer institutions, few have any designation related to oral communication, and, if they do, it is often part of a different requirement (e.g., Mount Holyoke offers Speaking, Arguing, Writing courses that combine those three skills). Pomona very recently approved Speaking Intensive (SI) courses into their curriculum, which is the closest
analogue to our current designation. Regarding peer support, only Davidson College has as robust of a service as our Oral Communication Center (OCC), though it is becoming more common for peer institutions to offer speaking support. Often those peer tutors are a subset of writing tutors; for example, Amherst College recently adding a “public speaking fellow” to their Writing Center staff. For now, Hamilton stands out in terms of maintaining distinct services. As more of our peer institutions seem to be moving to include oral communication, our SI designation remaining as is will not be sufficient to maintain our leadership position. Likewise, faculty support and assessment will be vital if the services hope to grow.

Quantitative and Symbolic Reasoning (QSR) Skills – Hamilton was one of the first schools to explore quantitative skills with a 1978 grant that led to development of the Q-Lit exam and program in the 1980s. However, we have done little since then to be leaders in the teaching of this foundational skill. Recently, the Career Center identified that one of the strongest needs for graduates from employers in all fields is numerical analysis/comfort with quantitative information. When compared to our 25 peer schools on the teaching of quantitative skills, we are ahead of 8 schools (32%) who either don’t have a requirement or have it as part of a broader distribution requirement so the quantitative focus could be avoided. We are on par with the 11 schools (44%) that require one course. We felt this comparison did not make us leaders in this area. Of schools with a specific quantitative requirement, two require more than one course and Carleton stood out with a two-tiered approach: a 6 credit Formal and Statistical Reasoning requirement plus a 3-course Quantitative Reasoning Encounter requirement, which includes courses that have at least one substantial assignment or module designed to enhance students’ Quantitative Reasoning skills in at least 1 of the 6 learning goals at Carleton.

**ACTION 1**

**Enhance Student Engagement Within Foundational Areas**

- Change the requirements to add parity and depth across the three foundational areas.
  - Start with two WI courses, one QSR course, and one SI course required before the end of the sophomore year. With the addition of an equivalent Speaking Intensive requirement, we could be one of the few institutions that requires all three at the lower levels.
For all three areas there should be a systematic review of the language of the requirements and of how courses are approved to meet the requirements, as well as a process for regular oversight of continuing courses that count toward the requirement, including faculty development for those areas that need support to come up to the standard. Catalog language should be updated to reflect any changes.

○ What would really set us apart is a more systematic integration of these skills into upper division courses in each discipline. We could achieve this goal by requiring one WI course after the sophomore year in the student’s major discipline/concentration. We could then add a requirement of one Speaking Experience course and one Quantitative and Symbolic Reasoning Experience course (similar to Carleton’s QRE model above) after the sophomore year in the discipline/concentration. Such courses would involve a minimum of a single module or major assignment that would emphasize oral communication/analytic discernment through the lens of quantitative and symbolic reasoning in the context of the particular discipline. These could be pre-existing upper-level required courses for concentrators, including the senior program.

● Engage students early in their Hamilton careers by incorporating more explicit attention to foundational goals in First-Year Courses (FYC).
  ○ Require particular assignments or participation in FYC research festival
  ○ Assign writing, oral communication, and/or quantitative tutors to each FYC

● Explore ways in which peer tutoring programs across all three foundational skills can offer more individualized support that has the potential to span a longer period of time (e.g., peer tutors assigned to particular courses for a semester, peer tutors assigned to particular students across a semester). This step will help Hamilton serve the growing diversity of students that we hope to attract.

