The New CUNY Community College
First Round Working Committee Reports

March 2, 2010
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INTRODUCTION TO FIRST ROUND WORKING COMMITTEE REPORTS

After an open call to the University community, seven committees were organized last October with seventy faculty and staff from fifteen CUNY colleges participating in the development of the ideas put forward in A New Community College Concept Paper. The work of the committees on City Seminar and Professional Studies, Math Topics, Assessment and Portfolios, Enrollment and Persistence Management, Library and Technology, Facilities & Physical Infrastructure and First-Year Experience lasted through January, and what follows is an edited compilation of the reports of five of those committees. The work of the Facilities Committee continues under the direction of CUNY’s space planning experts. The First-Year Experience Committee created a preliminary framework of behaviors and qualities the New Community College (NCC) will foster in its first year program.

The members of the committees were extraordinarily diligent in addressing their charges. The way they worked across disciplinary boundaries in a collaborative effort exemplifies the team approach to the educational model that is such an exciting feature of the NCC. I would like to thank all seventy committee participants for their thoughtful work and the group and individual contributions they have made to the development of the NCC.

After each report is a postscript from the Planning Team acknowledging next steps. The committees were asked to think broadly and imaginatively, not to base their recommendations on existing constraints. Their recommendations should therefore be considered preliminary. As we move forward, the Planning Team, NCC college leadership and foundational faculty will have to design and implement the college with the reality of budgets and in compliance with contracts. We hope these reports will be read with the same spirit of excitement and openness to the possibility of reimagining current practices that led the committees to create them.

John Mogulescu
Senior University Dean for Academic Affairs &
Dean of the School of Professional Studies

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1 The lists of members on the Facilities Committee and the First Year Experience Committee can be found in an appendix following the bibliography.
CITY SEMINAR AND PROFESSIONAL STUDIES
WORKING COMMITTEE REPORT
The committees of the New Community College (NCC) initiative are established to fully realize the development of the educational model outlined in *A New Community College Concept Paper*. Taken as a whole, these ideas are intended to dramatically improve student engagement, persistence, and degree attainment within three years by creating an integrated approach to the study of a limited number of majors within a community focused on academic success. The NCC will also serve to identify successful innovations that can inform educational practice throughout CUNY and higher education generally. The committee work will be done in stages, with particular emphasis in stage 1 on designing frameworks for the first-year educational model and the enrollment and persistence management model, followed by development of the majors in stages 2 and 3. Since the work of developing all the components of the college are interrelated, the work of each committee will be collaborative and coordinated with the work of other relevant committees.²

This Committee will develop two of the first-year courses that are key components of the educational model. The City Seminar and Professional Studies courses will provide engaging intellectual content using New York City as the context for learning, develop students’ capacity to do college-level work, develops skills in reading, writing and quantitative reasoning, and make connections between academic learning and the world of work. The charge for this Committee is to be innovative in reimagining the integration of college-level work, developmental skills, and experiential learning. The Committee will develop the design principles for the City Seminar and Professional Studies courses, address the connections between content and developmental skills, and integrate Professional Studies with City Seminar. To illustrate their work, the Committee will also design a prototype module.

The Committee will include eight to twelve participants, a staff liaison, and advisors with specific expertise who will consult with the Committee and/or review and respond to written materials.

**Key Questions**
- Building on the learning outcomes framework developed by the First-Year

² This introduction was included in all the committee charges, and so will not be repeated below in the other charges preceding each report.
Experience Committee, what do we want students to know and be able to do at the end of the City Seminar and Professional Studies courses?

- In the context of New York City as the laboratory for learning, what theme for the City Seminar lends itself to experiential learning that will engage students and intellectually connect the City Seminar and Professional Studies courses?

- How can City Seminar be designed so that the intellectual content has a progression leading to learning outcomes for both content and skills? How should that relate to the award of credits?

- How can Professional Studies be designed to build skills, workplace experience, and reflection on workplace experiences through the lens of City Seminar?

- What is the role of college partners in shaping and facilitating the learning experiences for the City Seminar and Professional Studies courses?

- How many modules and of what duration are needed to support student learning and success in the City Seminar and Professional Studies?

- How can ESL students and students with learning disabilities be supported? What level of proficiency in reading and writing do students need to succeed with additional support?

- How will students demonstrate proficiency and competencies at mid-year and year end?

- What will the criteria be for determining college credit?

- What staffing models will foster collaboration in planning, implementing, and integrating the different components of the City Seminar and Professional Studies courses?

- Is there a role for instructional technologies in supporting the work of these courses?
INTRODUCTION

The educational model for the New Community College (NCC) envisions a first-year core curriculum that enables students to experience academic success and that provides the foundation for a student’s work in a chosen major and for life-long learning. The first-year curriculum will consist of three core courses in which students investigate real-world problems in New York City, use the city as a laboratory for learning, and develop skills through those investigations that will serve them in school, work and their communities. This report elaborates on ideas articulated in the Concept Paper (August 2008) and focuses on two of the three foundational courses: City Seminar and Professional Studies. The third course—Math Topics—is discussed in the report following this one.

The work of the Committee was to show what the content, pedagogy, and structures for both courses, as well as the integration across courses, might look like. Together, both courses address the development of higher order thinking skills, habits of mind for investigating structures, institutions, and work places that make up the urban fabric, and specific skills in reading, writing and quantitative reasoning that will enable students to engage in increasingly complex texts, data, and problem-solving. These courses will serve as introductions to disciplinary thinking in the humanities, social sciences, and sciences, and to different kinds of work and work places. In tandem with this work, students will deepen their aptitudes, interests, and understanding of themselves as learners, all of which inform decision-making about choice of major and career aspirations.

The Committee recommends key assignments through which students will demonstrate their ability to transfer knowledge and skills to new problems or situations. The instructional approach to the foundational courses guides students through scaffolded activities and helps them make connections between tasks, so assignments over the course of the year will become increasingly complex and invite increasing independence in tackling tasks. For the first semester, students can earn up to six credits for City Seminar and one credit for Professional Studies; and over the first year, students can earn 17 or 18 credits, including Math Topics. Toward motivating students and giving them tangible ways to measure their success, credits can be accumulated with successful completion of a set of assignments collected in an e-portfolio and assessed at the end of each module.

3 This does not include equated credits.
The information in this report is organized to help the reader appreciate the structure and organization of the foundational courses: blocks, modules, case studies, sections, and the integration of City Seminar and Professional Studies.

**CITY SEMINAR AND PROFESSIONAL STUDIES**

**Overview**
This section offers recommendations to guide NCC’s foundational faculty in the design and development of the City Seminar and Professional Studies courses that – together with Math Topics – comprise the first-year core.4

**Part 1** illustrates the elements of City Seminar, where faculty teams collaborate around historical and contemporary city-based case studies that are tied to the college’s programs of study. Professional Studies is fleshed-out in **Part 2**; here, students will investigate specific work places and collect information about work and occupations. In **Part 3**, the elements are brought together with an example of assignments across one week. More sample curricula are included in the Appendices.

**Rationale for the Foundational Courses**
The common core curriculum lays a foundation for students to make informed academic and professional decisions. The guidelines and sample curricula take into account the diverse backgrounds of New York City students, especially those often unprepared academically and socially for the unfamiliar and intimidating environment and culture of higher education. These courses build an ethos of possibility by recognizing students as capable of success and having important experiences, knowledge, and nascent talents that must be cultivated. The focus on selecting a major by the end of the first year acknowledges that most students have an incomplete understanding of many of today’s professional opportunities, responsibilities, environments, and education requirements. Through case-based approaches, we will provide students with real-world connections to academic learning that align with professional pathways. These explicit connections between academic learning and professions address our students’ practical approach to higher education as a rewarding intellectual experience with important financial benefits.

The model fosters collegiality among academic staff and engenders a college-wide commitment to a life-long learning process within the context of a vibrant New York City. The recommendations are predicated on the notion that sustained faculty collaboration

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4 It should be noted that the programs presented in this report are sample curricula.
and inquiry around student learning across the courses (City Seminar and Professional Studies) will best support success for many of the underprepared students we expect to enroll in the college. Student success is defined primarily as academic achievement measured by satisfactory course completion, movement into a major, and progress toward life goals, such as the pursuit of more advanced postsecondary training or the first steps on a career pathway. Our design reflects our awareness that individual successes are incremental and, importantly, additive, and it values the social and emotional dimensions of student development.

Ultimately, the purpose of City Seminar and Professional Studies is to broaden students’ knowledge of the range, impact, and value of the disciplinary areas they can pursue. The two courses provide opportunities for students to investigate, observe, and experience the ways that institutions and individuals influence the nature and quality of work, workplaces, and community life, so students will see the possibilities for their own roles in work and civic arenas as they explore possible careers and majors. The content of both courses will focus on institutions relevant to all metropolises, the diversity of people who constitute institutions, and the relationships and connections among urban institutions. Finally, students will begin to recognize that “change is a constant” in terms of the evolution and development of work, the workplace, and their own role and impact on society.

**Integrating City Seminar and Professional Studies**

Institutional support for faculty collaboration is fundamental to building an integrated curriculum.

The NCC will support faculty collaboration and maximize student learning through coordinated course planning, teaching, and evaluation:

- maximize student learning and build momentum through curricular alignment;
- ensure that CS and PS share the same calendar and course schedule;
- provide attention to and coordination of the pacing of student work load;
- coordinate assignments in terms of skills, purpose, and due dates;
- develop block schedules and faculty/student learning communities;
- consider hybrid learning environments, and
- intentionally create repeated, “reinforcing” structures for both CS and PS activities.

The NCC will support collaborative course planning and respect faculty time:

- schedule time to plan, review, and make ongoing adjustments to curriculum, and coordinate the reading and evaluation of assignments;
- structure team consultations for trouble shooting and addressing students’ problems and needs, and
• schedule time to visit other classes to monitor curricular integration.

The NCC will support dialogue and collaborative inquiry by building and utilizing shared vocabulary/terminology, references/cases, key resources, etc.:
• develop and document a shared vocabulary of learning;
• share a common literary text to foster connections; and
• share/coordinate access to internal NCC and external New York City partnership resources

The NCC will support partnership development and implementation of the curriculum, working with a set of affiliated partner organizations:
• work with the NCC Office of Partnerships to take advantage of the expertise and resources of New York City partner organizations;
• work with partners to give students access to their work places; and
• coordinate the use of partner resources

Part 1: City Seminar

Every urban center addresses issues of public health, safety, education, commerce, and environmental sustainability, and there is a rich history that helped shape the development of the systems and institutions designed to address these important matters in New York City. City Seminar will introduce students to systematic thinking and addressing problems using a strategic approach that includes unpacking the historical and socio-economic context of an issue; surveying multiple perspectives of stakeholders within a community (practitioners, competing interest groups, or partners); and analyzing the evidence that has driven – or may inform – key decisions. Students will learn to think historically, comparatively, and analytically about major city institutions, important professions, and the highly contested processes that characterize the allocation of municipal resources. Students will build a foundation for evaluating institutional decisions and solutions in the context of specific New York City cases.

The learning goals link the work of faculty teaching in City Seminar and build a bridge for students’ second-year study in their majors. By exploring the history of urban systems and institutions through a series of cases – chosen for their level of importance and interest – students will learn to distill the important social, economic, political, and cultural issues the city faces today, recognizing what is at stake for them as New Yorkers, what important contributions they will make by way of their chosen majors and professions, and their roles in various local and global communities.
**Year-Long Learning Goals for City Seminar**

1. Students will develop a basic understanding of the central questions and “ways of knowing” within several areas of inquiry.
2. Students will learn how to analyze various urban systems and institutions through the lens of historical and contemporary problem-based cases.
3. Students will build foundational knowledge and strengthen their academic and technical literacy, numeracy, and quantitative skills in order to complete introductory major courses successfully.
4. Students will develop an understanding of their roles as ethical actors/citizens with responsibilities in their various communities (local, academic, and professional/work).

**Structure of the City Seminar**

City Seminar has four linked sections. The **Case Study** component organizes the content of each block and is at the level of an urban institution/system. “Institution” is a key organizational structure that is integral to a working city. Cases can be viewed as “quality of life” issues from the angle of context, stakeholders, and evidence. An **English** class strengthens literacy by supporting students as they practice more complex reading and writing skills. In the **Quantitative Reasoning** section, students will build expertise in interpreting and representing demographic, workforce, financial, and other data. Finally, the **Group Workspace** provides individual and group support around student learning, with particular strategies for building independent learning skills and opportunities for individualized attention in areas such as English Language Learning, advisement, project development, and guided practice. While each component will include its own assignments, the sections are linked by content and final projects, and also by teams of faculty working together with cohorts of students.

Each 15-week semester includes two seven-week blocks, containing two modules shaped around an urban institution or system and a final, one-week component that requires students to reflect deeply on their learning processes, including specific moments of academic growth and responses to personal challenges. Each component of City Seminar meets twice weekly across the semester. The chart below maps out the first semester; the second semester will follow the same format, and we will refer to those later modules as Block 3 and Block 4.

A module begins with an engaging, historic case study and an overview of the purpose of the institution or field, e.g., “What is the purpose of a public health organization?” Early case examples eventually lead to a discussion of how past crises or community necessities have shaped the institution or area of study in that module. In the second semester, students work alone or in small teams to explore contemporary, critical cases.
recommended for that module. Students learn to apply a systematic way of looking at an issue or event, gather information pertinent to a case, analyze data and texts, and report the outcomes or results. They also reflect on the development of these learning processes and their own capacity to analyze important urban issues.

Both the seven-week blocks (each with two modules) and the one-week final component (reflections) have specific learning objectives that, when met, will award credit toward the academic program. Student projects will include low- and high-stakes assignments, such as presentations and papers (with outlines) that build an understanding of how to “look” at city issues through the lens of an urban institution and an academic discipline. Across the four components of City Seminar, faculty will connect pedagogical approaches and course content to help students meet the requirements for successful completion. Scaffolding skills over the semester and year will give students many opportunities to develop important critical thinking skills that include exploring the historical, social and political framework surrounding issues or problems, the various and sometimes competing interests of stakeholders, the search and selection of evidence or the experimental processes involved in finding evidence, and an analysis of outcomes or key decisions.

**City Seminar: First Semester**

<table>
<thead>
<tr>
<th>Block</th>
<th>Weeks</th>
<th>Section</th>
<th>Hours/week</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1-7</td>
<td>Case Study</td>
<td>3</td>
<td>2</td>
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<tr>
<td></td>
<td></td>
<td>Reading and Writing</td>
<td>3</td>
<td></td>
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<td></td>
<td></td>
<td>Quantitative Reasoning</td>
<td>3</td>
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<td></td>
<td></td>
<td>Group Workspace</td>
<td>3</td>
<td></td>
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<tr>
<td>2</td>
<td>8-14</td>
<td>Case Study</td>
<td>3</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
<td>Reading and Writing</td>
<td>3</td>
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<td></td>
<td></td>
<td>Quantitative Reasoning</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
<td>Group Workspace</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Final</td>
<td>15</td>
<td>Reflection</td>
<td>12</td>
<td>1</td>
</tr>
</tbody>
</table>

**Key:**
- **Block** – seven-week program that encompasses all four linked sections; there are two blocks per semester.
- **Section** – comprises a module that contains four linked components (Case Study, Reading and Writing, Math Topics, and Group Workspace); there are two modules per block.
- **Case Study** – organizes the content of each module.
Sequence of Modules and Integration of Components
Based on our conversations, the Committee recommends the following sequence: Public Health and Emergency Services in either order during the first semester and then Commerce and Environmental Science (again, in either order) during the second semester. Dividing each semester into two blocks serves three goals:

1) to expose students to four areas in the first year, expanding their understanding of the fields represented in the majors and demonstrating important areas of overlap should they refine their programmatic goals;

2) to build a sense of accomplishment for our students, with a shorter timeframe for earning small amounts of credit to minimize the potential harm of a temporary drop-out due to personal circumstances; and

3) to offer opportunities for repetition, practice, and the transfer of knowledge and skills to new problems of increasing complexity.

The complexity of student work increases as the year progresses and is supported by the work across all City Seminar components. For example, the English class will support the development of reading for understanding, such as paraphrasing, summarizing and interpreting, and comparing and contrasting academic and trade texts. Later projects will require students to engage in more research and to become proficient in locating, evaluating and citing sources, as well as to write persuasively and analytically using different kinds of evidence. By the second semester, assignments will be designed to support students’ expanding skills of observation, perception, and problem-solving.

Wherever possible, NCC will choose materials for Quantitative Reasoning that resonate with themes in City Seminar and Professional Studies. Using these materials, students will investigate, interpret, analyze, and manipulate data, and they will learn to use qualitative and quantitative evidence in support of written and oral arguments. To introduce students to the historical processes shaping the worlds of work today, students will spend the first module examining and constructing statistical graphs that illustrate the extraordinary transformation of the American economy in the 20th century. They will look at such areas as the growth of the service economy, professions, and government, as well as such issues as women’s participation in the workplace. As part of understanding and evaluating problems embedded in cases, students will work with a data set relevant to a module’s central case to build their skills in analyzing, interpreting, and communicating quantitative evidence.
The flexible sequence of modules within a semester allows for variation in the intensity of course activities. That is, the curriculum – texts, classroom activities, etc. – will be modified depending on where the particular module falls in the semester for a given student cohort (and whatever the particular needs of those students), especially in the English and Quantitative Reasoning sections, but without changing the content of the Case Study section. For example, the table below showing the first semester goals, assignments, and outcomes demonstrates how an assessment such as describing relevant context may easily be adapted for either the Public Health or Emergency Services module, based on course material. The ability to interchange modules also places less demand on partner organizations or other field resources we may draw upon for student placements and other types of assignments.

Embedded in the case-based approach is an emphasis on teamwork. Facilitated by faculty, Group Workspace will develop behaviors and practices that foster teamwork through role play and learning specific strategies such as time management. Students will learn that effective teams harness different strengths and expertise. Developing expertise requires practice, and Group Workspace will promote a culture of practice in which students individually or in groups will become “experts” in something that will enhance their investigations and studies, be it organizing data using Excel, developing interview skills and questions, or graphically representing information. Parallel to increasing the independence of students as learners in the case study classrooms, in the second semester, students will increasingly assume responsibility for facilitating and initiating activities in Group Workspace, such as facilitating presentations by students or interviews with community resources relevant to a case.

**City Seminar Sample Modules: First Semester**

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<table>
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<tbody>
<tr>
<td><strong>Students will learn to think systematically by exploring:</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>the historical or socio-political context behind the emergence of city institutions.</td>
</tr>
<tr>
<td>2.</td>
<td>an in-depth urban problem and the actors/stakeholders who confront it: what it means to take action and who is acted upon.</td>
</tr>
<tr>
<td>3.</td>
<td>the steps taken to address the problem: weighing options and evidence,</td>
</tr>
<tr>
<td>4.</td>
<td>the impact of any action/inaction in light of the purpose of the institution: the result of decisions.</td>
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</table>
Key Assignments

- **Low-stakes (weekly scaffolding assignments):** Focus on questioning, discussion, annotating texts, paraphrasing and summarizing, outlining, drafting, organizing data, graphing data.

- **High-stakes (graded):** Two-page essay summarizing social, political and historical factors defining a case crisis (module 1); outline and 500-word paper on context and conditions leading to organized response at a particular historical moment (module 2); discussion of journal selections; selection of annotated texts; analyses and comparison of historical trend data. (2 or 3 credits)

- Reflection on the semester-long learning process and understanding of historical, comparative, and analytical ways of thinking. (1 credit)

Learning Outcomes

1. Students will demonstrate an increased understanding and appreciation of the emergence of city institutions/infrastructure in response to community needs.
2. Students will become proficient at note-taking, paraphrasing and summarizing a variety of texts including articles, trade texts, textbooks, and reports.
3. Students will describe how the city balances competing needs and resources in order to keep its population healthy and safe.
4. Students will demonstrate familiarity with and an ability to take on the identity of a stakeholder in a significant issue of public health and safety.
5. Students will strengthen their ability to explain how different aspects of case-related context intersect and why this is significant.
6. Students will become skilled at using a meta-cognitive vocabulary to talk about their learning.

The examples of modules are illustrative of what foundational faculty might develop. In the case study classroom, students will explore a series of New York City–based cases by considering the context (social, economic, political, cultural), learning about key stakeholder groups (geographic or demographic communities, institutions, advocacy organizations, individual actors), examining quantitative and qualitative data, and reviewing the results – the proactive or passive decisions and the short- and long-term effects. The content of these case studies frame the work in English and Quantitative Reasoning.

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5 See Appendices B to E.
**Case Studies: First Semester**

The case investigations for each seven-week module are organized, more or less, as follows:

- **Class 1:** 2 dramatic cases that draw students into the issues
- **Class 2:** 1 case in the early history of the system, something that changed the playing field
- **Class 3:** 1 case that helped shape or more closely represents the workings of the institutions as we know them today
- **Class 4:** An introduction to cases students will study over the course of the module
- **Class 5-12:** An extended, contemporary case (monolithic, one that captures the zeitgeist)
- **Class 13-14:** Sharing student work (presentations, papers, discussions, etc.)

The Committee chose *Public Health* and *Emergency Services* for the first semester modules. The Public Health module studies the historical emergence and institutionalization of New York City's Department of Public Health and Mental Hygiene, beginning with the response to the scourges of major diseases in the 19th century, particularly yellow fever and cholera. The major case study will explore in detail the origins and trajectory of the HIV/AIDS epidemic, with particular attention to the experiences and perspectives of several key groups who are often at odds: medical practitioners tracking and treating the disease; municipal authorities shaping and enforcing policies to protect the public; the changing roster of groups of victims principally affected by the disease; and different advocacy groups who call for resources to meet their own needs.

Emergency Services highlights the necessity of every big city to respond to certain emergencies; fires, medical emergencies of individuals, and homicides are singular examples of such breaches of public order. This module studies the habits of mind of various first-responders to immediate crises in New York City. The key groups analyzed are firefighters, emergency medical technicians, and police detectives; the module might explore in-depth the emergence of the detective division of the New York City Police Department and that division's growing responsibility in the 20th century to investigate violent crime in the city, with particular reference to homicides. This module alerts students to the extremely complicated workings of essential public services.

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6 See Appendix B.
In the first semester, student work will focus on developing the contexts of contemporary cases within the topic of the particular module. The English and Quantitative Reasoning classes will work with texts and data that provide information about the social, political, and historical factors of a case, and at the same time, focus on specific skills that enhance understanding and communication. Instructors will provide feedback to each other with regard to texts, concepts, examples, etc., that are working particularly well or are causing much confusion or difficulty for many students. Examples of contemporary issues – such as antibiotic resistant TB or the increased rate of diabetes – will be introduced periodically to show students the relevant application of knowledge and skills to current issues.

Assignments will be coordinated across all module components to support and strengthen the skills students will need to understand the workings of a case.

Case Studies: Second Semester
The second semester emphasis shifts from simple description of the context of a case to a deeper analysis of evidence leading to key decisions and an exploration of points of view held by various stakeholders (institutions, community groups, individuals, etc.). Assignments will increase in complexity, building on the work of the previous semester. For example, students will use what they have learned in primarily group-based work in the first semester to complete independent assignments.

Environmental Science and Commerce are the lenses for the two modules in the second semester.

Every metropolitan area suffers from pollutants caused by vehicle-exhaust, electricity-generation plants, pesticides, excessive noise, contaminants released by destruction and construction of buildings, and sewage failures, to name only a few major hazards of city life. Environmental Science is the study of the environment and the role that humans play in it. In this block, students will examine the habits of mind of policy-makers and scientists charged with maintaining standards to keep New York City safe from various kinds of environmental pollution. The case of New York City’s drinking water supply – arguably the most important environmental issue facing any metropolis – will introduce students to the basic principles and quantitative nature of ecology. This block will explore the creation, development, and maintenance of the City’s justly esteemed municipal water supply. By exploring the social, scientific, and ecological dimensions of this issue, the module introduces students to the intricacies of city policy-making and to the crucial notion of trade-offs, or essential compromises to achieve desired goals.

The Commerce block examines the habits of mind of businessmen and businesswomen who seek, through their own enterprise, to make money by offering desired goods and services. Cities emerged as centralized places for trade and commerce, and businesses remain the backbone of urban life. Great metropolises, New York City first among them, are the centers of banking and credit-allocation, the fonts of creative innovation and,
sometimes, the epicenters of financial catastrophes. This block examines business people’s conceptions of the notion of trade-off, with particular attention to their decisions to invest money in areas fraught with environmental risks. The module introduces students to the cost/risk/benefit way of thinking characteristic of business in a world bounded by governmental regulations and complicated by adverse advocacy.

The Committee foresees the development of additional modules—in areas such as information systems and cultural institutions—based on the academic programs offered when the college opens.

In the second semester, students are presented with a range of institutionally targeted contemporary environmental science or commercial issues. In groups (module 3) or individually (module 4), students will select case studies on which to work for the rest of the module. For example, in the area of Environmental Science, students might choose from among the following contemporary cases:

- Pollution of the Hudson River by General Electric
- Endocrine disrupting chemicals in waste-water
- Pesticide use in New York City
- Improving New York Harbor water quality
- The disappearing salt-marshes of Jamaica Bay
- PlaNYC 2030 water quality
- Water network initiatives

We recommend that the faculty initially provide selected readings. As students acquire research skills over the course of the semester, they will be required to search for and select sources to use in papers and presentations. Assessment of student work will include more formal assessments as the semester progresses and students get practice applying their developing skills toward analyzing contemporary issues and evidence, evaluating decisions, and presenting their ideas to their peers. The Environmental Science module in Appendix E provides more details, including proposed coursework and readings.

City Seminar Sample Modules: Second Semester

Students will learn to think systematically by exploring:

1. the historical or socio-political context behind a contemporary city issue.
2. an in-depth contemporary urban problem and the actors/stakeholders who confront it.
3. the significant evidence and weighing options for various stakeholders
4. recommendations for potential solutions.
### Key Assignments

- **Low-stakes (weekly scaffolding assignments):** Annotating public documents; locating, evaluating, and citing sources; analyzing uses and misuses of data; exercises manipulating and representing quantitative evidence.

- **High-stakes (graded):** Group or individual presentation; individual paper (1,000-1,500 words) and outline (2 or 3 credits).

### Learning Outcomes

1. Students will demonstrate an understanding and appreciation of the emergence of and response to crises in the City.
2. Students will become proficient at analyzing qualitative and quantitative data and representing the data accurately and clearly.
3. Students will describe how public and private organizations compete for natural and material resources in order to address the needs of stakeholder constituencies.
4. Students will deliver oral presentations and produce formal written papers that demonstrate an understanding of a contemporary commercial or environmental issue.
5. Students will cultivate the use of a meta-cognitive vocabulary to talk about their learning.

### Assignments, Assessment, and Credits

Table 1 below illustrates the types of assignments for each of the four blocks for City Seminar and Professional Studies. The City Seminar assignments reflect an increasing complexity of tasks: in modules 1 and 2, students complete highly structured assignments using the rich materials of the expanded cases (HIV/AIDS and the NYPD detective division), whereas in semester two, students prepare formal presentations and papers on a case they select to research.

Within each of the City Seminar classes – Case Study, English, and Quantitative Reasoning – students will complete a variety of low-stakes assignments both to practice skills and to demonstrate understanding of content. In addition, these low-stakes assignments, such as annotating texts or discussion journal entries, support and prepare students for the high-stakes assignments. For each City Seminar module, students will organize into an e-portfolio a collection of materials on which they will be graded; these materials are a combination of low- and high-stakes assignments. By way of illustration, in module 2, students will be graded on the following work: outline and 500-word paper, four selections of revised discussion journals, annotation of two primary and two secondary sources, and analysis and comparison of quantitative data relevant to the case. Detailed examples of classroom activities and assignments are included in Table 2 (Part 3) and in Appendix E. At
the end of each semester, students will write a structured reflection on what they have learned in City Seminar, questions they have, what they would like to do more of, and what was difficult and why.

A rubric will be designed to support and reflect the goals of City Seminar assignments. Students will learn to use the rubric to talk about their work periodically and to select assignments that demonstrate improvements in areas represented by the rubric. We are recommending the approach to assessment, but it will be the work of the foundational faculty to develop specific tools and criteria for grading and credits earned in the context of the system of assessment (the Assessment & Portfolios Committee are making these recommendations).

**City Seminar Design Principles**
The City Seminar structure will influence the culture of teaching and learning that NCC hopes to engender among all its stakeholders. The Committee recommends the curriculum adhere to the following design principles:

- **Start from the known and work outward.** Activating prior knowledge helps students to process texts more deeply, strengthening students’ comprehension and learning.
- **Privilege depth over breadth.** Teaching for depth helps students to recognize a discipline’s central organizing principles and questions, and to understand which concepts are most important and how to make connections among them.
- **Slow down.** Taking the time to help students burrow into content and practice skills helps deepen their understanding and represents a commitment to learning as a process.
- **Promote early success.** For many students who are considered unprepared for higher education, small initial successes can build the important confidence and motivational factors that propel them toward later success.
- **Provide models.** Through modeling and other kinds of scaffolding, the tacit knowledge of experts is made accessible to “novices.” Modeling allows students to develop skill gradually, through approximation accompanied by feedback. For example, models provided in the English course can include instructor “think alouds,” papers written by students, journal questions, question stems, and sentence templates modeling academic style.
- **Foster student collaboration.**
• Create overlap in content areas. Allow students to develop skills in the context of similar, connected content over the year.

• Choose diverse, engaging, and relevant mixes of texts from social sciences, humanities, and sciences.

• Incorporate qualitative and quantitative materials and primary resources.

• Provide access to local practitioners when possible.

• Teach students to be meta-cognitive. When students monitor their thinking and learning, they can become aware of difficulties and learn strategies for improving.

**Part 2: Professional Studies**

The students who attend the New Community College (NCC) will almost certainly lead their adult lives in the context of rapid change. Technological, economic, and social change will render old occupations obsolete and usher in new ones not currently imagined. With this understanding, the Committee has created a structure to help students develop habits of mind and attitudes toward work that will stand them in good stead in this changing environment. We have conceptualized this first-year foundation course in relation to City Seminar, with that core component addressing broader issues at the level of institutions and communities, whereas Professional Studies looks at affiliated workplaces as the possible location for work in service of larger institutions and community needs. Professional Studies will provide frequent opportunities for interaction between the abstract and the concrete in the context of the workplace.

The chart, “Connecting City Seminar and Professional Studies” (Table 1), illustrates how skills and content are to be integrated across the City Seminar and Professional Studies components of NCC’s first-year curriculum. The integration of students’ growing awareness of the structure of academic learning with their assessment of their own interests, skills, weaknesses, and strengths is intended to inform the choice of a major and career path by the end of the year. This includes an understanding about a student’s evolving, long-term aspirations and the possibility of pursuing an advanced degree at the baccalaureate level or beyond.

Professional Studies aims to broaden students’ awareness of jobs, occupations, and careers; students should leave the seminar having been challenged to consider careers that may be entirely new to them. More important, they should develop both a set of questions with which they will approach any new work setting or career option and a capacity to closely observe and analyze specific workplaces, and to collect relevant information about
occupations and career paths and the implications of work in the for-profit, non-profit, and public sectors. In conjunction with City Seminar, students should finish the first year with an understanding of the ways diverse occupations fit together to address the fundamental needs of the city.

Professional Studies is also a place to practice becoming “workplace ready” in terms of specific skills and habits of self-presentation, communication, handling feedback, social interaction, and gathering, organizing, and making sense of information. Students will develop the capacity to access, enter, and thrive in a range of workplaces. They should be prepared to enter into and learn from internships in the second year of NCC.

Year-Long Learning Goals for Professional Studies

1. Expand students’ knowledge of work and workplaces.
2. Increase students’ appreciation for the potential of work to contribute to satisfaction/meaning in life.
3. Enhance students’ readiness to enter and learn from work settings.
4. Prepare students to make a reasoned decision about choice of a major and internship aligned with career interests.
Table 1. Connecting City Seminar and Professional Studies: Building Learning across the Curriculum

<table>
<thead>
<tr>
<th>Block</th>
<th>City Seminar Tasks</th>
<th>Credits</th>
<th>City Seminar Competencies</th>
<th>Professional Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Semester 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
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<tr>
<td></td>
<td>- Collection of work on historical, social, and political context of HIV crisis: Summaries of 3-5 documents and 1- to 2-page summary of key factors defining crisis in 2000</td>
<td>2</td>
<td>Distinguish fact from opinion</td>
<td>- Organize characteristics of best and worst jobs</td>
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<td></td>
<td>- Revised Discussion Journals (2 selections)</td>
<td></td>
<td>Gather and organize info</td>
<td>- 250-word essay comparing change in ideas about best and worst job</td>
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<tr>
<td></td>
<td>- Annotated texts (2 selections)</td>
<td></td>
<td>Summarize and paraphrase</td>
<td>- Electronic journal entries on &quot;the Five Skills&quot;</td>
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<tr>
<td></td>
<td>- Analysis/comparison of trend data for HIV</td>
<td></td>
<td>Identify qual. and quant. data</td>
<td>- Revised personal statement</td>
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<td></td>
<td></td>
<td></td>
<td>Compare and contrast</td>
<td>- Field observation guides and 2 field reports</td>
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<td></td>
<td></td>
<td>Interpret information and data</td>
<td>- Write-up re: experience/skills employed working on a team</td>
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<td>Final</td>
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<tr>
<td></td>
<td>Reflect on thinking historically</td>
<td>1</td>
<td>Evaluate and synthesize</td>
<td>- Electronic journal entries on &quot;the Five Skills&quot;</td>
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<td></td>
<td><strong>total credits</strong></td>
<td><strong>6</strong></td>
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<td></td>
<td>Semester 2</td>
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<td>3</td>
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<tr>
<td></td>
<td>- Collection of Materials: Working with Evidence</td>
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<td>- annotate documents in set provided</td>
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<td></td>
<td>- organize and represent different points of view</td>
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<td></td>
<td></td>
<td>- revised Discussion Journals (4)</td>
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<td></td>
<td></td>
<td>- represent and interpret changes in water quality over time and tie to stakeholder point of view</td>
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<td></td>
<td></td>
<td>- Group presentation representing a stakeholder point of view with supporting evidence</td>
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<td></td>
<td>- 1000-word paper – individual paper</td>
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<td></td>
<td>- Collection of Materials: Problem-solving</td>
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<td></td>
<td>- select sources and summarize main ideas</td>
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<td></td>
<td>- organize and represent different points of view</td>
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<td></td>
<td>- outline presentation</td>
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<td></td>
<td>- revised Discussion Journals (4)</td>
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<td>- written &amp; graphical argument using financial data</td>
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<td>- Individual presentation 5–10 minutes</td>
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<td></td>
<td>- Individual paper and outline 1000–1500 words</td>
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<tr>
<td>Final</td>
<td>Reflect on historic, analytic, comparative thinking</td>
<td>1</td>
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<td></td>
<td><strong>total credits</strong></td>
<td><strong>6</strong></td>
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</table>

**5 Skills**

1. Gathering, Organizing, and Analyzing Information
2. Presenting Oneself and Communicating
3. Seeking and Responding to Feedback
4. Contributing to and Building Community
5. Enhancing Habits of Responsibility

**Semester 1**

1 total credit

**Semester 2**

1 total credit
Structure of Professional Studies
Professional Studies will broaden knowledge and awareness of occupations and workplaces before helping students narrow toward a choice of major and a set of career aspirations. Collaboration is modeled throughout the semester. For example, once the group has established its list of the primary sources of satisfaction and dissatisfaction in work, several opportunities for collective revision based on concrete applications of the framework are built into classroom activities. The course meets once a week for three hours. Students from one learning community are scheduled together, and we recommend it to be the only course scheduled for that day, allowing for investigations in workplaces.7

Professional Studies Sample Modules: First Semester
The semester begins with a focus on students’ own experiences and perspectives. Students will start by identifying and exploring their own motivations, conceptions, and preconceptions (including stereotypes and myths), priorities, attitudes, and influences regarding the purpose and meaning of work. Several layers of learning will begin during the first module and will progress in depth and scope throughout the semester, with an emphasis on “the Five Skills” for investigating and pursuing work options. These include: 1) gathering, organizing, and analyzing information; 2) presenting oneself and communicating; 3) seeking and responding to feedback; 4) contributing to and building community; and 5) enhancing habits of responsibility.

Block 1: The “Best and Worst Jobs”

| Students will develop broader understanding of work and the workplace through: |
| 1. baseline information about their own knowledge, attitudes, and proclivities about work and careers; |
| 2. an introduction to a “language for investigating” work and career options; |
| 3. an overview of and launch toward practicing skills for success at work. |

Key Assignments

- **Low-stakes (weekly scaffolding assignments):** journal writing, thank you notes, activity response-writing.

- **High-stakes (graded):** individual papers (250 words) on “best and worst jobs,” group presentation on similarities and differences of “best and worst jobs,” personal statement, journal entries on “the Five Skills” (0.5 credit).

7 See Appendix F for a recommended schedule.
Learning Outcomes

1. Students will clarify their own priorities about work and careers.
2. Students will develop and apply conceptual frameworks and terminology for investigating work and career options.
3. Students will articulate an appreciation for various and specific skills for success at work.

The organizing assignment in Block 2 is a field observation project: students will move out in pairs from the classroom to observe workplaces associated with the college’s majors and report back to their peers. Each pair of students will make a brief oral presentation to the class in which they will compare and contrast the two work settings they observed, and each individual student will write a brief paper reporting on the field observations and what he or she learned from them. Through NCC partner agencies, it is hoped that students will be able to shadow workers or be guided through the various workplaces. Details of the field observation assignment and other elements of the Professional Studies course are included in Appendix F.

Block 2: What Happens at Work? – Experience and Context

Students will investigate workplaces and meet with practitioners to:

1. reinforce – through experience – their knowledge and perspective about what happens at work.
2. practice and reinforce investigation skills – with emphasis on field observation – and constructive work habits (“the Five Skills”).

Key Assignments

- **Low-stakes (weekly scaffolding assignments):** field observation guides (features that should be observed), field reports, journal entries.
- **High-stakes (graded):** group presentation of team findings from fieldwork, individual writing about experience of working on the team (250-350 words), journal entries on “the Five Skills” (0.5 credit).
Learning Outcomes

1. Students will represent a general knowledge of how work is organized in the larger society and the structures and networks that support an individual’s or group’s work (labor unions, trade associations, workplace affinity groups, etc.).
2. Students will represent several dimensions of work experience in general (what we investigate if we want to know what a job is like) and as applied to a particular job (what we learn about a particular job when we apply the investigation tools).
3. Students will continue to build and apply constructive work habits to their own work (“the Five Skills”).
4. Students will begin to demonstrate skills for success at work.

Professional Studies: Second Semester

Professional Studies will continue to build knowledge and reinforce skills addressed in the first semester, with a narrowing of focus and preparation for work choices. Rather than continuing to expand awareness of the range of work options, the focus of the second semester will be on investigating more thoroughly specific work and career options that may be of interest to students.

In Block 3, we envision an organizing assignment of résumé preparation as a means for students to evaluate and refine their sense of their skills and interests – as they might be applied to specific types of jobs and enhance skills of self-presentation and writing. Composing and writing the résumé will also require that students investigate and consider the characteristics and requirements of specific occupations. During this module, students will learn how and where to access data about such occupations (e.g., salary, benefits, entry-level requirements, job forecast, diversity, promotion opportunities, career path) to further clarify vocational priorities and preferences, and also to help understand how a résumé can be tailored to apply for specific types of jobs.

During Block 4, we envision one or two organizing assignments related to seeking summer jobs or internships and the decision of the college major. Activities could include: interviewing people at specific workplaces/occupations, preparing for interviews and application completion, guest speakers from HR departments or Department of Labor to offer job forecasts, etc.

Partnerships and Institutional Linkages

A major assumption for the Professional Studies seminar is that formal partnership agreements are established between NCC and New York City businesses, organizations, unions and individuals, and that partners provide students and faculty with easy access to a wide array of external research sources, field study sites, and contacts. A high priority in the first semester of Professional Studies is for students to gain experience and confidence
in investigating the work world of New York City through activities that put them in direct contact with individuals who are willing to share their personal stories and observations about work and with institutions that are ready to welcome them in order to observe, tour, talk, and learn. In the second semester, students select one occupation to research in greater depth – ideally at a partner site – where they find supportive, interested staff members.

Partnership linkages have the potential of supporting the learning goals of Professional Studies in some of the following ways:

- Partnerships can provide students with exposure to jobs, occupations, and careers that are new and unfamiliar to them and are possible to pursue through their NCC academic studies.

- Employees at partner institutions or independent professionals can volunteer their time to visit the classroom or meet with students at their workplaces, so students will learn first-hand what job responsibilities they have, how they prepared, and more personal thoughts about their “best” and “worst” job experiences and what inspires and motivates them every day.

- After practicing several critical workplace skills in the classroom, students will have a chance to see and learn about their use and value in real-life work situations.

- Students will benefit from learning how individuals reached their current positions, what memorable defining experiences influenced their decisions and how varied career paths can be.

Students and faculty will need access, simple procedures, and excellent coordination to make the kinds of connections with partners that are described above. To realize the greatest potential of the partnerships, NCC should consider ways to increase the partners’ investment in the success of the students and the new college; consider providing a range/menu of contribution and recognition options/levels (i.e., like a corporate sponsorship); and work with partner organizations to determine innovative ways to significantly increase the benefits of the partnership program to the students and the value of participation to their business/organizations. This approach may argue for initiating the partnership development with fewer, larger organizations that are strategically selected, for example, working with the Brooklyn Chamber of Commerce or the Cultural Institutions Group, which represents 34 major institutions in New York City.
As the NCC’s majors and programs evolve, the criteria for recruiting partners will change, and as the workforce needs and technologies change, the pool of partners will naturally change over time. This change will require continual recruitment of partners, but will also provide a built-in mechanism for updating course content and will help to ensure that the Professional Studies seminar and other courses continue to be relevant, compelling, and connected to real-life work issues and opportunities.

Professional Studies Design Principles

In designing the sample module and the semester and yearlong overviews, the Professional Studies Team has been guided by the following design principles. As to be expected there is some overlap with the City Seminar Design Principles.

- Elicit and build on students’ existing knowledge. We have tried to begin each class and each module with activities in which students can draw upon personal experience to make a contribution.

- Move from the familiar to the unfamiliar. We start with activities that involve unthreatening, familiar settings – family and neighborhood – and interactions with known and friendly actors. We gradually increase the degree of distance and unfamiliarity of those with whom students must interact.

- Move from the structured, guided, and collective to the independent. We have begun with activities in which the instructor is expected to provide direction and careful supervision to those in which students are on their own. Thus, before interviewing professionals in their workplaces, students will conduct an interview in the classroom, working as a team with extensive preparation supervised by the instructor. Similarly, before moving to individual interviews, students will go out in pairs to conduct field observations. And before conducting those field observations, they will have an opportunity to view and analyze a video of a work setting with their classmates and the guidance of their instructor. That is, they will have an opportunity to “practice” field observation in the classroom.

- Promote self-awareness, agency, and the desire to find a good fit between their interests and strengths and their long-term plans. Activities should be structured so that students not only learn what is available “out there” in the world of occupations and professions, but also what strengths, weaknesses, experiences, interests, abilities, values, and preferences they are bringing to any internship, job, or occupation. Students should be helped to understand how their personal characteristics interact with workplace and occupational characteristics.