Outcomes and Implications
What these actions mean for:

● Students:
  ○ The College’s focus on foundational areas will be more transparent for students; More intentional development of foundational skills throughout students’ four years
  ○ An increase in the number of “required” courses

● Faculty/staff:
○ Enhanced development needed to learn how to infuse SI and QSR into courses across the curriculum

● Alumni:
  ○ Hamilton will meet the needs of potential employers in all professions by developing students’ skills in all three foundational areas
  ○ Once students graduate having developed all three foundational skills, they will begin to build Hamilton’s national reputation among employers as a leader in teaching these skills.

● Various groups/entities on campus whose work would be affected:
  ○ There would be an increase in demand for services at the Writing Center, Oral Communication Center, and Quantitative and Symbolic Reasoning Centers; These centers may need to increase their hiring of students and increase administrative and other professional assistance.
  ○ With an increased need for faculty development, all three centers will need to respond with appropriate programming, especially the QSR center.
  ○ Other programs that offer support in foundational skills such as English for Speakers of Other Languages (ESOL) and Opportunity Programs (OP) will need to be prepared to support their students at all levels.

● Facilities/Budget:
  ○ Growing use of academic centers will mean more traffic through limited spaces, so there may need to be expansion of the current centers
  ○ Additional support staff for centers; increased number of peer tutors and professional/administrative positions

ACTION 2

Promote Lifelong Learning by Developing Students’ Metacognitive Awareness of Their Growth in Foundational Skills

● Use ePortfolios (1) to foster students’ reflection on their development of foundational skills; (2) to provide a means for institutional assessment of growth in student skills over time; and (3) as a tool for enhancing academic and career advising
  ○ Upon enrollment, students will create an ePortfolio to which they will regularly contribute throughout their Hamilton careers, archiving examples of their work and reflecting on their experiences.
  ○ Regular ePortfolio practice is believed to enhance student achievement, particularly students from underrepresented populations (Finley & McNair,
2013). The use of ePortfolios was recently added to the list of recognized and validated “high-impact practices” by George Kuh and the AAC&U (2016; http://www.theijep.com/pdf/IJEP254.pdf). Quality ePortfolio practice brings intentional and integrative processes to learning -- processes that are known to enhance short- and long-term learning and transferability to other domains.

(1) ePortfolios can contribute to the growth of students’ foundational skills over time and promote lifelong learning.

- Asking students to reflect upon and draw connections between their foundational skill experiences will foster feelings of self-efficacy, hone skills of self-assessment, and encourage the pursuit of new growth opportunities during their time at Hamilton and beyond. Having students reflect on their work and choices in ePortfolios also ties in with wellness goals by helping students internalize the choices they make and appreciate their own agency in crafting their broader educational experience.

- One requirement of foundational skill courses in any of the three areas would be for students to include and comment on work produced in the course. Students might respond to a fixed set of targeted questions, or they might offer an open-ended narrative about the work.

- The ePortfolio can be broad in scope and encourage inclusion of co- and extra-curricular experiences that support the development of foundational skills (e.g., member of debate club, writer for student newspaper, peer tutor); allowing this flexibility would help students see connections between experiences. Thus, students would be able to include out-of-class experiences that help build these skills (e.g., mock trial, summer internship).

- Implementation of ePortfolios is a natural complement to our open-curriculum where students are encouraged to create a personalized learning experience. An ePortfolio would help students contextualize their curricular and co-curricular choices and potentially transfer their knowledge to new areas/domains.

(2) ePortfolios can be used as a means of regular and robust institutional assessment of the growth in students’ foundational skills over time. This will be a key means for determining whether our efforts to enhance student engagement are successful and will provide a step towards building a national reputation.
○ Systematic collection of student work would provide us with a regular source of data across skills and time and would allow us to document how students benefit from instruction in curricular foundations.

○ We recommend that the college explore options for how the portfolio could be used for First-Year Courses and in the senior program to promote the development of skills across the four years. Regular, longitudinal, outcome-based assessments would set us apart from peer institutions. Rather than rely on students’ self-reported belief that their writing, speaking, and quantitative reasoning skills had improved, we would be able to show the development.