- Reference and connect to the fields of work under investigation in City Seminar and make active use of the NCC’s network of partnerships. This would be most likely to
occur when Professional Studies has field learning assignments – when guests are invited to come to NCC to speak to students and when students go out into the field to observe and/or interview at workplaces. In these instances, we anticipate that overlap will occur naturally through the use of the same pool of NCC partnership organizations and because the list of available majors shapes both curricular streams.

- We view partner organizations as sources of opportunities for our students and also as resources for instruction.

- Build in opportunities to enhance workplace skills. For example, receiving, using and giving feedback are important skills in many work settings; therefore, the seminar will provide ample opportunity for students to develop these skills in the course of completing Professional Studies assignments and classroom activities.

- Demonstrate the relevance and provide opportunities for the development of skills for learning: gathering and assessing information, sorting and categorizing, inference, and both oral and written communication.

**Part 3: Integrated Model**

Table 2 below illustrates how the City Seminar and Professional Studies coursework might be integrated. The example here shows a student’s schedule over the course of a week – what the student will encounter across the various components during Block 2 of the first semester, on or around week 5. The content of City Seminar is Public Health; specifically, students are engaged in the deeper analysis of a large issue: HIV/AIDS.

Sample activities, readings, and student work appear in this report’s Appendices for the individual components.
Table 2. City Seminar and Professional Studies: Integrating the Curriculum in a Student Schedule

<table>
<thead>
<tr>
<th>Day</th>
<th>Period 1</th>
<th>Period 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon</td>
<td>CASE STUDY: PUBLIC HEALTH</td>
<td>ENGLISH</td>
</tr>
</tbody>
</table>
|     | Students will continue their examination of the HIV/AIDS epidemic in New York City, looking at the initial responses by the city and the impact on various stakeholders. In class discussion, they will explore the city’s early efforts to educate the public about HIV/AIDS-prevention, including the politics of decision-making. What was the outcome of the city's attempts to control risky sexual behavior in public gathering places? How did different groups respond? | Students will continue to annotate their readings and practice comprehension monitoring and repair strategies. They will formulate and answer questions in their discussion journals related to:  
- descriptions of context and explanations of how different aspects of context intersect and why this is significant.  
- interests, concerns, and relative power held by stakeholders engaged in “point of view” writing from the perspectives of different stakeholders; students will discuss and write paragraphs describing, comparing and contrasting the points of view of at least two stakeholders |
|     | Readings will include excerpts from Larry Kramer’s play The Normal Heart. The class will also examine articles from GMHC and images used by the advocacy organization, ACT-UP. | The instructor will model how to select sections of the text to paraphrase – reading with questions in mind; re-reading to look for repetitions and relationships among details; talking the text. Students will practice these steps in pairs. The instructor will model how to use paraphrasing to write summaries of sections of the texts. |
| Tues | QUANTITATIVE REASONING | GROUP WORKSPACE |
|     | Work in groups to analyze historical HIV rates in NYC. Using the text and other documents, students will construct a written argument around the increase and decline of HIV infections over time to include qualitative reasoning and quantitative data. The report should include the graph constructed in Excel. | Work with partner on graphing using Excel |
|     | Use the historical HIV rates broken down by a category like age group, socio-economic group, ethnic group, geographic location, etc. Each student will be given an individual data set of categories and common cumulative HIV data. Working in groups, students will create graphs and analyze their data against the cumulative data and against the other indices for trends | Work in small group reading aloud and role playing The Normal Heart and discussing the main ideas. |
### Wed

**PROFESSIONAL STUDIES**

*Pairs of students will visit organizations to observe workplace features.*

One possibility in the public health field is the Callen-Lorde Community Health Center, located in Chelsea. Callen-Lorde describes itself as a "Medical facility for the lesbian, gay, bisexual, and transgender community, as well as people living with HIV/AIDS.” The center provides primary care, mental health and social services, outreach to teens, HIV/AIDS services, testing, senior health care, health education training and outreach, and support groups.

Students will practice and reinforce their investigation skills – with emphasis on field observation – and constructive work habits. They will continue to work on their field observation guides (features that should be observed), field reports, journal entries.

### Thurs

**CASE STUDY: PUBLIC HEALTH**

The class will discuss the ongoing history of the AIDS epidemic in NYC by exploring the development of medications that slow the onset of AIDS and the changing demographics of the epidemic in the 2000s, including the documented resurgence of risky sexual behavior in certain populations, despite the city’s constant advocacy efforts to educate the public.


### Fri

**QUANTITATIVE REASONING**

Complete an individual report using a table of values, graphs, and calculations with regard to HIV infection rates over time and by age group.


**GROUP WORKSPACE**

Construct its resulting graph and complete the following:

- Compare and contrast the growth of infection rates within the category.
- Compute the percentage growth of the disease by category and graph the resulting proportional growth chart by year.

Use related documents to create a report on the HIV trends by category. The report should include:

- An argument for the findings using quantitative and qualitative information.
- A comparison of the proportional growth to the actual growth.
- Appropriate labels for both graphs.

Bi-weekly meeting with Student Support Expert

Independent work drafting outline for HIV paper and with a partner provide feedback on each other’s drafts.
STAFFING AND FURTHER WORK

The Committee recommends that responsibility for teaching the first-year foundational courses be a shared faculty responsibility, since these courses are the core of the NCC educational experience. To enable faculty/staff collaboration and integration of the curriculum, the Committee recommends that faculty teaching first-year courses be organized into teams, with each team teaching one cohort of 75 students placed in three learning communities of 25 students each. A team includes: a faculty member from one of the majors, a writing or English instructor, a faculty member who teaches Quantitative Reasoning, a faculty or staff person for Professional Studies, and a Tech Fellow who brings expertise in instructional technologies. The Macaulay Honors College has incorporated Tech Fellows into its first-year seminars and they have been effective in supporting faculty and students in using new technologies for teaching and learning. Additionally, the team should include a member of the student support staff as recommended by the Enrollment and Persistence Management Committee. It will be essential that the program schedule include a regular common time for all team members to meet, plan, and respond to student work.

Initially, the Committee imagined that the same discipline-based faculty member would teach all the case studies for one year. However, given the range of content covered in the City Seminar case studies, the Committee recommends that discipline-based faculty rotate by semester, teaching two case studies per year – either modules 1 and 2 or modules 3 and 4. Having a different faculty member teach the case studies in each semester leads to a second recommendation, that teaching teams reconfigure or rotate cohorts so that students do not have the same team of teachers in the second semester as in the first semester. The reasons are three-fold: 1) changing one member of a team would necessarily change the group dynamics; if the change is perceived negatively either by the students or teachers, it could undermine the teaching and learning that occurs; 2) it is good for students to be exposed to different teachers and to know that their learning is not dependent on having particular teachers; and 3) in a college with a culture of collaboration, shifting teams creates new or multiple opportunities for different people to work together and learn from each other. While there was some discussion of the benefits of consistent teams for the first year, faculty and staff working on first-year teams will be part of a larger team, so knowledge about students and the successes and challenges of implementing the curriculum will be shared.

The interdisciplinary breadth of City Seminar requires faculty with cross-disciplinary interests. At the same time, it requires faculty who have an openness to
different ways of teaching and a commitment to teaching students, many of whom will be underprepared for college. The discipline-based faculty will be connected to the different majors. It was recommended that instructors for Quantitative Reasoning could be from Mathematics, Math Education, or from the social sciences or sciences. It would be important that the Quantitative Reasoning faculty have experience teaching through problem solving and with developmental learners. Similarly, English instructors should have experience working with developmental learners and English Language Learners. Professional Studies instructors could be drawn from a variety of fields, such as sociology, organizational psychology, social work, or career development.

The design work accomplished by the City Seminar and Professional Studies Committee establishes the kinds of learning goals and outcomes and instructional approaches and integration envisioned for NCC’s foundational courses. City Seminar and Professional Studies are grounded in investigations of New York City, the place most of our students likely will call home and where they will be future workers and citizens contributing to the social, political, and economic infrastructure of the City. Within the report are suggestions of the kinds of resources that can be tapped with this kind of place-based curriculum, but the well of resources is much richer than illustrated. Similarly, the format for assignments described in the City Seminar and Professional Studies modules indicate papers, but other possibilities that involve substantive writing and are aligned with the kinds of work produced in the workplace and in civic life can and should be imagined.

The role of new technologies for engaging today’s students also should be given more consideration in the development of the curriculum for City Seminar and Professional Studies. While the face-to-face classroom is the primary mode of instruction in the first-year, networked technologies such as e-portfolio, social networking sites, and blogs should be utilized as important learning tools that promote learning as a process, the methods of practice and feedback, and safe and familiar environments for today’s student. Not only does technology engage this generation of college students, but today’s information economy underscores the importance of strategically bridging the digital divide that is sometimes evident in higher education through database research, statistical software, scientific modeling tools, imaging, and instructional gaming systems such as Stock Market simulations.

The report provides direction for the curriculum to be developed by foundational faculty. It maps the vision for City Seminar and Professional Studies and elucidates the design principles that will frame unique, rigorous, and scaffolded learning
experiences that are relevant to the lives of New York City’s future workers and leaders.
CITY SEMINAR & PROFESSIONAL STUDIES WORKING COMMITTEE REPORT

COMMITTEE MEMBERS

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Gregory Donaldson, Assistant Professor of Communication & Theater Arts, John Jay College of Criminal Justice

Carol Enseki, Former President, Brooklyn Children’s Museum

Eric Hofmann, University Director for CUNY Collaborative Programs

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NCC Staff Liaison
Dolores Root, Senior Director for the Educational Program
Tamsyn Phifer, Research Associate
At the center of the New Community College (NCC) educational model is the first-year curriculum. The following are issues the Planning Team has identified that need to be addressed in the next steps in the development of the NCC:

- The case studies or case analyses presented in the report are meant to exemplify the model, not to serve as curriculum per se. NCC faculty will design the actual case studies.

- There is more work to be done in refining the allocation of credit in the first-year curriculum by connecting contact hours, demonstration of competencies, and content knowledge to the number of potential credits. In any event, students must have the opportunity to qualify for financial aid by taking a full-time load of credit/equated credit coursework.

- First-year work will satisfy some portion of the NCC general education curriculum, and thus it will be necessary to map onto that curriculum the NYSED guidelines for the distribution of liberal arts and science credit requirements by type of degree.

- The cohort model must accommodate students who learn and make progress at different rates.

- Planners must address how pre-college credit, earned through College Now or the Early College Initiative, can fit into the NCC model.

- Both Group Workspace and Professional Studies need further development.
MATH TOPICS
WORKING COMMITTEE REPORT
This Committee will identify the foundational math content and skills in which all students will need to demonstrate proficiency in the first year. The committee will also define the math pathways - content and skills - for STEM and non-STEM majors to be offered by the New Community College. The Committee will address the ways students will demonstrate proficiency in the Math Topics course(s) and will culminate in crafting design principles – content, pedagogy, and competencies – for the foundational modules and for the different math pathways for first-year students.

The Committee will include six to eight participants, a staff liaison, and advisors who will consult with the Committee and respond to materials produced.

Key Questions

• What are the foundational math concepts and skills all students need to know and be able to do?

• What pedagogy/approach might be identified that would facilitate all students having mastery of foundational content and skills in mathematics?

• Once students demonstrate proficiency in the foundational math content and skills, what is the math content and skills STEM and non-STEM majors need to demonstrate?

• What are the different pathways – content, courses, and pedagogy – for STEM and non-STEM majors?

• How should college credits be awarded for the different pathways?

• How can the Math Topics course(s) connect with the quantitative reasoning component of City Seminar?

• What is the best approach or tools for assessing incoming students' proficiency in math and for students to demonstrate proficiency along the different pathways?

• What role can instructional technology have in supporting student learning?
MATH TOPICS WORKING COMMITTEE REPORT

INTRODUCTION

This report brings together the work of the New Community College (NCC) Math Topics Committee, which addressed the content and pedagogy for the first-year Math Topics course. In addition, the Committee considered the relationship between the Math Topics course and the Quantitative Reasoning component of City Seminar, recommending an integrated approach that actively engages students in solving real-world and non-routine problems. This integration will enable students to see mathematics as a tool for deepening their understanding of problems, as well as for analyzing, interpreting, and communicating quantitative evidence. Furthermore, the Committee underscored the importance of students connecting their mathematical learning in Math Topics and Quantitative Reasoning to their daily lives and career aspirations. The Committee recommends that:

- The Math Topics course be a Statistics course engaging students in real-world problems related to urban life.

- The Quantitative Reasoning component of City Seminar focus on analyzing and interpreting quantitative evidence in the context of the specific case students are investigating.

This report provides an overarching framework for the design of the first-year math courses. For both Math Topics and Quantitative Reasoning, the report offers complementary models for teaching the courses and creating a cohesive, first-year curriculum focused on real-world problem solving and deepening understanding of issues in New York City.

Framework for First-Year Math Courses

The AMATYC Standards\(^8\) provide a set of teaching and learning goals for students. Committee members agree that the learning goals can best be attained through both the Math Topics and Quantitative Reasoning experiences.

1. The Math Topics course should cover the material that constitutes a first-year Statistics course. It should also include instruction in the arithmetic and

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\(^8\) The AMATYC Standards were developed for two-year colleges, which the Committee has drawn from to fit their recommendations for the Math Topics and Quantitative Reasoning courses. For more information, refer Appendix A.
algebraic skills students need to succeed in the course as well as an introduction to the use of graphing calculators and Excel. This course will complement the Quantitative Reasoning component of City Seminar by developing the algebraic, problem solving, reasoning, and modeling skills needed for statistics and data analysis.

2. The Quantitative Reasoning component of City Seminar should be a problem-solving course in which students learn to use mathematical tools—both statistical and algebraic—to investigate and solve problems, to question, manipulate, and represent data, and to create and communicate arguments supported by quantitative evidence.

The Committee believes that the combination of Quantitative Reasoning and Math Topics will lead students to develop higher order thinking skills, supported by an ability to use appropriate mathematical tools, including technology, that are necessary for their further education and professional development. The Committee urges collaboration on the part of faculty in developing and implementing the curricula for the two courses to foster integration of concepts and skills, including “just in time learning” of arithmetic and elementary algebra.

MATH TOPICS COURSE

Rationale for the Statistics Course
The Committee recommends that the Math Topics course be a Statistics course for which students will earn three credits upon successful completion. The Committee reviewed the mathematics requirements at CUNY colleges (two- and four-year) for the 12 NCC majors. Nine of the twelve majors list Statistics as a required math course. Increasingly in the mathematics community, Statistics is identified as the course that best prepares students for their civic, professional, and personal lives, since it is an important tool for analyzing and evaluating data and for informing decision-making (Carnegie Foundation for the Advancement of Teaching, 2009). The Statistics course will meet the requirements of the CUNY Associate Degree.

Design Principles for the Statistics Course
The Statistics course should be consistent with the AMATYC Standards and incorporate problem solving. To the extent possible, the problems should be based on real-world data, as well as be relevant and motivating to students. As needed, instruction will include developing students’ number sense, arithmetic and algebraic concepts and skills, ability to graph points and lines, and the use and
interpretation of functions. By solving real-world problems, students will learn that data analyses, statistics, and mathematics are relevant to their own lives and professional interests. One resource and possible model may be a course titled *Introductory Statistics with Community-Based Projects*, which was developed and implemented at Metropolitan State University in Minnesota, with partial support from an NSF grant to the National Center for Science and Civic Engagement.9

**Content**

A list of content topics for the Statistics course might resemble a typical liberal arts-oriented college Statistics course, but the extent to which the following content principles are implemented will help to distinguish the NCC Math Topics course from others around the country.

- As often as possible, data sets and problems will be drawn from physical, social, and other contexts in New York City. Where possible, problems will also be related to topics presented in City Seminar.

- Arithmetic, graphical, and algebraic concepts and skills will be woven into instruction on an as-needed basis, and adequate practice will be included so students become confident and fluent in their computational abilities.

- Students will be given tasks to represent data or relationships using multiple representations. As part of this work, they will not only be asked to execute a specific statistical calculation, but will also need to decide which representation, test, or calculation, if any, makes the most sense for a given set of data.

- Students will be able to perform several statistical calculations by hand to ensure they have a deep understanding of their meaning and origins, as well as by using appropriate technologies (usually graphing calculators or Excel) when it makes sense to do so.

- A variety of real-world problems will help students appreciate the value of statistics and mathematics as tools for investigating and understanding complex civic, professional, and personal issues, and for making informed decisions.

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9 See Appendix C.
Pedagogy

- Students’ ability to communicate their mathematical understanding should be fostered in a variety of forms (orally, in writing, and through presentations) and in a variety of settings (individually, in small groups, and in class-wide discussions/activities) that offer different opportunities for student-to-student and student-to-teacher interaction.

- Wherever possible, activities and problems should be constructed so that students are actively engaged in formulating conjectures, observing patterns, and making connections between what they already know and new mathematical concepts. When integrated throughout the course, these tasks will help students develop the habit of thinking and learning like scientists.

- Problems often permit multiple solution methods (and perhaps multiple solutions). Instructors should value and highlight the different approaches students may use to solve problems. The instructor has the important task of helping students to make connections between these methods as well as articulating the strengths and challenges inherent in them.

- Use of technology should not be a substitute for understanding how statistical measures are calculated. Students should know when it is appropriate to employ technology in investigating real-world problems. Technology can also be used as a pedagogical tool when its calculations can be a source for students’ inductive reasoning in examining patterns in functions, data, etc.

- Students should be given significant practice estimating and judging the reasonableness of data and statistics they themselves calculate or that are presented to them. Students should also be given tasks that focus on instances in which data are used to make persuasive or even misleading claims or conclusions.

- Student activities will be drawn from more than a single textbook. Lessons embodying these and other pedagogical principles will be developed by a team of NCC instructors and supplemented with texts, videos, software, and other tools that students may use in conjunction or as extensions to the core lesson material.

Pathways for Students

The Math Topics course is six hours/week, which offers flexibility for meeting students’ different learning needs and developing their confidence in using
mathematics for problem solving. During the first semester, all students will take the Statistics course. The course will cover approximately half of a typical one-semester Statistics course and will build students’ skills in arithmetic and algebra, as needed, and introduce students to the use of graphing calculators and Excel.

The Committee decided it would be best to have all students take the same first-semester Statistics course and to differentiate students into different pathways at the end of the first semester. This decision was made for a number of reasons – the Committee places a premium on students working in groups (see Treisman, 1992 and Oakley et al, 2004) and recognizes the benefits of keeping students in their learning communities for Math Topics in the first semester. Additionally, while some students may know how to do mathematical procedures, they may not be able to explain the concept or how they arrived at a solution. In this course, students will develop this capacity. The Committee recommends using evidence from students’ work over the first semester to better understand their competencies before differentiating students in different pathways. Further, this methodology gives students more time to get to know their interests and capabilities with respect to STEM and non-STEM majors.

For the second semester, students will be placed into one of three courses based on faculty assessment of their performance during the first semester. At this point, some differentiation could be made by student interest and between students who need more time and those who are ready to move more quickly and cover more content.

- Students who demonstrate sufficient competence, but who need more time to complete the Statistics course necessary to round out a full semester of work, will complete their study of Statistics in the second semester. It is expected that the majority of students will follow this path. In their second year, those students who need Precalculus will be able to take a 6-hour/4-credit Precalculus course that will integrate algebra skills on an as-needed basis.

- Students who demonstrate competency in the first semester, are ready to cover content more quickly, and are interested in a STEM major will take a course in which they complete the Statistics necessary to round out a full-semester course and also learn algebraic concepts and skills to prepare them for Precalculus. We anticipate that the work in Statistics can be completed in one-third of the second semester. Additional time can be spent in problem solving that teaches content for Intermediate/College Algebra and focuses on problems relevant to the STEM majors. They might include problems of optimization (e.g., maximizing profit, minimizing cost,
finding the shortest route), fairness questions (e.g., election methods, fair division), or problems requiring the study of “similar and different” (e.g., designing new drugs by looking for medically active “nearby” molecules, determining the function of genes whose role is not understood) (Bennett and Briggs, 2007, COMAP, 2009). The time allocation can be over the entire semester (2 hours/week for 15 weeks for Statistics and 4 hours/week for Algebra). Students in this course will be awarded an additional credit for their work in Algebra. In their second year, these students will have the option of going into a 4-hour/4-credit Precalculus course. Typically, Intermediate Algebra courses that prepare students for Precalculus are 40 hours.

- There will be some students who do not meet with success during the first semester of Statistics. Assessment of their competencies will determine the best course of action for fostering success. There will be options for these students to complete the Statistics course either over the summer or in their second year of college.

**Quantitative Reasoning**

The Committee addressed the compatibility and integration of the Quantitative Reasoning component of City Seminar with the Statistics course, recognizing that the City Seminar and Professional Studies Committee will make recommendations about content. However, as described above, the Committee recommends that the first-year math experience share a common pedagogical approach. The focus of the Quantitative Reasoning component of City Seminar will be investigating data using mathematical and statistical tools. The Committee envisions that students in the Statistics course will learn some of the tools needed to investigate data, and in turn, students in Quantitative Reasoning will gain practice and experience applying these tools to problems that are embedded in or grow out of topics or problems in City Seminar.

Coordination between faculty teaching Statistics and Quantitative Reasoning will allow for integration in sequencing the content in both courses towards enriching students’ understanding of concepts and their application in different contexts. While it is expected that the Case Studies in the City Seminar modules will provide the problems for the Quantitative Reasoning course, additional sources for problems or investigations may be articles in newspapers and professional journals that relate to issues of living in an urban environment. Data sets can be compiled
from appropriate sources found on the Web. A possible model and resource are described in Appendix C of this report.

**STAFFING**

The Committee recommends that the instructors teaching Quantitative Reasoning and Math Topics be part of the first-year cohort teams so as to foster coordination and integration in planning and assessing student work. Moreover, the Committee recommends that, within each cohort, the Quantitative Reasoning portion of City Seminar be taught by faculty who also teach Math Topics. It further recommends that within a cohort of 25 students, the instructor who teaches the Math Topics course should not be the same as the instructor for Quantitative Reasoning. This model will provide students with different perspectives on and approaches to problem solving.
MATH TOPICS WORKING COMMITTEE REPORT

COMMITTEE MEMBERS

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NCC Liaison
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Brian Sulkow, Research Associate
The Math Topics Committee proposes a statistics course as the foundational math course at the New Community College (NCC). These issues need to be addressed in next steps:

- A strategy needs to be developed for students who do not demonstrate sufficient proficiency at the end of the first semester to move on with the cohort. What are the options other than simply repeating the first semester course?

- The report proposes students earn 3 credits for the Statistics course upon successful completion at the end of the second semester. Will such a course be appropriate for students who are moving at a faster pace? Should NCC faculty consider defining outcomes tied to the 7-week blocks (on schedule with the City Seminar and Professional Studies) so that students have an opportunity to demonstrate proficiency for more advanced competencies?

- What are the advantages and disadvantages of not differentiating students by “ability” until the end of the first semester? Should students be differentiated on entry and tracks established from the start? If so, what assessment instrument should be used for placement purposes?

- How can technology and the use of e-portfolios enhance student learning?
ASSESSMENT AND PORTFOLIOS
WORKING COMMITTEE REPORT
The Concept Paper proposes that the New Community College adopt a portfolio system for assessing student learning, growth, and mastery of core competencies. Furthermore, the Concept Paper proposes replacing the CUNY Assessment Tests with diagnostic instruments designed by the college’s faculty. The Assessment and Portfolios Committee will examine recent University Task Force efforts that review existing CUNY Assessment Tests, help determine the role of assessment in the new college, and develop a framework for portfolio assessment that engages students and faculty in ongoing assessment of student learning. In developing the framework, the Committee will examine models for portfolio assessment, methods and practices, issues of consistency and reliability as well as assignment of credits and transcripts. They will also consider other tools for assessment that would support student learning and progress towards degree completion.

The Working Committee will include five to seven members and will work with staff from the New Community College Planning Team. In addition, the Committee or its members may work with materials produced by the First-Year Experience Committee and interface with the Institutional Effectiveness and the Summer Bridge Program committees.

Key Questions

- What are different models for portfolio assessment?
- What are the benefits and limitations of portfolio assessment?
- How would a portfolio system incorporate different methods of assessment?
- What other forms of assessment should be considered?
- What kinds of formative and summative assessment should occur during the program – from the Summer Bridge Program through graduation – to promote student success?
- What are the implications of portfolios for transcripts and articulation to four-year institutions and how should the New Community College address this?
- Similarly, how should portfolios be used to assign credits during the first-
year experience and beyond?

- What models for faculty development should the institution use to insure quality in implementation? What are the implications for faculty workload?

- How might portfolio assessment be used to inform teaching practice and program design?
INTRODUCTION: ASSUMPTIONS AND VALUES

As stated in the Concept Paper, the New Community College (NCC) is being developed to better meet the needs of students who may aspire to earn an associate’s degree but are insufficiently prepared for postsecondary education. The integrated first-year core curriculum, focused majors, and structured learning supports should improve student engagement, persistence, and degree attainment. Moreover, the NCC has the potential for serving as a laboratory for new ideas—a place for the University to try out innovations and practices that improve teaching and learning.

The NCC must define and promulgate curricular goals at the institutional, program, and course levels, and assessments of student performance must be aligned with those goals. The assessment system should be set up to monitor progress toward these goals and to meet best practice standards of assessment. This is particularly important with regard to the NCC’s adoption of student portfolios as the primary tool of assessment of student learning.

In keeping with having students take ownership of their learning, it is necessary that students not only understand the curricular goals but also what they need to do to meet them. Instruction will be designed and implemented in such a way that students will have a reasonable expectation of meeting those goals. Instructors play an important role in helping students see where they are with respect to the goals and the best way to progress toward them.

All members of the NCC community should have a clear understanding of the goals, learning outcomes, and expectations. High expectations and rigor in the curriculum should be coupled with strong supports so that all stakeholders are capable of fulfilling their specific roles. The system should operate with transparency and clarity at all possible levels.

OVERARCHING DESIGN PRINCIPLES FOR ASSESSMENT PRACTICE

The Committee recommends that the NCC use performance-based criteria whenever possible for its assessment system. Doing so enables students to know explicitly what is expected of them and the basis on which their work will be evaluated. The
more explicit the expectations and the basis for ratings, the more likely that student ownership of learning will take hold. Performance-based assessments will be embodied in grading rubrics that indicate levels of performance, which, in turn, are linked to instructional strategies for moving students from one level to the next and serve as the basis for credit allocations.

When groups of instructors develop and adopt the same rubric for evaluating their students’ performance, they can monitor student success, exchange instructional strategies, and establish a basis for improving overall instructional practice. This assessment system involves collaboration for ongoing faculty-driven assessment of both curricula and the assessment system. Of particular interest is putting in place instructional strategies and assessments that are focused on students with profiles associated with non-completion or withdrawal from traditional college programs.

Other members of the NCC community, such as counselors and advisors, should understand the assessment process and inform its ongoing development and practice. The NCC might also consider engaging external community stakeholders and program partners and employers to validate the assessment process.

Like the Concept Paper’s approach to teaching and learning, the assessment system should have a clear progression in which students begin in a highly structured system led by faculty and grow to take primary ownership of the e-portfolio and the work they present for review. Similarly, the assessment system should reinforce the habit of self-assessment so that students might gain a clearer understanding of their strengths as well as opportunities for growth. Portfolios are particularly adept at supporting students’ ability to review and reflect on their academic growth over time, which makes them well suited for the mission of the NCC.

Although the Concept Paper proposes not issuing grades, the Assessment and Portfolios Committee advises the use of a grading system that directly reflects the performance assessments and the rubrics used. The linking of grades to agreed-upon educational goals and observable levels of performance leads to a greater transparency in the grading process and helps to prevent grade inflation. The Assessment and Portfolios Committee believes that a new college working with a new model for education and a rubric-based grading system can not only improve the learning environment but demonstrate its value and reputation as an educational institution.

Following these principles, the Committee will work toward recommending an assessment system that:
• closely reflects the curricular goals of the college;
• is performance-based;
• can be understood and adopted by students as congruent with their own self-assessments;
• has clearly articulated rubrics that indicate levels of performance that are based on instructional strategies;
• leads to better and informed instructional practice; and
• can be used as a tool to effectively inform senior colleges and prospective employers of student achievements.

The use of portfolios to serve as the core of the assessment system at the NCC is recommended because of its inherent ability to satisfy the first three requirements. Like other forms of performance-based assessment, portfolios can be more effective at capturing higher-order learning outcomes such as critical thinking and dispositions not easily demonstrated through traditional assignments. However, like any assessment to be used for high-stakes decision-making, they must meet standards of validity and reliability. This challenge will become most acute as the NCC community expands to capacity. J.R. Wilkerson and W. S. Lang list guidelines for portfolio assessment that informed the thinking of the Committee:

10 J.R. Wilkerson and W. S. Lang, "Portfolios, the Pied Piper of Teacher Certification Assessments: Legal and Psychometric Issues," which appeared in the journal Education Policy Analysis in December 2003. Although, the portfolios in this article were used for teacher certification, the principles of portfolio design for high stakes purposes are the same. The list above has been adapted from their work.
e) There must be a realistic cut-score for determining if the performance is acceptable. This cut-score must differentiate between those who are competent to proceed to the next level and those who are not.

f) Alternatives must be provided to students who cannot successfully complete requirements, or the college must be able to demonstrate why no alternatives exist.

g) The results for the portfolio evaluation and the extent to which protected populations are equally or disproportionately successful must be monitored.

h) The process must be implemented and monitored to ensure reliable scoring and to provide for adequate student support.

ASSessment in the Summer Bridge Program

Goals

As outlined in the Concept Paper, there are four goals to be achieved during the pre-college program:

• to begin to develop students’ reading, writing, and research skills necessary for success in the first-year City Seminar;

• to familiarize students with the NCC math program and begin its intensive work;

• to acquaint students with the resources available at the college and help them develop a sense of comfort and familiarity through a student success course; and

• to complete diagnostic assessments in cognitive (reading, writing, mathematics, and quantitative problem-solving) as well as non-cognitive (study habits, ownership of learning, civic responsibility) areas.

Given the scale and importance of these goals, the committee recommends that the Summer Bridge Program (SBP) be given adequate time for the development and assessment of student performance in reading, writing, mathematics, and quantitative problem solving. A longer program (than the three weeks suggested in the Concept Paper) would allow the NCC faculty, staff, and entering students greater time to work toward programmatic goals. Because the Committee views assessment as directly linked to curriculum design, instruction, and the teaching and learning process, it recommends that assessments in the SBP identify these additional needs of incoming students:
• habits of learning, including both the skills and attitudes required for success;
• reading and writing skills;
• mathematics and quantitative reasoning skills;
• special needs such as ESL, learning disabilities, etc.;
• learning styles

Process
Prior to the start of the first SBP in 2012, faculty, student advisors, and others with roles in defining the first-year should work together to clarify the baseline information about students that would best allow them to move students forward. As the Concept Paper states (p. 13), the SBP will engage students in the types of reading, writing, and quantitative assignments that resemble those they will undertake in their first-year courses.

The Committee recommends that students have the opportunity to create a mini portfolio during the SBP, including portfolio assignments that would form the basis for assessment of their proficiencies in literacy, mathematics, and quantitative reasoning. This would provide new students not only a chance to learn the mechanics of setting up a portfolio but to become familiar with the assessment process itself. The Committee further recommends that rubric-based SBP assessments be used as the basis for informing students of their skill levels in relation to performance levels that will be expected to earn grades and credits.

The mini portfolio serves a second purpose that the Committee believes should be an outcome of the SBP experience – that of inculcating students into the culture of assessment that will be unique to NCC, specifically the e-portfolio, performance-based assessments, and rubrics as scoring guides. The Committee recommends that students participate in activities during the SBP that will serve as an orientation to the assessment culture at NCC. Students should have opportunities to work with rubrics for low-stakes or formative assessment. The Committee also recommends that students have the opportunity to create rubrics of their own, individually and in small groups, to further understand the function of rubrics within the assessment system.

Given the formative nature of the SBP portfolio, it is important that students receive rich and detailed information regarding their current performance levels and areas
for future growth. Doing so will help students to gain a better understanding of college-level expectations as well as create a clear roadmap for advancement. The same detailed information will also guide faculty in the first-year core program, particularly the individualized work planned for the Group Workspace. Most e-portfolio systems have space for comments, so these can easily be captured as part of the student record. Some of this work can be facilitated by using a rubric that expands the ranges ascribed for emerging competencies.

Since it remains unclear at this point what the specific learning outcomes will for the SBP, the Committee recommends that once these are identified, assessments should be designed to gather institutional data with regard to these outcomes for the continuous improvement of the SBP for future cohorts.

One of the purposes of the formative assessments in the SBP should be to appropriately counsel students about their strengths and areas for improvement. For students who do not regularly attend the required SBP or who having attended decide the college model is not for them, the NCC should provide students with placements in alternative educational programs or facilitate their transfer to another community college.

ASSESSMENT IN THE FIRST YEAR

Goals
- A process that enables NCC to assess student work in a way that reveals achievement of learning outcomes and provides important feedback to students and faculty about student learning
- A process that moves students toward greater responsibility for assessing their own learning as they progress through their chosen program of study

Process
A successful assessment system entails a close alignment between curriculum development and assessment planning, as described below. Many of the steps will be refined and carried out by the faculty team charged with developing the curriculum, but they are listed here as they are integral to developing an effective assessment program.

1. Committees at various levels of the institution come together to define learning outcomes for the first year: What should students know and be able
to do at the end of the first semester and at the end of the first year? These are defined at three levels:

- **Institutional level**: What are the learning outcomes that all students should come away with?
- **Program level**: What learning outcomes should students come away with after the first year?\(^{11}\)
- **Course level**: What are the learning outcomes in any given course in each semester?

Faculty collaborate to define how course-level outcomes map to broader outcomes (program or institutional level, as appropriate). They also determine a logical progression of how outcomes are reflected in the curriculum and assessment criteria. This process is sometimes referred to as “backwards design,” in that both curriculum and assessment are developmental and progressive and lead up to a graduation portfolio/capstone project (defined later in this report). One projected outcome, for example, is that students move towards taking greater responsibility for choosing and presenting the work products in their e-portfolios over their tenure at NCC.

2. Faculty collaborate to define how curriculum will move students toward achievement of the learning outcomes in the first and second semesters.

3. Faculty within specific courses collaborate to define portfolio criteria and assessment rubrics.

- Faculty determine the portfolio criteria: the work products to be included in the portfolio and the conditions under which they are produced.
- Faculty develop standard assessment rubrics: scoring guides for individual work products and the overall portfolio.

\(^{11}\) We see the first-year experience as the “program.” However, articulating outcomes for the first-year experience overall will help facilitate curricular integration among courses and allow us to envision and assess outcomes that are broader than any one course. “College success” behaviors or habits of learning will be part of the first-year program outcomes as well.
**Portfolio Assessment in the First Semester**

Students will enter first-semester courses having completed a mini-portfolio in the SBP. This portfolio should be available to instructors prior to the start of the semester, so that they have a sense of the range of student abilities and learning styles. Assessment in the SBP will mirror what is going to happen in the first year as much as possible in order to initiate students into this new culture of performance-based assessment.

Committees of faculty from each course will be responsible for developing assessment criteria that reflect the learning outcomes for the course and that show the alignment between specific course outcomes, first-year program outcomes, and NCC institutional outcomes. These assessment criteria will then enable faculty to determine which work products from the different course modules would go in the end-of-semester student e-portfolio.

Though e-portfolios will be assessed at the end of the first semester, the e-portfolio criteria will reflect the learning outcomes from each course and the progression of learning outcomes within each “block.”

Below are some examples of how e-portfolio requirements might be structured:
Student work will be assessed via standardized rubrics aligned with learning outcomes for each course. Grades and credit allocations will be part of the rubric and will be determined by the faculty team charged with assessing the e-portfolio. Below are two examples of rubrics: one is a 3-level rubric, the other a 5-level rubric. Levels, level descriptions, and scoring criteria would be determined by a faculty committee.
Student Self-Assessment
Every e-portfolio will include a student self-assessment component that engages the student in assessing how the work products included in their portfolio meet the learning outcomes for the range of courses they have taken that semester. Though students will be encouraged, over time, to take ownership of the self-assessment component, in the first year there will be a standardized self-assessment rubric to guide them. The portfolio criteria will delineate the self-assessment component, and its evaluation will be part of the assessment of the overall portfolio.

Since one of the goals of the assessment system is to move students toward greater responsibility for assessing their learning, the first semester portfolio will have a “student’s choice” category in which students select one work product that they believe meets the assessment criteria for the e-portfolio. The self-assessment component of the e-portfolio will include a rationale for the work product they choose to present in this category.

Portfolio Grading
Ideally, at the end of each semester, two faculty would score each student e-portfolio individually, without being aware of the other rater’s scores. Where scores fell within a defined range, a composite (average) of the scores would be shared with the student, along with comments from both faculty members. Where scores differed by a defined amount (e.g., more than one rubric performance level for x number of rubric criteria), faculty members would meet to discuss differences with
the goal of moving to consensus. If no consensus could be reached, a third faculty member would be called in to score the e-portfolio as well. If there was agreement between at least two faculty members, this score will be returned to the student. In cases, where three faculty members could not reach an agreement, a designated assessment coordinator would determine the final scores.

Faculty teaching courses will be expected to spend time on the portfolio assignments throughout the duration of the course. The philosophy behind the e-portfolio is one of mastery (versus weeding), so the faculty are encouraged and expected to provide all support necessary for students to do well in the final assessment of their portfolio. Faculty will be expected to review portfolio submissions and provide feedback on early drafts so that the student will likely submit their best work.

**Work Products for the E-portfolio**
Not all course work will be added to the e-portfolio. Faculty will be encouraged to use assignments and assessments that they feel will help students achieve the learning outcomes for the course. An important purpose of these ongoing assignments and assessments is to provide formative feedback to the student, with the goal of identifying areas of improvement early on so that the student has the opportunity to improve his or her work and to submit the best possible e-portfolio. For example, the instructor may decide to give quizzes, or smaller projects that scaffold the eventual e-portfolio submissions. Feedback on these projects/essays or scores on the quizzes may or may not count toward the course grade, but will be essential for students to know whether they are performing well in the course and whether their portfolio submissions are likely to pass the portfolio assessment. Faculty will also use these assignments and assessments to gauge their own teaching strategies and assess whether learning is occurring.

Samples of portfolio assessment criteria, assessment rubrics, and first-semester student e-portfolios representing a range of abilities/outcomes (different grades and credit allocations) will be available to students, once an archive of sample work can be assembled.

**Portfolio Assessment in the Second Semester**
Assessment in the second semester of the first year will follow the same basic process as the first semester. Since the NCC will be initiating students into a culture and system of assessment, it will be important to demonstrate consistency in the e-portfolio criteria and assessment rubric design, so students develop a deeper understanding of what is expected of them. However, because the assessment
process is developmental—moving from structured to student-directed—faculty developing the criteria for the second semester may want to consider how to incrementally increase the student self-assessment component and begin to incrementally decrease the faculty-driven components. The second-semester e-portfolio assessment criteria, like the first-semester criteria, will be standardized, but they will place more of the responsibility for self-assessment and selection of work products on to students.

**Appeals Process**
The NCC should establish an appeals process with an assessment coordinator to ensure that students who do not meet a satisfactory level of performance will be able to appeal a score they believe is unwarranted. This process will be defined in detail by foundational faculty.

**Assessment After the First Year**

Although this is not the focus of the Committee’s work, the group developed a set of principles and concepts that would serve as an outline for student assessment in the second or third year. Overall, we recommend that the college follow structures and processes comparable to the first year in designing institutional learning outcomes and assessments.

- The ideal of clear and transparent performance-based criteria established in the first year should continue in the second and third years.

- As students move into majors, the learning outcomes will become a blend of institutional and program learning outcomes. Program learning outcomes include a combination of professional knowledge and competencies created by the faculty as programs are designed. For assessments linked to the program, faculty will need to not only identify the specific competencies but also clarify where in the curriculum students will develop those skills.\(^\text{12}\)

- With the goal of preparing students to be independent and self-motivated learners in mind, students should have greater choice about what work

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products demonstrate their knowledge and what kinds of evidence can demonstrate their mastery (e.g., video, audio, formal writing, presentation outlines, etc.).

- If possible, e-portfolios in the second and third years should include second readers, in order to assure fairness and reliability.

**Culminating Graduation Portfolio**

Prior to graduation, every NCC student should be required to prepare a final e-portfolio for review. The purpose of this project would be for students to demonstrate mastery of critical skills as well as reflect on growth during their college experience. The overarching structure and requirements of the final e-portfolio should include some important features:

- The introduction to the culminating e-portfolio should be a self-assessment where students can show the evolution of their own abilities and build a case for their own degree candidacy. The narrative should also articulate how the work selected for presentation relates to different outcomes.

- In designing the specific requirements for the culminating e-portfolio, faculty and staff should view the likely audiences for the presentation as four-year schools and potential employers. Students should view the e-portfolio not simply as an academic exercise but as part of their transition to the workforce or pursuit of a bachelor's degree.

- Students should have an opportunity to publicly present their work to peers, faculty, and industry partners as part of a showcase.

- NCC should develop a one-credit course where students have time to assemble their culminating e-portfolio and obtain feedback on their self-assessments. Doing so would encourage students to allocate sufficient time and effort to preparing their final e-portfolio, and may also contribute to the timely completion of the requirement.\(^{\text{13}}\)

\(^{\text{13}}\) Highland Community College has found this to be an effective strategy to ensure that the final portfolio does not become an obstacle to completion.
IMPLICATIONS FOR FACULTY WORKLOAD AND PROFESSIONAL DEVELOPMENT

The Committee recognizes that the pedagogical approaches suggested here and the depth of the assessment process may be will unlike the training or experience of some NCC faculty when they first join the college. Even those faculty members who have been recruited for their excellence in teaching and learning will need significant support and resources in order to fully realize the potential of the performance-based assessment system proposed here. Resources for assessment should take many forms, including faculty development, time for faculty to conduct appraisals, time to work with other faculty to develop curriculum-imbedded performance activities, participation on the assessment committee, and other structures to support the process itself (e.g., on some campuses, faculty members work in study groups to investigate possible areas for curricular change). Moreover, NCC leadership should be committed to providing ongoing resources well beyond the initial development of the NCC.

Staff and Resource Recommendations
To scaffold the proposed assessment system, the Assessment and Portfolios Committee suggests three functional areas or positions: an assessment coordinator, an assessment committee, and a Center for Teaching and Learning.

- The role of the assessment coordinator will be to facilitate work around assessment, including leading the assessment committee, working with the Center for Teaching and Learning to identify areas for professional development, guiding program areas in defining learning outcomes, creating and reviewing the faculty-developed rubrics applied at the NCC, and other assessment-related duties identified by the faculty and staff. This person should be a member of the faculty.

- The assessment committee will be the designated group with responsibility for reviewing assessment practices and policies at the NCC, and identifying areas for improvement. The assessment committee also plays an important role in shaping the priorities for professional development for the NCC. Given the integrative approach and philosophy of the NCC, the assessment committee should be composed of faculty, student advisors, and other stakeholders identified by participants. Faculty should consider including opportunities for student feedback, such as having a current student or recent graduate serve on the committee.
• The Center for Teaching and Learning will have primary responsibility for coordinating and conducting professional development for all faculty, including part-time faculty adjuncts. The Center’s charge will be to support faculty in improving students’ habits of learning, teaching students with special needs and English Language Learners, as well as creating assessments that are mindful of various learning styles. In selecting and designing programs, the Center along with faculty will determine what activities and themes would have the greatest impact on instructional practice – and consequently student learning. While some of this might be done on campus, the Center can also support teaching and learning by connecting the instructional staff with activities and expertise at other CUNY campuses and elsewhere. The Center can also become the locus of an emerging scholarship on teaching in postsecondary education, with particular emphasis on community colleges.