○ ePortfolios would be a natural source for sharing student stories of their experiences both within and beyond Hamilton’s immediate community.

(3) ePortfolios can provide a tangible tool to enhance academic and career advising.

○ The summer advising tour could be transferred into the ePortfolio system so that students become acquainted with the tool from their first days at Hamilton. Students could answer advising tour questions within the ePortfolio platform much as they do currently; their responses would then be maintained as a later learning tool they could discuss and develop with their pre-concentrator advisor.

○ The current process for declaring a concentration could be revised and completed in the ePortfolio system such that sophomores would be required to develop specific components of their ePortfolio that could be related to their coursework in the foundational areas, progress towards the College’s educational goals, as well as students’ long-term goals (e.g., why do you want to be in this major). Students would be expected to comment on the courses that contributed to their choice of major: which courses were important in the decision, and why? The ePortfolio would then be shared with the concentration advisor.

○ Career Center staff could work with students to tailor ePortfolios for specific career goals.

Outcomes and Implications

What these actions mean for:

● Students:

○ Development of metacognitive skills of self-assessment and reflection that would lead to greater recognition of the value of these skills

○ Introduction of a new “requirement” that involves certain technical skills

○ Training in use of the ePortfolio and regular contribution to it
Enhanced tools for working with academic and career advisors

- Faculty/staff:
  - Would require clarification of where advising counts in tenure and promotion -- an argument could be made for advising to fall into the “teaching” bin if we are linking the ePortfolios in advising to development of foundational skills
  - Training needed in use and evaluation of ePortfolios

- Alumni:
  - Alumni could be recruited to evaluate ePortfolios

- Various groups/entities on campus whose work would be affected:
  - Institutional Research would benefit by having a partner in collecting information on curricular outcomes
  - LITS support and management of ePortfolio platform
  - Assistance in the identification and implementation of best practices around effective ePortfolio use

- Facilities/Budget:
  - Possible development of an Advising Office that can help support students and faculty in effective use of ePortfolios and to assist in reviewing ePortfolios.
  - Spaces (in Burke?) to support ePortfolio technology; Greater use of computers; Server space to archive ePortfolios
  - Campus license for ePortfolio software

**ACTION 3**

**Support Faculty at Hamilton and Across the Country in Incorporating the Teaching of These Skills in Their Fields**

- Create a Faculty Development Center that will (1) help faculty be successful in meeting curricular goals of the College, (2) provide a national training ground for teaching foundational skills, and (3) enhance faculty scholarship
  - In order to accomplish Actions 1 and 2 it is essential to support faculty to develop as teachers in these three foundational areas. Such a center will support and develop tools that would be useful for the curriculum and for the faculty’s own scholarly work.
  - If Hamilton builds good programs for helping faculty, this could be exportable to draw faculty from other schools.

1) Help the faculty be successful in meeting the curricular goals of the College
   a. We have a young cohort of new faculty, so it is a critical time for developing and retaining the integrity of our curriculum. The Center could
be a site for informal and formal mentorship of faculty, and should play a key role in faculty orientation.
b. The primary mission of the Center will be to support faculty in teaching foundational skills to College standards and to help faculty/departments identify where in the discipline these skills connect.
c. An important step would be to have a dedicated director to coordinate programming, attend national meetings on pedagogy in these areas, and bring innovative ideas back to Hamilton for implementation. Ideally, the director would have training in teaching pedagogy and instructional design. Center staff could serve as the program administrators to oversee the writing, speaking, and QSR curricula.
d. The Center could expand current faculty workshop activities to include all foundational areas. In particular, for QSR faculty will need support in increasing the quality of QSR content where it exists and identifying places where such content could effectively be added to new or existing courses.
e. The Center would also work with whole departments to explore how foundational skills are or could be embedded throughout all levels in the concentration.
f. If experiential learning becomes an important component of the curriculum, the Center would be a resource in coordinating activities (e.g., community outreach/liaison, compliance issues)