One of the specific responsibilities of this triumverate will be to facilitate a series of faculty workshops to ensure that faculty in the first-year program have similar understandings of what work constitutes different score levels.

Assessment Structure and Relationships
DEVELOPMENT OF THE ASSESSMENT SYSTEM

Because there are many existing high-quality rubrics that are in use and have been identified as best practice, the Committee recommends that faculty have access to these in order to select or develop rubrics that will serve as standardized tools for gathering performance data and will be used to assess change in students’ performance at multiple points along their NCC experience. The data from the various points should indicate where performance levels have improved and can be used institutionally or programmatically. From the experience of Committee members, we have outlined some of the important activities that will need to occur:

- Define the learning outcomes for the NCC.
- Differentiate the learning outcomes specific to the clusters, majors, and individual courses.
- Create the e-portfolio criteria and rubrics associated with the institutional and program outcomes.
- Develop the tools needed so that the rubrics can be incorporated into classroom practice (sample syllabi that present the learning outcomes and rubrics, examples of teaching practices that enhance the desired outcomes, etc.).
- Develop effective informal classroom assessments that can serve as early predictors of student success.
- Conduct training so that faculty can assign consistent ratings of students’ work.
- Provide training and support with the e-portfolio software.
- Provide ongoing professional development on best practices for imbedding assessment into the curriculum and using it to improve teaching practice.
- Conduct routine reviews of the learning outcomes and rubrics.
- Collaborate with the Center for College Effectiveness so that information about student progress in the aggregate can inform programs and facilitate planning for improvement.

14 Alverno College; DePaul University; Spelman College; Beacon High School; the CUNY Aligned Assessment of Writing and Analytic scoring rubric
ISSUES FOR FUTURE DEVELOPMENT

Using Assessment to Guide Supplementary Services
The first-year curriculum presented in the Concept Paper offers some unique opportunities for designing an assessment system. The use of a common core readily lends itself to creating institutional learning outcomes and rubrics that will facilitate clear communications between learners and instructors. It also allows for clear coordination among faculty and advisors, so that student work is assessed with consistency across the first year.

As with any college, assessment will be used to inform teaching and learning, and guide students and instructors to a common understanding of progress and attainment of learning objectives. Moreover, quality formative assessments can also become early indicators that signal that students are not performing adequately to meet critical milestones. We anticipate that despite the best efforts of the students, faculty, and staff, there will be some students who do not meet expectations. While these are important challenges at any community college, the cohort model does not readily allow students who do not meet the learning outcomes to take more time (repeat a course or semester).

In response, the Assessment and Portfolios Committee recommends that additional learning supports be actively introduced at points throughout students’ careers at NCC. The range of possible interventions can and should be linked to assessment points. Participation in special programs should be compulsory for students performing below expectations and should be focused on the specific needs of that student. For example, a student who has difficulties with particular math concepts need not attend programs focused on writing. That said, students who might benefit from additional time and work in smaller groups should have the option to be part of focused programs. As the work of the Planning Team and other Working Committees progress, these learning supports should be developed as part of the educational model.

A Caution about Using Student Assessment to Consider Faculty
While the focus of the Committee’s work has been to look at student assessment, we end with this caution about using student performance as a direct tool for the evaluation of individual faculty. Asking student assessments, including e-portfolio assessments, to serve separate and potentially conflicting functions could undermine their primary goal as a teaching tool. This is not to suggest that faculty should not be assessed on a regular basis. Rather, faculty review should be a separate and clearly defined process that could include the construction of
professional portfolios. Given the strong orientation of the NCC toward excellence in teaching, the assessment, tenure, and rewards systems for faculty should reflect this.

**Final Thoughts**
Implementing a whole college portfolio assessment system is a bold endeavor—like the NCC initiative itself. While ongoing faculty development and continual assessment of the portfolio system will be critical components of its success, we believe the NCC faculty should anticipate an initial period of some trial and error. While we should strive to have as much in place as possible before the college opens, we should also see the assessment system as something that will take time to develop. This effort will ideally strengthen the curriculum, foster faculty engagement, and improve teaching and learning at the NCC.

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ASSESSMENT AND PORTFOLIOS WORKING COMMITTEE REPORT
COMMITEE MEMBERS

Chair
Kathleen McSorley, Assistant Dean, School of Education, Brooklyn College

Members
Maaike Bouwmeester, Vice President for Product Development, TaskStream
Raymond Moy, Director of Assessment, CUNY Office of Institutional Research
Emily Schnee, Assistant Professor of English, Kingsborough Community College

Advisors
Jay Verkuilen, Assistant Professor of Educational Psychology, CUNY Graduate Center
Howard Wach, Director of Instructional Technology & Professor of History, Bronx Community College

NCC Liaisons
Toni Gifford, Associate Director
Dolores Root, Senior Director of the Educational Model
Julian Haynes, Research Associate
This Committee recommends a performance-based assessment system facilitated through the use of e-portfolios as a way of making assessment serve the larger needs of teaching and student learning. The Planning Team acknowledges these key issues to be addressed in next steps:

- Does the calendar on which the first-year curriculum will unfold allow enough time between modules and semesters for faculty and staff to make sense of what did or did not happen and to plan intelligently?

- Can performance-based rubrics designed or adopted and scored by faculty meet reasonable criteria for reliability and validity outside the context of a particular course? Should conditions for producing student work products be standardized for at least some high-stakes measures to avoid unacceptable variances from student to student?

- Are there other means than end of semester faculty assessments, which are extraordinarily time consuming, to assure both faculty and student that the assessments are accurate?

- What other measures of assessment might the NCC adopt or embed, in order to achieve reliability and validity?

- Should the NCC consider the approach to performance task assessment being developed through the College Learning Assessment (CLA)?
ENROLLMENT & PERSISTENCE MANAGEMENT
WORKING COMMITTEE REPORT
This Committee will address the ways the New Community College will support the
development of informed student choices and actions from initial contact through
degree and career attainment. The working group will identify services that foster
students’ ability to successfully enter and navigate the college environment, engage
with the academic program, and persist through graduation and career entry. The
working group will create a plan focused on providing comprehensive services
aimed at student success and graduation throughout students’ lifecycles:

- Recruitment
- Application, Interview, and Financial Aid
- Registration
- Summer Program
- Fall Start/Matriculation
- First-Year Experience

The Committee will include a chair and six to eight members, who will be assisted
by others serving as responders or advisors and a staff liaison.

Key Questions

- What are the exemplary models?
- What are the obstacles that hinder student persistence, and how can support
team be structured to mitigate these factors?
- What is the optimal support model that will help build and sustain a culture
consistent with the ideas outlined in a New Community College Concept
Paper?
- What are the individual roles within the support teams? How do their roles
differ, how are they alike? How can cross-training be utilized?
- What is the recommended support team to student ratio?
- What is the process that support teams will use to engage students from
initial contact prior to admission through the first year?
- How are the roles of the support teams communicated to the students? To
other members of the college community?

- How can technology be used to support the integration of services?

- How will the NCC use evidence about student progress to inform policy and practice?

- How will the work here inform practice across the system and beliefs?
ENROLLMENT & PERSISTENCE MANAGEMENT WORKING COMMITTEE REPORT

INTRODUCTION

The charge of the Enrollment and Persistence Management Committee was to identify services that foster students’ ability to successfully enter and navigate the New Community College, engage with the academic program, persist through to graduation, and transfer to a four-year institution or enter the workplace. Our mission was to create the map – an ideal, yet practical and easily navigable plan that would direct the enrollment and persistence process.

The Committee created a plan\textsuperscript{16} focused on providing comprehensive learning support services aimed at fostering student success, enabling persistence, and leading to graduation.

The following areas were addressed:

- Recruitment
- Application, Interview, and Financial Aid
- Registration
- Summer Bridge Program
- First-Year Experience

I. RECRUITMENT

The New Community College (NCC) proposes admission of the first freshman class in February 2012 for an anticipated start of the Summer Bridge Program in early July 2012. Outreach and recruiting efforts will start in September 2011; however, students may not be “officially” admitted until after the University Application Processing Center (UAPC) Phase I allocation has been processed in late January/February 2012.

In the period leading up to the opening of the Admissions Department, time will be spent on developing the NCC brand message. Web site development will be key, as the NCC Web site will need to function as a marketing site as well as an information hub with features such as the mission and goals of the college, its programs of study, social networking through an online community of applicants, financial aid, an

\textsuperscript{16} See Appendix B for a graphic illustration.
option to chat with an admissions representative, and tools to check application status or schedule an appointment. User activity and inquiry data will need to be captured in a Customer Relationship Management (CRM) tool for follow-up.

Consistent messaging regarding the mission, values, and student-supported culture at the NCC will be communicated on the Web site as well as in marketing pieces designed for students, guidance counselors, and parents. In addition to teen- and parent-friendly brochures and other promotional materials, special efforts will be made to ensure that counselors and other professionals working with prospective students on college planning fully understand the mission and organization of the NCC. This will help ensure that adults who work with prospective students are also conveying a consistent message.

An admissions team will be assembled in summer 2011. Special care will need to be taken to hire staff who have experience working with young adults and who have a commitment to the mission of the NCC. Admissions representatives/recruiters will be cross-trained in general financial aid literacy, administrative functions, and the NCC educational model and programs. Admissions recruiters and officers will need to be knowledgeable in all these areas to ensure that students who enter the NCC are making an informed choice. It is recommended that foundational faculty assist in the creation of the educational model training guides and facilitate ongoing training sessions with the admissions team to ensure consistent messaging both during the development process and once the school opens. It is also recommended that the NCC develop an internal call center with personnel able to respond to queries regarding the specific requirements of the institution.

Recruitment will begin in September 2011, or as soon thereafter as approval is received from the New York State Education Department, with targeted outreach to the following:

- New York City Department of Education (NYCDOE) schools, including its newly developed Career and Technical Education high schools
- GED programs
- Community-based organizations that operate college access programs for youth
- Liberty Partnerships Programs in New York City
- Charter high schools
- High school guidance counselors at “feeder” schools
NCC will recruit high school seniors and GED students who, though they may be academically underprepared, are nevertheless motivated to attend the NCC. We will seek guidance from CUNY Collaborative Programs and University Recruitment and Admissions colleagues to determine the “best fit” NYCDOE schools to initially target. Discussions have already begun with CUNY Collaborative Programs on implementing programs in NYCDOE feeder schools in 10th and 11th grades to start building a pathway to the NCC. Because we are concerned that some community college students delay their applications until shortly before classes begin, we believe it will be crucial to develop early and strong relationships with partner and feeder schools and organizations to facilitate early application. The NCC admissions team should conduct presentations at selected community-based organizations and high schools where representatives might be asked to assist students with the application process. If necessary, attendance at open houses may be facilitated by providing incentives, such as MetroCards or chartered buses.

II. APPLICATION, INTERVIEW, AND FINANCIAL AID

One of the main tenets guiding the work of the Committee was the notion of providing students with the tools to make informed decisions. Therefore, students will be asked to attend a mandatory Group Information Session (discussed in detail below). Typically, the first communication admitted students have with a CUNY community college is when they receive an acceptance letter with notification to take the COMPASS test. At NCC, a different set of procedures needs to be in place. The Committee recommends a two-part process: a Group Information Session and a one-on-one meeting.

The Committee realizes that the recommended admissions process requires a well-staffed and trained admissions team, able to establish and cultivate the necessary first contact with students. Included in this team will be various cross-trained staff – admissions representatives, financial aid advisors, faculty, and student support
Regardless of position, it is recommended that all members of the institution participate at some time and in some way in the admissions process. This strategy will help refine procedures, provide first-hand knowledge of the processes, and introduce staff and faculty to the prospective student body. Sharing responsibility in the admissions process will also set the stage for building a team approach to running the college.

**Online Application**

Students who submit an application online will receive an automated e-mail instructing them to contact the school to schedule a required Group Information Session. Ideally, the e-mail will include a link that will enable students to schedule this meeting directly via the Web. As the student may be receiving communications from more than one school, it is vital that the messages be clearly communicated. With the Enrollment and Persistence Management Committee’s core values in mind, students will be encouraged to invite a parent, guardian, or significant other, to attend this session with them.

The admissions team will be able to regularly track (and export records into a CRM tool) new applications via the CARS system (in advance of the UAPC Phase I allocation) and proactively reach out to students to encourage their attendance at a Group Information Session.

**Direct or In-Person Application**

When a student stops by or calls the admissions office directly, he or she will have a brief meeting or phone conversation with a member of the admissions team. A first call script will be used to ensure all students are receiving the same pertinent information and messaging about the NCC. Materials will be provided regarding the Group Information Session, clearly outlining next steps. For the call-in student with online access, the admissions representative will have the ability to provide real-time, relevant information to the student and facilitate scheduling.

It should be noted that while CUNY encourages all students to apply centrally, a number of community college students apply onsite as direct admits. (The ________________

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17 The student support specialist will be a key member of the NCC team responsible for establishing a relationship with a designated group of new students (see Appendix C for a job description).
18 See Appendix A.
19 CARS will likely be discontinued once CUNYfirst is implemented; a similar process will need to be developed as part of the CUNYfirst project.
20 Add-on to Web site [http://solutions.liveperson.com](http://solutions.liveperson.com) or similar tool, as recommended by the Library, Technology, Student and Faculty Resources Committee.
admissions office will have computers available for this purpose, and students will be able to apply via the direct admission process on a space-available basis once they have completed the other mandatory pre-admission requirements).

**Group Information Session**

Modeled in part on the Posse Foundation application process, each student will be required to attend a Group Information Session. Conducted by members of the admissions team as well as faculty and student support specialists, this session serves multiple purposes, providing students with accurate information regarding the NCC’s learning model, programs, and college expectations so that students can make informed decisions. The intention is to engage students during the admissions procedure by having them participate in the decision-making process with the opportunity to explore issues they may not yet have considered.

The Committee recognizes that an information session is a step some students may choose not to take. However, by making this session mandatory, we are setting the stage for a conversation about college success and completion. At this time, students will be introduced to the “educational plan agreement,” which will clearly outline the expectations and responsibilities of being an NCC student along with what the school will provide. Most importantly, as students interact with staff, faculty, and potential classmates, the session will start building the NCC community. In subsequent years, we recommend having NCC student leaders participate in this activity.

**Key features**

- A schedule of information sessions will be posted on the Web site and publicized in marketing materials. We recommend the development of an online self-scheduling component.

- Students should be encouraged to have a parent/significant other, guardian, etc., attend as well, and facilitators will need to be aware of the cultural differences than can impact student success. If possible, translation will be provided for non-English speaking parents and guests.

- Sessions will be scheduled in the late afternoon/early evening weekdays and on weekends to facilitate attendance by high school students and their

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22 Name and content to be developed, modeled after the ASAP enrollment agreement (see Appendix D).
parents. Sessions may be held at the college, or at partner/feeder schools, GED programs, and CBOs.

- An overview will be provided regarding NCC features and the structure of its programs, including:
  - a required Summer Bridge Program;
  - the first-year cohort model;
  - full-time attendance in the first year, which will require 22 hours on campus per week;
  - a three-year program of study with the opportunity to complete the associate’s degree in two years on an accelerated basis;
  - a focus on programs of study that will lead to careers in building and sustaining a thriving New York City;
  - internships and other work-based opportunities

- Short video vignettes (which can also be used as podcasts) will be utilized. Concepts for these videos may include:
  - video footage of people in relevant fields of work;
  - students interacting with each other, faculty and staff in the Group Workspace (this and the following could be available for students beginning 2013);
  - student testimonials

- Q&A session – information gleaned during these sessions can be added to the FAQ page on the Web site.

- Break-out session – students will be guided into smaller groups for breakout sessions facilitated by one or two staff members (admissions representative and student support specialist). During this time, students will work together on a team-based activity so they can experience first-hand an experiential group learning model.

- Parents/friends will, at this time, attend a brief talk and Q&A regarding available support for students, financial aid information, and etc.

At the conclusion of the Group Information Session, students will be asked if they wish to proceed with the admissions process for the NCC, and those who do will be scheduled for a one-on-one “Next Step Meeting.” Students will be given information regarding the Next Step Meeting as well as contact information (e-mail address,
phone numbers, Ask an Advisor link, Web site, etc.) and will be encouraged to contact the NCC with any questions prior to the meeting. E-mail and text reminders will be sent confirming the Next Step Meeting appointment. Again, if possible, phone call reminders will be made. Students who are not interested in the NCC will be referred to the Office of Admissions Services or given advice about how to pursue their application to another CUNY community college.

All students will be asked to complete a brief online survey at this time (created with input from other departments). Student feedback is key so we can revise the processes, if necessary, and assess effectiveness. A summary of each Group Information Session and data on the applicants will be distributed to appropriate stakeholders in a timely fashion.

**Next Step Meeting**
This mandatory meeting is intended to provide students with a more in-depth understanding of the NCC program of study. A similar meeting is required of ASAP students and has proven to be an important component in that program’s success. The Next Step Meeting ideally should be scheduled five to seven days after the Group Information Session to give students and their parent(s) or other support person time to process the information covered. For late applicants, the Next Step Meeting may have to be offered on the same day as the Group Information Session in order to admit the student in time for the start of the Summer Bridge Program.

The Next Step Meeting, which will be conducted by an admissions representative and/or a student support specialist, is designed to provide a balance of information from two perspectives: 1) NCC wants to make sure the student is well-informed and, 2) prospective students need to determine if the school is an appropriate fit for their goals and life situations. In this way, the meeting is an opportunity for student reflection.

**Key features**
- This meeting will reinforce what is asked of students in the first-year curriculum and the support that will be provided for their success.
- An educational plan contract will be presented to the student at this time.

**Follow-up**
- Again, if after the Next Step Meeting a student decides she is not interested in attending the NCC, she will be referred to the Office of Admissions Services or advised about how to pursue her application to another CUNY college.
• If a student is doubtful the NCC will meet a student’s needs, s/he will be invited to meet one-on-one with a student advocate who will explore options with the student.

The following issues still need to be addressed:
• Will affiliated immersion programs be offered at the NCC, and if so, how will they be funded?
• In the event a recommended immersion program is one semester in length, what are the options for the student, as the first-year core begins in the fall semester?

**Recommended for Admission**
The NCC will need to offer all students who submitted applications prior to the CUNY deadline an equal opportunity to present themselves for Group Information Sessions and Next Step Meetings. Official notifications of acceptance should not be offered until the UAPC Phase I allocation has been distributed (late January/early February) and students have had ample time to respond to notifications to attend an information session. Students will be notified of the timeline, will be invited to join the NCC social network site, and will receive periodic e-mail updates. It should be noted that students who are offered admission are not required to notify the school of their decision to attend until May 1st. A summary of Next Step Meetings, including applicant data, will be submitted to appropriate stakeholders in a timely fashion.

**Financial Aid**
Students who pursue admission will be introduced to a financial aid specialist who will work with them to complete their FAFSA application, review scholarship opportunities, and discuss financial literacy issues. The student’s family needs to be included in this process, and work will be done on modeling innovative programs that assist families in completing the FAFSA during tax preparation. It is recommended that the student be introduced at this time to the city, state, and not-for-profit services that are available to them based on their income level to help mitigate the financial factors that hinder persistence. Ideally, the financial aid team will be housed in a “one-stop” services model, logistically and practically linking admissions, financial aid, bursar, and registrar functions. A tracking tool will

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be utilized to ensure students are progressing through the financial aid process, and if not, staff will be able to intervene as necessary.

III. REGISTRATION

With the NCC first-year core curriculum model, registration will be a straightforward block-scheduling for all students. The typical practice of consulting a course catalog and seeking advisement and permission to register for a class will not be required at the NCC for freshman students. The student will need only to select an AM (morning) or PM (afternoon) block schedule. If warranted, an evening block schedule may be a third option. Working under the guidance of the registrar’s office, staff will be available to assist students with online registration during the Summer Bridge Program.

Once registration is complete, student information previously contained in a CRM product will be relocated to CUNYfirst (if available during the implementation phase) or an alternative student information management system. The concierge approach recommended by the Library, Technology, Student and Faculty Resources Committee will enable students to contact a single source and have their issue logged appropriately for follow-up. It is recommended that a ticketing, key card system or other software program tool be implemented to track registered student inquiries and involvement with services at the NCC. Service providers will be able to pull up a student record and view activities to date. This system will also enable staff to run reports to determine if students have followed-up and if they have to intervene as necessary. Key cards can also be used to track points in a reward-based system if the NCC chooses to provide incentives to students to encourage participation in campus-based extracurricular activities or use of campus resources.25

IV. SUMMER BRIDGE

The Committee recommends that the areas typically covered in new student orientation session be woven into the Summer Bridge Program (SBP), including the following26:

26 A model for the Summer Bridge Program is being developed in Spring 2010.
• The SBP should develop a sense of community among students, faculty, and staff. These efforts can begin by asking students to interact in distinct cohorts/learning communities and participate in group activities that will foster collaboration and cooperation.
• Students should be (re)introduced to student support specialists and faculty advisors, and the roles these individuals will play in their college experience.
• Administrative processes should be completed – ID cards, portal log on, key staff/department introductions, financial aid, immunization record collection, work study, partnerships, campus tour, etc.
• Students should be introduced to and begin creating their e-portfolios.
• Students should learn the questions they need to articulate to take responsibility for their learning, and how college differs from high school.
• Students should be taught to access the information they will need to advocate for themselves.
• Students’ financial aid literacy should be reinforced within a case study model.
• The SBP should be engaging and set high expectations from the start.

It is also recommended that a proactive approach to student support be implemented during this time by employing a retention software tool such as:

• Student Readiness Inventory (SRI) (ACT)  http://www.act.org/sri/
• College Student Inventory (CSI) (Noel-Levitz) www.noellevitz.com/rms
• First-Year Retention and Engagement (FYRE) (Education Dynamics)  http://www.educationdynamics.com
• College Success Factors Index  www.csfi-wadsworth.com/
• Retain (Hobson’s)  http://www.hobsons.com/solutions/retain.php

These self-assessment programs help students identify their strengths and weaknesses. They are also an effective jumping off point for student–advisor interaction and the development of individual learning plans such as the Valencia LifeMap tool.28 The FYRE program from Education Dynamics offers the interactive ability of automatically e-mailing students helpful hints, reminders, and suggestions that keep students on track and motivated.

27 The OAS is looking into piloting this tool. Discussions are also underway regarding using Oracle’s retention tool within CUNYfirst.
V. FIRST-YEAR EXPERIENCE

With a view to integrating the classroom experience with continuous, proactive student support, the Committee has proposed a model for City Seminar that incorporates the three class units (Quantitative Reasoning, Reading/Writing, and Case Study) and the Group Workspace with the common connective support of the student support specialist.

As already noted, the student support specialist will establish a relationship with a designated group of new students. Based on the understanding that the bond formed with one individual early in an educational career is the basis for greater persistence and academic success, new students will be introduced to their student support specialist (a professional with a background and advanced training in psychology or social work) during the Group Information Session or subsequent Next Step Meeting. The student support specialist (HEOa) will use a developmental advising model that promotes social and academic integration, and will monitor students’ progress, referring students to appropriate internal and external services and agencies as necessary.

**Group Workspace**

One student support specialist will be assigned to three cohorts of City Seminar, with 25 students in each cohort. A cohort will be composed of a team of three faculty members plus the student support specialist. One of the City Seminar faculty will lead the Group Workspace session facilitated by the student support specialist. The Group Workspace will meet twice each week for 90-minute sessions.

It is recommended that the student support specialist and faculty advisors from City Seminar meet for weekly case review sessions to discuss individual students’ progress and concerns. The student support specialist will continue as a team member for these cohorts through graduation, each year dropping one cohort and starting a new cohort of incoming students.

29 The Committee agreed that the student support specialist should be an HEO rather than a faculty member to ensure student support throughout the calendar year with the proviso that the student support specialists have parity to faculty in the governance structure to be developed at the NCC. This is particularly essential as the student support specialist and faculty will be co-facilitating in Group Workspace sessions.
**Integrated, Proactive Advising**

Integrated, proactive advising is an intentional and multidimensional educational process rooted in facilitating connections among a student’s courses, professors, mentors, life in and out of the classroom, ideas, aspirations, and practical goals, especially including the relationships the student has with the college community. Given the wide variety of anticipated NCC students, there will be a broad spectrum of support and advisement services to build students’ strengths and address students’ academic, personal, and career concerns. The faculty advisor and the student support specialist will be able to refer or directly help students by:

- conducting ongoing periodic assessment of students’ progress and troubleshooting areas of concern;
- providing knowledge of academic regulations to support student success;
- creating definitive plans of study that are revised and reviewed regularly;
- establishing support and referral systems to help students cope with nonacademic responsibilities (work, family, etc.);
- providing knowledge of financial aid regulations and counseling, or referrals about financial aid matters.

The ultimate responsibility for making decisions about life goals and educational plans rests with the student. NCC faculty advisors and student support specialists assist in this process by helping to identify and access roads to success as well as the potential consequences of decisions that may hinder them from achieving these goals.

**Structure of Student Advisement**

The faculty advisor will take a visible, proactive role in the life of every student at the NCC. The critical first year will be structured as follows:

**First Semester**

City Seminar will provide the environment for interaction among the faculty, students, and the student support specialist. Each student cohort will be assigned a faculty advisor, who will be, at the same time, one of their first-year core City Seminar faculty. During the Group Workspace sessions, assigned faculty will collaborate with the student support specialist to interact with students individually and in small groups to follow-up on attendance, academic performance, social integration, and any other issues. This team will also co-develop and co-teach skill development Group Workspace curricula and will participate in periodic case
conferences with other faculty/student service professionals to review student progress.

Resource Center
Students who will attend the NCC may bring complex personal issues that create barriers and challenges to achieving academic goals, requiring a level of support that goes beyond academic advising and the generalist advising responsibilities of the student support specialist. The Committee recommends a campus Resource Center be available to provide an array of assistance to help students meet the challenges that may otherwise derail their focus on successfully completing their academic requirements. This Center, which may be designed as part of the NCC Commons, could be modeled after many of the successful women's centers on campuses around the country. The Center is a hub for students to access counselors, informative reading materials, study accommodations, and benefits that help students work through the challenges of attending full time-classes. The Center is an inviting, informal meeting place, a reading room, and a place where students feel welcome to ask questions.

The Center will be staffed by an administrator, two counselors, and an administrative assistant to provide the following types of services:

- Classroom and study accommodations for students with physical and learning disabilities; off-site referrals for testing will be available
- Personal counseling and/or off-site referrals
- Social service/housing/childcare resources and referrals
- Assistance for veterans to complete certification for benefits from the new GI bill
- Career exploration (pending Office of Partnerships committee recommendations)
- Developing and hosting study groups, connecting to tutors and peer mentors

The Resource Center staff will maintain up-to-date contacts/referrals and print materials for external, community resources. While a student may initially welcome assistance from a staff counselor, there will be an emphasis on developing self-advocacy skills. It is recommended that the staff from the Resource Center share information periodically with the support staff and faculty advisors regarding the types of services students are utilizing, as well as general themes that arise to help inform program services.
Career Exploration
While the Committee understands that the Office of Partnerships model has yet to be developed, we feel strongly about the need for career advising. For the prospective student, career exploration begins when he or she contemplates attending NCC. One cause of student dissatisfaction and lack of persistence in college is lack of motivation or a poor “fit” between the student’s interests and the academic major. It is therefore important to integrate the career specialist’s work with the enrollment process. Ideally, the career specialist would be an integral part of the admissions team to offer insight and advice to students and work alongside faculty and advisors during interviews. The career specialist will assist the student in exploring his or her interests when determining which major to pursue at NCC.

The career specialist also has an important role in conducting market research, providing data, assisting with the marketing of majors, and preparing the video vignettes. Prospective students commonly ask, “What can I do with a major in ....?” The career specialist will be able to assist the student with major-specific resources and begin self-evaluative discussions. An excellent resource to provide students with an overview of careers related to their anticipated major would be a “fast-fact sheets” for each major. Although students may not be declaring majors until after their first year, they should have a general preference for a major (career) that will be offered at the NCC. If students realize that the majors offered at the NCC are not in line with their interests, values, skills, and abilities later on, it will negatively impact students’ desire to persist at the institution. Career awareness and efficacy interventions should minimize such attrition.

In addition, if the majority of students maintain an interest in pursuing the same major from enrollment through the first year, there could be future issues. If these students are able to officially declare, there could be an imbalance and lack of resources at the college. For these reasons, the Committee strongly recommends that an early declaration of a major be taken into consideration.

Traditional career counseling incorporates career assessment, exploration, and planning. However, students may not engage in related interventions until the latter part of their first year in college. Integrating career awareness activities with students upon entry is consistent with the NCC’s vision of clear communication from the start. The career specialist could play an active role in the Summer Bridge Program or City Seminar with in-depth career assessments and reflection papers. Career exploration and planning (along with transfer planning) will lay the groundwork for students’ academic accomplishments, ultimately contributing to
motivation and persistence. It is envisioned that many of these competencies will be addressed within the context of the Professional Studies course.

At a minimum, the career specialist should be involved with supporting the professional development of admissions advisors/recruiters and academic advisors to understand the relationship of the majors that are offered to current workforce needs and the career track that prospective students need to consider in order to achieve their personal goals. There is strong research to support the assertion that strong career efficacy among students positively contributes to persistence.30

CONCLUSION

As the Enrollment and Persistence Management Committee worked to develop this plan over the past three months, it remained mindful of the following:

- What are the obstacles that hinder student persistence, and how can support teams be structured to mitigate those factors?
- What is the optimal support model that will help build and sustain a culture consistent with the ideas outlined in the NCC Concept Paper?
- What are the individual student support roles, how do their roles differ, how are they alike, and how can cross-training be utilized?
- How can technology be used to support the integration of services?

As the process unfolded, questions arose, and we remained committed to creating a flexible plan that could be easily modified to meet student needs. We recommend a process that embraces continuous and formative assessment. Checking in with students, staff, and faculty during all phases of the process will enable the continued development and refinement of the process.

ENROLLMENT & PERSISTENCE MANAGEMENT WORKING COMMITTEE REPORT

COMMITTEE MEMBERS

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Members
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NCC Staff Liaison
Lyn Cooperman, Senior Director of Enrollment Management
Julian Haynes, Research Associate
The Enrollment and Persistence Management Committee proposes NCC models for recruitment, admissions, and advisement/counseling that involve extensive interaction between students, faculty, and staff. The following are issues the Planning Team has identified that need to be addressed in the next steps in the development of the NCC:

- The staffing recommendations in this report need to be added to the recommendations of other committees and reconciled with available resources.

- How does the NCC assure its commitment to open admissions and diversity, especially during the early years when enrollment numbers are small?

- How can the NCC create more effective pre-college pathways to successfully recruit and retain black and Hispanic males?

- In addition to structured advising and counseling, how can the NCC address non-academic student life issues that so often lead to stop out?
LIBRARY, TECHNOLOGY, STUDENT AND FACULTY RESOURCES
WORKING COMMITTEE REPORT
This Committee is charged with three overlapping tasks. First, it will reconceptualize the traditional place-bound information-hub library into an integrated space of learning and community that brings together students and faculty for scholarly, professional, and social purposes. Second, the Committee will develop a roadmap for using technology to connect students and faculty – with each other, with the rest of the college and its partners, and with any academic and professional resources they need – for scholarly, professional, and social purposes, at anytime and from anywhere. And third, the committee will draft a blueprint for building the college’s instructional and academic technology, which includes, but is not limited to, a learning management system, e-portfolios, multimedia systems, interactive tools, and other development platforms. For all three tasks, the Committee will specify the necessary resources, services, and infrastructure needed to support our constituents. In particular, the results of this work will form the basis of our proposals to the New York State Department of Education (NYSED) and eventually the Middle States Commission on Higher Education, with specifications for the New Community College’s general and disciplinary collections, resources, and staffing.

The work of this Committee will be closely coordinated with the work of the Facilities and Physical Infrastructure Committee, the First-Year Experience Committee, and the Assessment and Portfolios Committee. It is anticipated that the Committee will be comprised of participants in these roles: chair or co-chairs, members, consultants, advisors/responders, and a NCC staff liaison.

Key Questions

- In what different ways can the 21st century NCC library, defined broadly as both physical and virtual spaces, be a hub of teaching, learning, faculty collaboration and campus community?

- What possibilities can we imagine in this area and what spaces and technology would enable their operation?

- How can the library support the college’s focus on student career paths through collaboration with the Office of Partnerships?

- What are the exemplary models?
• How will technology support learning communities, provide cross-disciplinary and cross-course connections, and support faculty research?

• What basic information literacy competencies should all NCC graduates have?

• What are the technology qualifications for faculty and staff in the NCC and how can the library foster opportunities for faculty and staff collaboration?

• What ongoing professional development or support (e.g., Technology Fellows) will be needed/should be provided?

• What roadblocks in organizational structure (reporting relationships, budget, etc.) are commonly encountered that impede effectiveness in this area?

• What evidence will be needed from the Center for Institutional Effectiveness for ongoing assessment in this area?
LIBRARY, TECHNOLOGY, STUDENT & FACULTY RESOURCES
WORKING COMMITTEE REPORT

PART I: THE ‘COMMONS’ APPROACH

Introduction
The Library, Technology, Student and Faculty Resources Committee was charged with the task to "reconceptualize the traditional place-bound information-hub library into an integrated space of learning that brings together students and faculty for scholarly, professional, and social purposes." To some extent, that exercise has been happening across the country for the last decade as academic libraries everywhere have sought ways to provide services for the digital age. The “Commons” approach has been favored as it offers the potential of the modern library, incorporating digital and traditional resources and services. The Committee has made the idea of the Commons and what it represents a basis for all its recommendations, while also considering how the concept may be adapted to serve the New Community College (NCC) in unique and particular ways.

The Committee received two additional charges that targeted technology issues, and those are addressed in the second part of this report (Part II. Building and Sustaining Community at NCC through Technology). That report lays the groundwork for a Virtual Community to serve the NCC. In doing so, it also creates the potential for a virtual Commons. This Report will deal with the physical Commons, but will also reference virtual capabilities.

The NCC Concept Paper suggested a positive view of a Commons:

[a] teaching and learning commons [that] will function as a ‘hub’ where students can study individually or in small groups, meet with faculty during office hours, meet with staff when needed, but [where] it also will serve as a space . . . [for] the college’s faculty and staff [to] spend time learning and working. We believe this commons/hub should be the architectural element that sets the tone for the entire facility.31

It is part of the aspirations of every Commons that it becomes a natural center for its college’s community life. All hope that the appeal of attractive spaces designed for working with peers and fostering collaborative learning will draw students and faculty alike to the Commons. The Committee, while envisioning a physical space for the NCC, also wanted to

31 A New Community College Concept Paper, pg. 61.
challenge the idea of the Commons, to reach beyond its physical attributes. The Committee’s first discussions dealt with finding ways to expand the capabilities for communication and collaboration to serve students, faculty, and the whole college community on a virtual level. A virtual Commons can offer services on demand, exist on a 24/7 schedule, and be accessible from anywhere. Virtual capabilities may also extend not just library services but other college services to the community as well. The Committee believes that having the combination of a physical and virtual Commons secures its place as a hub and truly makes it the “architectural element” that will set the tone for the entire college enterprise.

The NCC Commons: Delivering Concierge-Level Service

Many colleges make their Commons a popular center by locating it near other student services. Those student services can vary from an adjacent café to writing centers, tutoring centers, and the like. The idea is to create a place that students may frequent for many reasons, but which will also make it easy for them to run into the Commons to study, meet with study group members, or conduct research.

This idea of a convergence of student services appealed to the Committee on several levels. When envisioning the NCC Commons, we saw it as a place adjacent to diverse college services and were drawn to the idea of the Commons itself becoming a center for student services, which could help students with more than just their study and research needs. The advantages for this approach are that libraries are usually open longer than other student services, and they receive student requests for help beyond those services that libraries traditionally offer; as a result, they often act as a referral service.

With this in mind, the Committee’s discussions led to a proactive approach to help students. The Commons’ service desk should help students navigate all college resources, whether it helps students make appointments for advisement, seek support for personal emergencies, or deal with their research needs. We envisioned this service as a physical component of the Commons but also saw the potential of virtual access. When not on campus or when the college is closed, students may still get some help even if it is in the form of communicating with someone virtually or utilizing a system that creates tickets that record a request and sends them to the appropriate office so it can be responded to as soon as help is available. The Committee refers to this as a concierge approach to service. The Commons information service desk can help those students needing face-to-face assistance. With the use of technology, students can contact these same services virtually. The virtual component of this concept is discussed at greater length in the Technology Report.

The Committee also engaged in a discussion of a new service located within the Commons
that can serve students and further its role as a “learning” facility. The Committee proposes a Literacy Center to support reading skill development. The creation of this Center would require strong collaboration with teaching faculty and require their skills in assisting students. Adult literacy has long been a national library cause, and the Committee believes that the Commons would be a good location to further that initiative. The Committee also recommends that grants be sought to fund this enterprise.

**What space will be needed?**
The NCC will be a physical place and so must its Commons. The Committee found that while it could develop a list of features that would be needed in the Commons, it could not be prescriptive about how the space should be allotted. There is no easy formula to suggest how much space should be used for book stacks, student seating, and computers. Earlier iterations of the Association of College and Research Library’s Standards provided formulas, usually based on FTE counts, for seating, collection size, and staff rooms. That organization has abandoned such recommendations; in its current form, the Standards (2004) concentrate on the effectiveness of library services in relation to its mission. The Commons’ mission, as elaborated in the Concept Paper, is to be “an integrated space for learning.” The Committee believes the mission should also have an information literacy component that will be further explored later in this report.

To fulfill its mission, the Commons should be a welcoming environment, encourage communication and collaboration, and provide space for learning outside the classroom. Planning for seating spaces seems to present a contradiction. If the Commons’ virtual capabilities are successful, students may not need to physically go to the Commons; yet, if the Commons is to act as a hub for the college community, it should have plenty of attractive seating and meeting spaces. The Committee’s wish list for the Commons includes individual study spaces, group study spaces, and an information or concierge desk, along with another desk that can serve circulation and reserve collection functions. There should be collection or stack space and an electronic classroom or space where instruction can take place. There should be staff offices to facilitate the behind-the-scenes work of any library.

How much computer equipment the Commons should have is also hard to judge. The Committee recommends that every student be given a laptop or Netbook for his or her college studies. If that recommendation is possible to fulfill, the need for computer lab facilities may diminish and be minimized to desks with outlets. The Campus Computing Project’s recent annual survey showed that community college students own laptop computers at a far lower rate than do other college students. The survey numbers were 35 percent ownership for community college students as opposed to 70 percent at other colleges. If it is not possible to distribute laptops or Netbooks to students, there will be a
greater need for computer workstations in the Commons.

There should also be a space set aside for media creation equipment that students and faculty may need for their classes and e-portfolio work. There should be adequate equipment and space to provide for assistive technology. There needs to be a room that can accommodate meetings and include equipment that supports all kinds of presentations. There will also need to be space set aside in the Commons for the proposed Literacy Center.

**What kind of staffing will be needed?**
The Committee proposes that the Commons provide a 90-hour week of staffed services. Service expansions may be needed during peak usage periods, such as midterms and finals, and may be contracted during intersession and break periods according to student and faculty needs. As suggested earlier, the virtual commons can offer support services 24/7.

The most important component for the new Commons will be its staffing. The Committee has considered how to structure the staffing to meet the goals and mission of the Commons. It recommends a blended staffing of librarian, faculty, and instructional designers. The Committee recommends that this merging of library and technology services should fall under the leadership of a Chief Librarian, a faculty member who holds an ECP-level appointment to lead information technology and reports to the Chief Academic Officer. While the Committee acknowledges that defining the role in this way may limit the pool of applicants, it feels this approach establishes the appropriate leadership to serve the goals of the Commons and the instructional mission of the college.32

The Committee recommends that there be one librarian assigned to serve as a liaison to each academic program. There should be twelve librarian positions based on the number of academic programs proposed in the Concept Paper. That number includes the Chief Librarian position as well as a Deputy Chief Librarian position. The Committee recommends that librarians should all be tenure-track faculty members. The librarians' roles will be to provide reference assistance, teach information literacy, be responsible for specific library functions such as technical services or access services, and serve as subject specialists. The role of subject specialist will be an important and proactive component of

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32 The Committee hopes this approach will solve the kinds of problems that exist elsewhere. As Susan Heid (2007) writes in her article on this subject, “Historically, it’s been an unavoidable truth: IT people and library people have not been inclined to come to the same concept of service with the same view. For IT, it’s been all about keeping the servers and systems up, the Web sites going, and the help desk calls and their turnaround times to a minimum. For library professionals, service has meant keeping multimedia information and reference accessible; books, tapes, CDs, and other sources in order; and the environment primed for research and study.” By providing a unified leadership, the Committee hopes to create a different culture of shared goals.
the success of the Commons. Librarians will work as liaisons to the subject departments to develop collections that will support their programs, assist in curriculum development, and ensure that supportive resources are available. They will work with team teaching to help provide and support the research component of courses. Working closely with subject departments will help foster collaboration, increase communication about resources available to the community, and help students attain the research skills needed for their studies and future professions. The librarians will also work with department programs to help develop information literacy competencies in subject areas. These liaison librarians will also work to create materials that can support courses, such as research guides and tutorials. They will proactively “push” information to the college community via the library Web site, e-mail postings, RSS feeds, blogs, and other social networking media.

In a similar way, the Committee recommends there be twelve instructional designers. They can act as liaisons to departments to provide technology support and work with faculty on blackboard sites, e-portfolio programs, and the like. The twelve positions are HEO lines and include a Deputy CIO who can coordinate their work. Instructional designers can provide training to help keep faculty up-to-date on technology. While the librarians can help teach information competencies, the instructional designers can develop the computer literacy skills necessary as a component of information literacy. They can work in the Commons’ public service areas to assist students in the same way. They can help develop technology guides that support student use and push technology-related information that can assist the college community in the same ways as the librarians. They also can help both students and faculty to integrate new media into the instruction and learning experience.

The work of the librarians and instructional designers should be supported with additional staff. The Chief Librarian will need an executive assistant. The Committee proposes the inclusion of two Senior IT Associate positions, two IT Associate positions, and one IT Assistant position to serve the network and desktop technical support needs of the Commons. The Commons will also need support staff to handle circulation functions, process materials, and shelf and maintain the collections. These staff recommendations do not deal with security, custodial, or facilities support. In planning for service staff, NCC should take into account that under the CUNY Libraries’ Open Access Policy, the NCC Library will also be serving some on-site users from the other CUNY schools.
Why information literacy?
Teaching information literacy is an important role for the Commons faculty to play in helping students succeed. The NCC Concept Paper suggests opportunities to introduce information literacy into college programs, while not explicitly naming the term. For example, the Summer Bridge Program (SBP) will “acquaint students with resources available at the college.” It goes on to mention that students will encounter texts, including newspapers, journal articles, policy briefs, census data, etc. All of these seem to imply some information literacy component to the SBP. The Committee recommends that certain basic concepts be introduced during this program as well, such as “What is plagiarism?,” how to distinguish between popular and scholarly works, the basics of evaluating Web sites and other resources, and an introduction to citation.

Again, the first-year program offers opportunities to further information literacy instruction. The Committee recommends the introduction of a one-credit information literacy course as part of the first-year core program. This introduction will serve students well as they progress through their studies. During their second year of studies the Committee recommends that the library subject liaisons work with teaching faculty to integrate information literacy into their courses.