2) Provide a national training ground for teaching foundational skills

a. As Hamilton successfully integrates the teaching of foundational skills throughout the curriculum, the Center could begin to build Hamilton’s reputation in this domain by reporting our successes at national meetings. As our reputation grows, faculty workshops and summer institutes could evolve to include faculty from other institutions.
b. The Center would work with Institutional Research in overseeing assessment of curricular programs to assist in shaping/guiding its own development programs.
c. The success of the Center will depend on sustained faculty engagement in shaping programming. We can encourage Center engagement with a Faculty Fellows Program. In this program faculty could use a portion of their sabbatical time to explore pedagogical innovations in addition to making progress on their scholarly research. Fellow positions could be competitively chosen each year to receive a full-year’s leave with pay (instead of standard half-year) during their regularly scheduled periodic leave with the understanding that they are to coordinate some faculty
development workshops/programming during the year. (Or perhaps tie it to the CJ Professorship.) Fellows could also receive support to attend national meetings on teaching/pedagogy to inform campus programming. These fellows could rotate each year from different divisions.

d. The existence of a Faculty Development Center could be an important feature in hiring and retaining faculty. Faculty would find it appealing to know a dedicated resource exists to help them be successful at Hamilton.

e. We recommend conducting further, substantive research to determine what peer institutions are doing in this area and how Hamilton could be truly distinctive in regard to faculty development.

3) Enhance faculty scholarship

a. The Center could provide a space for group writing, quantitative analysis, and practicing talks. It is valuable for students to see their professors doing the work that they are being asked to do.

b. The center could sponsor activities to support faculty scholarship (e.g., faculty writing workshops, grant writing workshops).

c. Staff can help identify outside workshops/training opportunities based on faculty needs as well as funding for such opportunities (e.g., summer stats boot camp, grant writing workshops).

Outcomes and Implications

What these actions mean for:

- Students:
  - Improved support for teaching would enhance classroom experiences such that the learning/developing foundational skills would happen seamlessly as one advances through the curriculum. In a sense it will become unavoidable and will be just what we do at Hamilton.
  - The presence of a dedicated Faculty Development Center will model the concept of lifelong learning for students. Students will benefit from seeing faculty engage in professional development through various workshops and activities.

- Faculty/staff:
  - Such a Center would signal to the faculty that teaching is valued and that their efforts in this domain will be supported in tangible ways. They would receive needed assistance in meeting expectations for curricular integration; they would not have the burden of learning best practices on their own. They could also get support in the development of other innovative pedagogical endeavors.
With the faculty fellow program, faculty would have enhanced opportunities to develop their own level of expertise in these areas and to share their wisdom with other interested faculty.

Would provide faculty with a “neutral” (non-evaluative) location and support network for teaching and scholarship.

- **Alumni:**
  - Alumni could participate once development opportunities expand beyond the immediate Hamilton community.

- **Various groups/entities on campus whose work would be affected:**
  - Collaboration with IR to manage assessment needs.
  - Collaboration with Grants director to develop programming around external funding.
  - Coordination with Committee on Academic Policy if the Center takes on program administrator duties.
  - Extensive collaboration with existing Academic Resource Center staff: Writing Center, OCC, QSR, ESOL, OP.

- **Facilities/Budget:**
  - Would need to hire a director and support staff.
  - Location for Center where staff could work with small and large groups of faculty; technology needs, place to store resources and materials.
  - Center Director would need budget for faculty development/course development funds, inviting speakers/workshop organizers, student help.
  - Salary support for Faculty Fellows program.

**CONCLUSIONS**

Taking the above recommended actions will place Hamilton at the forefront of liberal arts colleges in educating students on fundamental skills for the 21st century. Action 2, in particular, will provide Hamilton with important data to support claims of being a leader in teaching students these foundational skills further building Hamilton’s reputation.