What collections are needed?
The Committee recommends that the new Commons take complete advantage of electronic resources available to help serve students. Digital resources have the advantage of being available to students on demand and will complement the Commons’ other virtual services. The CUNY Office of Library Services already sponsors a core collection of electronic databases that support a broad spectrum of subjects. These collections include newspapers, e-books, e-reference materials, and scholarly journals. Within the CUNY library community there are other opportunities for consortia purchasing of electronic resources that share the cost among several libraries, an option that may assist the purchase of more specialized materials. The CUNY Office of Library Services sponsors an Electronic Resources Advisory Committee with membership from all the CUNY libraries. Participation on this Committee will help inform the new Commons on consortial

33 “Information Literacy, or Information Competency, briefly defined, is the ability to locate, evaluate, and use information to become independent life-long learners. We now live in what is often referred to as the Information Age, a time when there is a wealth of information available to us at every turn. As a consequence, we have found ourselves in a world where information literacy is a set of skills crucial to being an informed, independent, critical thinker.” The CUNY Office of Library Services-sponsored Library Information Literacy Advisory Committee.
34 A New Community College Concept Paper, pg. 15.
35 Boff and Jonson (2002), in their article on the first-year experience, write, “...this research is encouraging in that it indicates that the majority of FYE (First-Year Experience) programs (86 percent) included in this survey sample have some type of library component..."
opportunities for the purchase of electronic resources.

The Committee recognizes that there is still a need for those print sources not yet available in other formats. The print collections will fall into two areas: textbooks and monographs. The textbook market presently offers limited access to electronic formats. Some titles are not available, and some are available electronically for individual purchase only. Many publishers have not yet determined how they want to deal with electronic books for the library market. The CUNY Textbook Initiative (2009/2010) has encouraged libraries to explore all options. The Committee recognizes that the e-book/e-textbook market may change very quickly in the next two years, making digital textbooks more feasible, but for now the Commons may need to invest in textbooks to support students.36

There is an opportunity for the library liaisons and the instructional designers assigned to the academic departments to assist faculty with the selection of electronic information sources that could substitute for the use of commercially published textbooks. Library liaisons can help teaching faculty explore these open access materials. Collaborations with librarians and instructional designers may also help faculty design their own open access materials. Librarians can help faculty navigate creative commons and copyright issues. In addition to advancing the goal of easy, mobile access to e-collections, the effort has the potential of yielding a substantial savings to students.

Monographs—the second type of books in a collection—are not available in any digital format. We hope to see book collections developed through the collaboration of librarians with subject department faculty. This liaison work should start during a program’s curriculum development phase so materials can be in place to support classes. Librarians can help faculty identify materials that can support their curricula.

The Committee further hopes that when the requirements for textbooks and monographs are met, some consideration can be given to the development of a leisure reading collection. This collection will help support the mission of the proposed Literacy Center. Collection development should also involve acquiring media items to support curriculum. Recorded books may also be needed by students with disabilities.

It is important to note that physical collections may still be required by accrediting agencies. The Appendices section of this report shows the New York State Education Department requirements and Middle States’ material that mention libraries and their

36 The Commons can also utilize electronic reserve systems like E-Res to provide materials electronically. This model can assist with access to articles and book chapters.
collections. In addition, certain program-specific accrediting agencies may have requirements that may inform collection development.

**What kinds of assessment will be needed?**

The Commons will need to periodically evaluate all its services to judge their effectiveness. The Committee reviewed the types of assessment tools currently used by academic libraries and concluded that the Commons may have to use more than one method to evaluate its services. The first method would be to use student surveys to judge user satisfaction. The discussion referenced the CUNY Student Experience Survey, which is applied every two years and includes three library satisfaction measures that address facilities, services, and collections. Because of the broad approach it takes, the Committee felt that other measures would be needed. The Committee considered the use of LibQual, a standardized tool developed by the Association of Research Libraries. The CUNY Office of Library Services sponsored the use of this test across all CUNY Libraries in 2005; therefore, the institution has experience using it. LibQual does require an investment of money and staff resources. The Committee also reviewed the potential need for the college faculty and librarians to develop rubrics together to address aspects of the Commons services relating to its effective dissemination of information literacy skills.

In the Committee’s view, judging the effectiveness of the concierge desk approach to services must rely on the participation of all the student services for which the desk will serve as a referral point. Student focus group discussions were proposed to help determine the success of the concierge service approach or the need to adapt or provide additional services. The Committee discussed the recent trend for academic libraries to recruit “user experience librarians” versed in outreach, marketing of library services, and the tools that measure effectiveness. While the Committee could not agree on the need for such a position at the outset of the college, it does recommend that a librarian act as liaison to the proposed Office of Institutional Effectiveness and create a dialogue about the best ways to accomplish assessment.

Another aspect of assessment will naturally be the need to meet standards imposed by accrediting agencies. The immediate need will be to meet the requirements imposed by the New York State Department of Education. Consideration also must be given to Middle States standards for library services. When reviewed by the Committee, neither of these agency standards appeared beyond the capabilities of the proposed Commons. Potentially, some disciplinary accrediting agencies may also require standards that will have to be

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37 See Appendix A.
addressed as subject programs are developed.38

**What will some of the roadblocks be?**

The Committee recognizes that every new recommendation and proposal has a potential roadblock. Many roadblocks already exist for CUNY community colleges, most of them related to limited resources that affect both digital and print collection development, the ability to keep up with technology, the need to attract faculty with the right expertise, and space challenges. These issues will be equally important for the NCC.

There will be other challenges as well. Much of the work of the Commons will rely on strong collaborations with subject department programs. It is hoped that the NCC environment will foster such collaborations and that faculty will be open to such relationships. It is easy for a sense of territorialism to prevail over subject specializations that may hinder the development of true partnerships.

A timeline for the procurement of furniture, equipment, and collections will have to be carefully developed and followed in order to have the Commons in place for students when the school opens. The creation of a timeline also applies to the hiring of faculty for collection and curriculum development.

**Conclusion**

The Committee would like to conclude its work with two final recommendations. The New Community College will probably first open its doors in a temporary site. The Committee recommends that it fall to the new Chief Librarian to translate the recommendations made here into a working Commons. It is hoped that all the best aspects of the proposed Commons be established from the beginning, even if in temporary quarters.

A second recommendation concerns an unfulfilled goal. The Committee hoped to have a focus group of students respond to some of its proposals. It was not possible to realize that goal during the Committee’s term of service, but it is hoped that such interaction with students can take place in the near future.

Finally, the members of the Committee wish to express their appreciation for the opportunity to participate in the NCC Initiative. Everyone learned from the experience, and all hope to share that with colleagues at home campuses.

38 Refer to the Appendix A for statements of standards. The CUNY LILAC Committee has compiled a useful list of discipline-specific requirements at: [http://web.cuny.edu/academics/library/OLS/LILAC/standards.html](http://web.cuny.edu/academics/library/OLS/LILAC/standards.html).
PART II. BUILDING AND SUSTAINING COMMUNITY AT NCC THROUGH TECHNOLOGY

Introduction
The Committee was charged with developing “a roadmap for using technology to connect students and faculty – with each other, with the rest of the college and its partners, and with any academic and professional resources they need for scholarly, professional, and social purposes, at anytime and from anywhere.” The fundamental core for this roadmap is the application of technology to achieve community: a unified sharing of resources that helps students engage in successful learning and social bonding. NCC will employ an integrated set of information communication technologies to provide a Virtual Community (VC) that students will enter from their initial contact with the college, benefit from as they progress through their studies, and use to remain linked to the college and each other as alumni. The VC will be a social network that extends the goal-directed, student-centered service orientation of the physical community of the NCC campus by offering students immediate, one-stop access to information and services critical to their academic and professional success, as well as proactive support from one another, faculty, staff, external partners, and as time passes, the NCC alumni. The VC will support collaboration among all the college’s stakeholders and foster a level of campus engagement that fulfills curricular goals.

The Virtual Community: Design Principles
During the Committee’s discussions, members found it helpful to consider what the technology experience at NCC will not be, as a means of identifying the recurring problems with traditional technology deployment in higher education that NCC should avoid. The common hierarchical system of IT governance should be abandoned in favor of a model that promotes a shared or symbiotic relationship between IT and its users and eliminates organizational silos. Toward that end, the Committee recommends that technology professionals be part of the instructional team so they develop a personal stake in student learning outcomes. Moreover, one of the initial implementation tasks should be the establishment of an ongoing planning process to guide technology change beyond the opening of the college. Technology services and tools will be developed and deployed based on concern for how they will advance all aspects of the NCC experience: enhancing instruction, improving business practices, furthering student life, and strengthening external partnerships. The process will involve students in a meaningful way and will be evidence-based in that decisions will be based on the analysis of student academic outcomes and user perceptions collected while the technology is being used.

In higher education environments, the ability to use technology too often requires an incremental addition to one’s user privileges, often only after a user has requested permission. The Committee recommends that to the fullest extent possible, the
communication technologies that comprise the VC and the larger campus IT environment will be easily accessible by all stakeholders without having them obtain special permissions or approvals.

The VC will be developed to match the communication technology practices and information needs of the students it serves. The students who enter NCC will be from a general population that increasingly reads or writes blogs, uses social networking sites or software/storage sharing devices on the Internet (also known as “cloud computing”), and participates in online messaging. Consequently, the VC will have the following basic features:

- **Mobility** - The VC will be designed around mobile communication. The tools that constitute the VC will be optimized for access via mobile devices. Moreover, faculty and staff will be provided with the mobile communication devices necessary to conduct their business with students and other stakeholders, along with the training and support such a commitment requires. While preserving the security of non-public information in the VC, the college will utilize “cloud computing” to advance user mobility.

- **Proactive assistance** - The VC will use student profiles and information from their e-portfolios and academic records to proactively offer students institutional information and support. In the same way that Amazon.com recommends book titles based on user preferences, NCC may use the VC to recommend internship opportunities based on student needs and interests, alert them to administrative deadlines, and anticipate their need for other types of assistance.

- **Ease of communication** - The information communication technology environment at NCC will be designed to enable faculty, students, and staff to engage with one another and with external partners easily at any time and from anywhere. It will be a routine course of business to initiate one-to-one or multi-party Web conferences and produce multimedia content effortlessly. By having access to a full range of communication technology options (e-mail, SMS, podcasting, blogging, RSS feeds, Web conferencing, etc.), users will be able to choose the preferred mode of communication based on what is most suitable for the message, rather than basing a decision on the relative difficulty of using the technologies.

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• **Collaboration** - A hallmark of the VC will be its ability to foster user collaboration that extends beyond course, program, class year, and institutional boundaries. At all points in the academic experience, students will be able to use computer-based collaboration tools to work with one another, as well as with faculty, staff, and external partners. The VC will also support faculty work on the ongoing revision of the first-year core program. It will be used with external partners so that students engaged in their Professional Studies coursework and internships will be able to work remotely with them. The exceptional value of the VC will lie in its ability to identify opportunities for collaborative relationships that users might not have recognized on their own. For example, the VC will not only provide students with access to all the application software required for their coursework, it will offer them the opportunity to consult with peers who are users of these applications.

• **Support for assessment and corrective action** – The VC will, of course, supply faculty and staff with the data they need to perform assessments of programs and student performance at individual and group levels in coordination with the Center for College Effectiveness. Moreover, the role of the VC in assessment will extend beyond providing a data warehouse for reports and analysis at milestone (“high-stakes”) events. A distinctive feature of the VC design will be the recognition that formative assessment is an active, continuous process integrated into other routines and processes. Consequently, the VC will identify problems when they occur (and to some extent, anticipate them) and provide data and communication mechanisms to help users remedy them. In addition, the VC will capture attitudinal feedback or the value judgments that users make about what they are doing while they are doing it.

**Components of the Virtual Community**
The VC will be developed around a set of technology tools that minimally includes those listed below. Although each item is readily available at this time, what will distinguish the VC will be: (1) the degree of integration that permits information and functionality from each system to be accessible across all components; (2) the use of this integration in the design of the VC to anticipate and address factors that may impede student success; and (3) the design of the VC as not simply a portal but a social network that links individuals who can help one another, thereby fostering a sense of community support across the college.

For students’ convenience, their unified entry point will ideally be the CUNYfirst Student Center, which delivers some of the self-service functionality outlined in the requirements below. For faculty and staff, CUNYfirst would also be the logical entry point, as they will be using it to perform related administrative functions to support students. However, the Student Center is not likely to be available to the developers of the VC in time for the
opening of NCC; therefore, an interim student service portal may have to be developed, perhaps using Blackboard.

- **E-portfolio** – This will be the focal point of the student’s interaction with the VC, because it provides an opportunity to deliver access to tools within the context of her or his individual needs for academic success. For example, students may access tutoring services or library assistance through other paths (e.g., departmental Web pages), but these services will be presented in a student's personal e-portfolio in relation to a specific need that has arisen, such as poor exam performance that might be remedied by a tutoring session or online library tutorial. In addition to documenting achievement as a student progresses through the program, serving as an assessment tool, and offering a portfolio of work product for potential employers, the e-portfolio will serve as a comprehensive academic planner, including a degree audit function.

- **Learning management system** – This component of the VC organizes access to students’ course materials, supplementary readings (e-reserve), and opportunities for independent learning (e.g., library digital collections, multimedia learning objects from MERLOT,40 and textbook ancillaries). Blackboard will likely remain the default learning management system for CUNY when NCC opens. The Committee recommends that three steps be taken to achieve the most from Blackboard, if it is the system that will be adopted:

  1. **Promulgate standards for course sites.** NCC should require a Blackboard site for each course and provide standards for the minimum content. This objective could be achieved through a collaborative faculty-student-staff planning committee that addresses Blackboard use within the larger context of course materials standards, such as course syllabi and textbook selection. For example, if the college develops a template for faculty to inform students about expectations regarding academic integrity, course requirements, grading policies, and class participation, it may stipulate that the learning management system is a required distribution of course syllabi. The college may decide that each course site should contain certain basic elements such as a syllabus, e-reserve content delivered by the library, grade books, and textbook information.

  2. **Address NCC goals and needs.** Given the interdisciplinary nature of the proposed NCC curriculum, the learning management system should support the ability of students and faculty to collaborate across courses, such as the linked

40 MERLOT is a Multimedia Educational Resource for Learning and Online Teaching (see http://www.merlot.org/merlot/index.htm).
courses in the NCC second-year experience. The learning management system should also allow students who will be pursuing admission to a CUNY senior college to obtain guest access into courses in their intended programs to gain a better understanding of the future expectations that will be placed on them. In both cases, Blackboard, as currently deployed, does not perform these functions well. The implementation team will have to determine the extent to which workarounds are suitable or if the use of complementary systems is required.

(3) Emphasize faculty development. To take full advantage of the tools that will be provided and to achieve the type of integration the Committee recommends, the NCC will need to invest heavily in faculty development and an organizational culture that provides incentives and rewards for faculty who invest their time and effort in the use of technology in teaching. These two areas are discussed in greater detail in the next section of this report.

- **The Commons** – The Commons will provide one-stop access to support services and information resources, including access to services of partner community-based organizations. Although one of the design principles of the VC is to optimize student self-service through tool integration and user-centered design, students will nonetheless need direct human assistance with navigating the administrative processes of the college. To handle this situation, the Committee recommends the adoption of a concierge service model that has a face-to-face service point on campus in the Commons along with a presence in the VC. The “concierge” will be a customer service-oriented staff member who can interpret a student’s need for institutional service, resolve first-level requests for information through access to information resources, and make suitable referrals to college and external partners.

The technology to support concierge-level assistance will include a campus-wide scheduling system for faculty office hours and support services, so that the concierge may not merely refer a student to someone for assistance, but take the additional step of arranging a specific appointment when appropriate to the problem. In addition, a ticketing system will enable the concierge to submit help requests and direct them to appropriate staff. The ticketing system will enhance the quality of student service through the collection of data on requests (such as recurring problem types, throughput times, and quality of responses) that will be analyzed to identify improvements in information, business practices, and training needs. Students will be supplied a ticket number to follow-up on the progress of a request.

The Committee designated the one-stop student service as a Commons to emphasize the college community’s collective engagement in mutual support. In addition to the
A concierge, any staff member who works at a service point will be able to create a help ticket for a student concerning any service when a physical referral to the primary service provider for that inquiry is not possible. In this way, every member of the NCC staff will have a stake in and take responsibility for providing assistance to students at the point of need. The Commons will also incorporate access to support from faculty, fellow students, and external partners.

- **External partnership development** – This component will organize the opportunities for internships and placement, enable students to understand professions (e.g., simulations or games that provide virtual reality experiences of workplace environments, a library of information about employers and professional organizations, a video of a day in the life of a working professional), and offer structured opportunities for establishing contact with partners (Webinars, online chat office hours).

- **Application software** – The software that students will need for their academic work will be conveniently accessible to them both on and off campus from one location. NCC may need to distribute access through a secure platform such as Citrix.

- **Communication tools** – NCC will provide students, faculty, and staff with ready access to a full range of communication tools\(^{41}\) and a shared calendar/scheduling system that will permit students, faculty and staff to schedule meetings and reserve meeting rooms, study rooms, conference space, and equipment.\(^ {42}\) A standard content management system will enable faculty, staff, and program administrators to create college-hosted Web pages.

**The Campus Environment**

There are identifiable features of the campus environment that will be necessary for the use of technology, as proposed in this report, to have the intended impact. An organizational culture must be established at the outset regarding the critical role of technology in the service of NCC’s goals. That message should be communicated from the recruitment staff and reinforced through organizational policies and procedures. The campus environment must have the necessary technologies in place and maintained,

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\(^{41}\) Communication tools would include e-mail, blogs, wikis, podcasting, IP telephony, Web conferencing (e.g., GoToMeeting, WebEx), asynchronous discussion boards, chat rooms, IM, and SMS, as well as collaboration software (e.g., Sharepoint, Google Docs).

\(^ {42}\) The Committee assumes that a property management system based on RFID tagging would facilitate locating and loaning equipment.
refreshed, and kept up-to-date, as well as replaced when emerging technologies offer new opportunities or preferred solutions.

- **Organizational culture** - From its inception, NCC will project an institutional commitment to the application of technology to achieve its goals. This commitment should be evident in hiring decisions, the incentive and reward systems for employees, the use of technology in instruction, and the technology environment it provides for its stakeholders. The recruitment process for faculty and staff should consider a candidate’s professional commitment to using technology and demonstrated skills in prior work experience as critical factors in the hiring decision. Once hired, there should be incentives such as faculty and staff reassigned time for individual and collaborative development of innovative use of technology to teach or make business practices more efficient and consistent with organizational goals. The reward system for faculty and staff, including promotion, will support this culture.

- **Facilities** - The effectiveness of the VC depends on a strong information technology environment on the physical NCC campus, so that students, faculty, and staff may work seamlessly across both realms. The elements of the campus environment will include:
  - wireless access
  - multimedia viewing areas
  - smart classroom technology\(^{43}\)
  - smart ID cards\(^{44}\)
  - kiosks
  - laptop workspaces/lounges
  - multimedia conversion and editing stations
  - e-textbooks and digital collections
  - assistive technology campus wide

The success of the VC will also depend on student-wide ownership of mobile computing and communication devices, as well as off-campus access to the Internet, ideally broadband access. Moreover, NCC would need to maintain an equipment refreshment cycle that is consistent for faculty, staff, and students.

- **User training and support** - The importance of user support and training as part of the campus technology environment cannot be overstated. It is recommended

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\(^{43}\) At the time of writing, the components would include an instructor’s lectern with computer with multimedia player, projection (including wireless projection from a tablet PC), sound amplification, document camera, iPod connection, recording facility, Web casting, response system (“clickers”), and ports for portables and peripherals. Power outlets should be located at each student seat.

\(^{44}\) Each user’s ID card should not only enable access to facilities and services (face-to-face and online) at all CUNY campuses, but also permit the institutional collection of longitudinal student data for assessment purposes, simplify user authentication, and facilitate follow-up with regard to service request tickets.
that the NCC use the communication tools outlined in this document to provide effective user training and support services to all stakeholders. Packaged tutorials and a knowledge base will have to be supplemented with technical support accessible anytime, anywhere through the full range of communication technologies that users expect.

The Committee recommends that NCC adopt an IT staffing model that focuses on hiring technologists who will serve on teams engaged in the direct support of instruction. The Committee expects that the college will be able to minimize its investment in back-office technical support staff due to: (1) taking advantage of “cloud computing”; (2) relying on the delivered functionality of CUNYfirst for its administrative systems; and (3) outsourcing and partnering with other CUNY institutions for some types of technical support, such as help desk services.

In addition to delivering training and support from technology professionals, NCC will promote peer support among students, faculty, and staff. Consistent with the principle of community that guides this communication technology plan, users will share knowledge, collaborate on solving problems, develop social bonds, and establish formal and ad hoc communities of practice around the use of technology through the VC.

From the time of their initial orientation, staff members need to understand how the VC communication technologies serve the core values of NCC. A staff training program is the first step toward realizing the effective use of these technologies, but the ultimate success will derive from daily use, which requires a commitment from all levels of management. Ongoing support should include creative activities that engage staff, revisiting how the technologies are used, and brainstorming about how to keep their use consistent with institutional goals.

- **Faculty professional development**

  Faculty support for teaching with technology should be provided proactively across the stages of course development, delivery, and assessment. Faculty members need to be made aware of the possibilities open to them. The technology environment as envisioned is intended to be highly flexible and offer numerous options; therefore, faculty will need assistance with selecting and integrating their tools. They will need assistance with the design of their courses to incorporate the technology to meet their learning goals. They will need training that is available at the point of their interest in exploring a technology, not just when it is scheduled to be offered. Similarly, ongoing assistance to faculty should be provided through a range of options that best suit their needs, including online tutorials, podcasts, Webinars,
phone assistance, and chat sessions. In the same way that student profiles will help NCC anticipate their needs, instructional technology support staff will be proactive due to the knowledge they will have regarding each faculty member’s interests and abilities. Technology fellows will provide one-on-one support within a course, such as those engaged in assisting faculty in the CUNY Honors College. Through blogging and other communication tools, the VC will enable faculty to maintain an ongoing dialogue regarding instructional technology so that they may share ideas, materials, and techniques.

Beyond the need for technology support, the VC will provide faculty with the linkages they require with one another and with external colleagues to advance their teaching, research, and overall professional development. NCC will attract faculty with a strong commitment to student success and an interest in the type of creative experimentation associated with the establishment of a new institution with the goals outlined in the Concept Paper. The VC will provide them with an online environment for locating potential collaborators, developing materials and programs with others, and partnering with other institutions.

The Role of the Virtual Community across the Student Experience

- **Application and administrative support** – Beginning with a prospective student’s first interest in attending NCC, the VC conveys the strong sense of community support that distinguishes the college. The VC is a place where students receive not only information about the application process and curricular requirements, but also an opportunity to interact with faculty, staff, and students about academics, campus social life, support services, and NCC’s partnerships. They may participate in Web-based open houses, chat with students in their potential majors, download multimedia samples of class sessions, find campus events, read student blogs, and explore the campus through virtual reality environments. Although they are considering only an application process, they can register for access to community-building features of the VC that extend beyond the media-rich information available to the general public on the NCC Web site. Within the VC they will also be able to receive assistance from financial aid advisors to ensure the support they will need to attend NCC.

To gain an understanding of course requirements and expectations, they will be able to peek into selected real-group coursework assignments in the learning management system. Through the VC, applicants will be able to create the fundamentals of their personal educational plan in the e-portfolio and begin building relationships with faculty and staff through the synchronous and
asynchronous communication services (chat, SMS, Webinar, Skype, etc.) that will be available. The e-portfolio will contain the results of their diagnostic assessments, which will be linked to resources for remediation, such as online tutoring, practice exams, Web tutorials, and other online learning tools.

- **Academic support** – During the Summer Bridge Program, the e-portfolio will link to course materials in the learning management system, so that a student can begin to map progress to her/his degree. The VC will help eliminate the “separation of student services from classroom learning” by informing students of the services provided by partner CBOs, keeping them in close contact with their academic advisors, providing alerts about upcoming events, and scheduling academic and coursework due dates in a comprehensive calendar.

The VC will provide complementary tools for the learning management system to extend its general functionality and support for interdisciplinary work. Faculty and students will be able create and annotate video as part of coursework. City Seminar will be supported by tools such as a blog and a public space for the e-portfolio; faculty will also have the ability to do Web conferencing with students (or other faculty) who are participating remotely or with corporate or government individuals who may be part of the course. The VC will support virtual visits to work sites connected to the case studies. In addition, courses that are “linked” will need similar access to shared space and remote conferencing for collaboration. The faculty-student interaction at the conclusion of the first semester will be enhanced through communication tools such as digital recordings of faculty assessments that may remain within a private area of the student’s e-portfolio for review at a later date.

In the Professional Studies course, students will be working in small groups to solve a problem identified by partner agencies or businesses. The VC will not only provide the tools for them to work together, it will present the case study materials in media-rich formats that link with the relevant digital library collections to support their research. It will give them an opportunity to confer with the external partners beyond the confines of a site visit so they understand how each organization conducts its business.

As students move into their major, courses that are heavily technology-related or require extensive field work or “place-based learning” will need access to

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45 *New Community College Concept Paper*, pg. 17.
application software specific to the major (statistical and GIS systems, for example), and to hand-held remote devices for data collection and field work notes. As part of the curriculum development and re-assessment processes, instructional technology staff should consult with faculty to determine what tools are necessary to support the needs of specific programs.

The communication tools of the VC will contribute to achieving cohesion within the cohort learning communities. They will be able to work together across course boundaries, maintain social ties with colleagues who share academic goals, and produce materials that may be preserved and shared with the NCC community. As students advance through their second and third years, their use of the VC will increasingly involve communication with institutions they expect to join after completing their work at NCC. Students planning to enter a CUNY senior college will have access to consult with faculty members in their intended majors and sample their podcasted lectures and course assignments. To facilitate their transition to their target CUNY schools, students will be able to build social relationships with other CUNY students who share their interests and join student organizations as a guest affiliate.

- **Student activities support** – In addition to supporting the academic and administrative dimensions of the student experience, the VC will contribute to students’ engagement in the social life of the college. Student clubs and interest groups will all be represented in online communities. Events and activities will be included in the online calendar system with RSS feeds by category of event, with easy access for the NCC community to sign up for an event and post to individual calendars within a community calendar system. The integrative design of the VC will allow for linkages to be made between student social activities and academic goals. For example, students who include a likely major or career in their profile will be alerted to events tagged as relevant to those goals. Students who have academic challenges will be notified about student clubs and special interest groups that could provide peer support.

- **Career support** – Students preparing for an internship placement will need appropriate technologies to interact with the Partnerships Office and with the internship personnel at the office for the remote placement. A blog of past students’ experiences and a wiki to help students navigate through a new set of corporate terminology would be of great assistance to a student faced with so many choices. Of course, the blog and wiki participation of students who are already doing or have done an internship is vital to establish a large base of experiences. These collaboration tools will prepare students for their careers.
• **Alumni support** – The VC will extend the NCC experience beyond the completion of a degree by continuing as a life-long link to the college for alumni. Alumni will update the e-portfolio after graduation for job seeking and as a professional resume. They will retain access to certain areas and functions so that they may preserve social ties and remain engaged in the life of the college. The VC will enable alumni to serve as mentors to students and host internships once they are established in their professional careers. Their continuing association with NCC through the VC will serve as a reminder to current students that academic success is readily attainable due to the support community around which NCC is established and the VC exemplifies.
Co-Chairs
Jane Devine, Chief Librarian, Library Media Resource Center, LaGuardia Community College

Arthur Downing, Chief Information Officer, Associate Vice President for Information Technology & Chief Librarian, Baruch College

Members
Consuella Askew, Associate Professor & Chief Librarian, Graduate School of Journalism

Monica Berger, Associate Professor & Technical Services and Electronic Resources Librarian, New York City College of Technology

Curtis Kendrick, University Librarian

LaRoi M. Lawton, Assistant Professor & Deputy Chief Librarian, Library & Learning Resources, Bronx Community College

Ken Lord, Lecturer, Computer Science Department, Queens College

Advisor
George Otte, Associate Dean for Academic Affairs, School of Professional Studies & CUNY Director of Instructional Technology

NCC Liaison
Paul Russo, Project Manager
Julian Hayes, Research Associate
This Committee recommends the NCC expand the traditional roles of librarians in the educational model and create a media-rich technological environment (the Virtual Community). These are some of the issues that should be addressed in the next steps in the development of the NCC:

- The staffing recommendations in this report need to be added to the recommendations of other committees and reconciled with available resources.

- The NCC will need to carefully consider privacy rights as it constructs and operates in a technologically pervasive environment.

- How does the NCC, through ongoing strategic planning and professional and staff development, assure that technologies truly serve to enhance student learning?
CITY SEMINAR AND PROFESSIONAL STUDIES COMMITTEE REPORT


Schwartz, M. S., Sonnert, G., & Tai, R. H. (December, 2008). Depth versus breadth: How content coverage in high school science courses relates to later success in college science coursework. Science Foundation.


MATH TOPICS COMMITTEE REPORT


**Assessment and Portfolio Committee Report**


**ENROLLMENT AND PERSISTENCE MANAGEMENT COMMITTEE REPORT**


Center for Community College Student Engagement. (2009). *Making Connections: Dimensions of Student Engagement (2009 CCSSE Findings).* Austin, TX: The University of Texas at Austin, Community College Leadership Program.


APPENDIX

FIRST YEAR EXPERIENCE WORKING COMMITTEE

COMMITTEE MEMBERS

Chair
John Beaumont, Assistant Professor of Developmental Skills, Borough of Manhattan CC

Members
Steve Amarnick, Associate Professor of English, Kingsborough Community College
Nancy Aries, Interim University Dean, Undergraduate Education Programs
David Brown, Student and ASAP Graduate, LaGuardia Community College
Linda Brown, Staff Developer, John Adams High School, NYC Department of Education
Jeanne Galvin, Professor & Chief Librarian, Queensborough Community College
Sonja Jackson, Dean of Curriculum & Instruction, NYC College of Technology
Yasemin Jones, Undergraduate Education Programs Manager, Office of Academic Affairs
David Judelson, Adjunct Professor, School of Architecture, the City College of New York

Advisor
Cheryl Williams, Assistant Dean, SEEK & College Discovery Programs

NCC Liaison
Dolores Root, Senior Director for the Educational Program
FACILITIES & PHYSICAL INFRASTRUCTURE WORKING COMMITTEE

COMMITTEE MEMBERS

Chair
Meghan Moore-Wilk, Director of Space Planning

Members
Steve Delgado, Associate Dean, Facilities, Campus Planning & Operations, Hostos Community College

Marcus Felder, Analyst, Facilities Planning Construction & Management
David A. Krauss, Assistant Professor of Science, Borough of Manhattan Community College
Helen Mele Robinson, Assistant Professor of Education, College of Staten Island
Christopher Rosa, University Assistant Dean for Student Affairs
David Salmon, Assistant Director, Design, Construction & Management

Consultant
Scott Page, Higher Education Space Consultant, Space Planning
Laurence Mucciolo, NCC consultant

NCC Liaison
Stuart Cochran, Deputy to the NCC Project Director
APPENDIX

CITY SEMINAR AND PROFESSIONAL STUDIES WORKING COMMITTEE REPORT
APPENDIX A: CITY SEMINAR AND PROFESSIONAL STUDIES COMMITTEE PROCESSES

The eleven-member Committee and one advisor came together for the first meeting on October 4, 2009 to start planning City Seminar and Professional Studies. Collectively, the Committee represented a variety of expertise in different disciplines, humanities, social sciences, sciences, mathematics, and developmental skills, including people with extensive experience in literacy and developmental learning and one educator from the public sphere who brought expertise in community partnerships and program development working with urban youth. Another participant from the public sphere resigned because of an unanticipated scheduling conflict. A student from BMCC joined the group in November. The Committee produced substantial work in face-to-face meetings and between meetings during the period between October 4, 2009 and January 11, 2010.

For the most part, participants did not know each other prior to their participation on the Committee, yet early in the process participants came to respect and appreciate each other’s expertise. With this mutual respect came recognition of the power of collaboration for creating new ways of designing a college curriculum. The Committee worked collaboratively, guided by a shared commitment for developing engaging, rigorous foundational courses that will build students’ skills and confidence as learners, sense of belonging to the academy, capacity for self-reflection, sense of possibilities for their futures and career paths, and engagement with the city as a place of inquiry and a place they will actively shape as workers and citizens. The Committee’s preference was to work together as a whole group or in pairs, small groups or teams. Its collaborative process demonstrates the kind of practice essential for development and implementation of NCC’s core curriculum.

Defining the Work
The Committee’s first set of tasks involved building an understanding of the students for whom we are developing the courses, predominantly adult developmental learners, some of whom will be English Language learners, and how to motivate and actively engage these students in learning and in taking responsibility for their own learning. To perform the work of the Committee, we had to increase our familiarity with the structure and organization of the foundational courses as they are envisioned in the Concept Paper, understanding blocks, modules, case studies, components of City Seminar, and the relationship between City Seminar and Professional Studies. Defining the components of City Seminar, their integration and the intersection between City Seminar and Professional Studies were key aspects of the Committee’s work.

At the first meeting there was general agreement on New York City as the object of inquiry for both courses. It was proposed that City Seminar would focus on the ways the city works – its structures and institutions – and Professional Studies would focus on workplaces. At the end of the first meeting, three people volunteered to draft a module to explore the potential of the overarching theme, worlds of work,
and to identify learning goals and outcomes. Thus began a working method adopted by the Committee, using concrete examples to distill knowledge, skills, and practices, which in turn, led to the creation of a framework and design principles for each course.

Importantly, the Committee spent considerable time defining and crystallizing what we want students to know and be able to do by the end of each course and identifying the structures that would best support this learning. Our approach was to identify essential curricular elements, moving back and forth between defining a particular element and explaining to ourselves how the elements might be integrated into a framework. Through this iterative process we established the building blocks for City Seminar: learning goals, key assignments for which students demonstrate knowledge and skills, structure and progression of case studies, progression of skills, and the integration between the case study and the Reading and Writing (English) and Quantitative Reasoning components. In developing these building blocks, we addressed the ways modeling and repetition can increase depth of understanding and the importance of developmental learners’ practicing skills and applying knowledge and skills to new content. The building blocks became the foundation on which we developed the prototype modules for City Seminar and Professional Studies.

**Building Modules**

The purpose of building prototype modules was two-fold: 1) to test our ideas for how to construct and use case studies as the primary vehicle for immersing students in discipline-based knowledge, developing their critical thinking skills and their reading, writing, and quantitative reasoning skills, and 2) to address the integration among the learning components in City Seminar and the intersection between City Seminar and Professional Studies. We developed two modules for City Seminar that provide different lenses on the work students will be doing with cases and one module for Professional Studies.

The process of developing modules led us to rethink the length and to depart from the recommendation in the Concept Paper for three five-week modules in semester one and two seven-week modules and an additional week for reflection in semester two. We found five-week modules did not allow sufficient time for students to engage in the rich material and develop a deep understanding of the key issues, questions, and methodologies of a particular area of study. Shifting from three five-week modules for each semester to two seven-week modules plus one week dedicated to reflection required some additional adjustments to the order of case studies and sequencing of benchmark assignments.

Another departure from the Concept Paper is having students in Professional Studies prepare for an internship and work experience in their second year rather than in the second semester of their first year. An important strand in the Professional Studies course is learning about different kinds of work and workplaces relevant to the majors; through these experiences students should be able to make a reasoned decision about choice of major aligned with career aspirations. The team believed that students would be better able to take advantage of a workplace experience once they had chosen a major and area of interest.
APPENDIX B: CITY SEMINAR: FIRST SEMESTER MODULE (BLOCK 1 OR BLOCK 2)

The City Seminar is divided into four 7-week blocks (modules). In the first semester, the blocks (modules) are Public Health and Emergency Services. In the second semester, the blocks (modules) are Environmental Science and Business/Commerce.

First Semester

1. **Public Health.** This block studies the historical emergence and institutionalization of New York City’s Department of Public Health & Mental Hygiene in response to the scourges of major diseases in the 19th century, particularly yellow fever and cholera, with a focus on epidemiologists and public health officials. The module moves into the 20th century and analyzes the city’s response to the Spanish Flu of 1918 to provide an early 20th-century data point in the development of municipal response to major crises. It then studies in detail the origins and trajectory of the HIV/AIDS epidemic with particular attention to the experiences and perspectives of several key groups who are often at odds: medical practitioners tracking and treating the disease; municipal authorities shaping and enforcing policies to protect the public; the changing roster of groups of victims principally affected by the disease; and different advocacy groups who demand resources to meet their own perceived needs. As do all the other blocks in the City Seminar, the public health module helps students think historically, comparatively, and analytically about an important profession, major institutions in the city, and the highly contested process that characterizes the allocation of municipal resources.

2. **Emergency Services.** This block studies the habits of mind of various first-responders to immediate crises in New York City. The key groups analyzed are: firefighters, emergency medical technicians, and police detectives. The block looks at the history of volunteer fire brigades in early New York up to the establishment of the paid Fire Department of New York in 1865. It then analyzes the development of the FDNY and the extension of its authority into all five boroughs. It looks at how the largely private occupation of emergency medical technician was eventually incorporated into the FDNY. Finally, it looks at the emergence of the detective division of the New York City Police Department and that division’s growing responsibility in the 20th century to investigate violent crime in the city, with particular reference to homicides. Throughout, the module considers: What are the typical habits of mind of first-responders to major crises? What are the typical responses of administrative bureaucracies to such crises? How do such responses, always highly politicized, shape the dynamics of first-responder organizations and the experiences of first-responders themselves? Every big city must respond to certain emergencies—fires, medical emergencies of individuals, and homicides are singular examples of breaches of public order. The module alerts students to the extremely complicated workings of essential public services.
In Public Health, students would learn to describe the relevant context surrounding the onset of several health crises with respect to:

- Who got infected – physical surroundings; social habits; beliefs
- City infrastructure: health-related institutions; political institutions; other kinds of community institutions (media; religious; community-based)
- Interaction (or lack thereof) among these
- Initial responses to onset – infrastructural and individual
The suggested sequence of topics for the 7-week Public Health module follows here:

<table>
<thead>
<tr>
<th>WEEK 1</th>
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<tbody>
<tr>
<td><strong>THE WORLD OF MEDICAL DETECTIVE WORK</strong></td>
</tr>
<tr>
<td>▪ Rouche, &quot;Eleven Blue Men&quot;</td>
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<tr>
<td>▪ West Nile Virus in NYC</td>
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</tbody>
</table>

The module starts with two dramatic, attention-grabbing instances of public health crises that illustrate the work of epidemiologists. Rouche’s intriguing case study makes a good beginning because it is clear and focused. NCC staff can develop a terrific case from the plethora of materials on West Nile Virus, which first appeared in New York City in 1999 and remains a threat. Special attention to: the habits of mind necessary to discern/diagnose medical crises affecting groups of people; how to construct a case study that incorporates all necessary information—who, what, when, where, and why—in a cohesive narrative. These cases also highlight how such medical issues are public concerns because they can and do strike randomly and often broadly. Moreover, these classes introduce students to thinking about how lessons learned from historical examples have lessons for the present and future.

<table>
<thead>
<tr>
<th>Class 1</th>
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<tbody>
<tr>
<td><strong>THE METROPOLIS AND PUBLIC HEALTH</strong></td>
</tr>
<tr>
<td><strong>Origins and evolution of NYC’s organized response to public health crises: Yellow Fever</strong></td>
</tr>
<tr>
<td>▪ James Hardie, An Account of the Yellow Fever, which occurred in the City of New York in the Year 1822.</td>
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</table>

Rationale: Classes #2 and 3 introduce students to New York City’s organized responses to public health crises among its citizens by examining the city’s response to several key epidemics. It provides an initial framework for students to understand the highly political process that always characterizes the allocation of municipal resources to address major issues, even those that threaten the common weal.
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<th>WEEK 2</th>
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**THE METROPOLIS AND PUBLIC HEALTH, cont.**

Origins and evolution of NYC’s organized response to public health crises: Influenza


**CONTEMPORARY PUBLIC HEALTH ISSUES**

Class 4

Present students with a range of institutionally-targeted contemporary public health issues and introduce them further to the notion of ’case studies.’ In teams of two, students will select case studies to work on for the rest of the module.

<table>
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<th>WEEK 3</th>
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**The HIV/AIDS Epidemic in New York City, late 1970s to the present.**

Building on the work in Weeks I and II, classes # 5-12 will examine in detail the response of New York City to the HIV/AIDS epidemic from the late 1970s to the present.

This sustained case analysis will begin by examining early clues to the epidemic amidst general puzzlement in the epidemiological community.

- Case studies and reading guides can be fashioned from the plethora of work—scientific, journalistic, and fictional—on the epidemic.
### Class 6

**The HIV/AIDS Epidemic in New York City, cont.**

*Who is Affected?*

Consider the stigmatization of certain groups—especially gay men and, to a lesser extent, Haitians—and the early political mobilization of both groups. Public texts will illustrate the death toll among gay men and intravenous drug users.

- "The Times as it Knows Us," from *The Body and its Dangers: and other short stories*, Alan Barnett

### WEEK 4

### Class 7

**The HIV/AIDS Epidemic in New York City, cont.**

*What was happening at the level of the institution?*

Public Health officials worked to identify the modes of transmission of HIV. Include coverage of the great scares about the city's blood supply and the disposal of medical waste.

- Excerpts from *And the Band Played On*, Randy Shilts, and viewing the HBO film.

### Class 8

**The HIV/AIDS Epidemic in New York City, cont.**

*Initial Responses and Impact on Stakeholders*

This class will explore the city's early efforts to educate the public about HIV/AIDS-prevention, including the politics of decision-making. What was the outcome of the city's attempts to control risky sexual behavior in public gathering places? How did different groups respond?

- *The Normal Heart*, Larry Kramer
- Images and articles re: ACT-UP
<table>
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<tr>
<th>WEEK 5</th>
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<tbody>
<tr>
<td><strong>The HIV/AIDS Epidemic in New York City, cont.</strong></td>
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</table>

*The on-going history of the epidemic*

Explore the development of medications that slow the onset of AIDS and the changing demographics of the epidemic in the 1990s and 2000s, including the documented resurgence of risky sexual behavior in certain populations, despite the city's constant advocacy efforts to educate the public.


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<th>WEEK 6</th>
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<tr>
<td><strong>The HIV/AIDS Epidemic in New York City, cont.</strong></td>
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<th>WEEK7</th>
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<tr>
<td><strong>The HIV/AIDS Epidemic in New York City, cont.</strong></td>
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<th>WEEK8</th>
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<tbody>
<tr>
<td><strong>The HIV/AIDS Epidemic in New York City, cont.</strong></td>
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<th>WEEK9</th>
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<tbody>
<tr>
<td><strong>The HIV/AIDS Epidemic in New York City, cont.</strong></td>
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</table>

*Contemporary epidemiologists. Class visits.*

Epidemiologists from Mount Sinai Medical School, Bellevue Hospital, and the New York City Department of Public Health & Mental Hygiene.

Students will prepare for and then interview guests in public.
<table>
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<tr>
<th>WEEK 7</th>
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<tbody>
<tr>
<td><strong>Class 13</strong></td>
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<tr>
<td>Reflective summary and appraisal of the case study method. Particular attention to the crucial importance of: mastering the historical, social, and institutional contexts of issues; learning the biographical trajectories of key players charged with grappling with those issues; and grasping the intersection between history, social structure, culture, and biographies.</td>
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<tr>
<td><strong>Class 14</strong></td>
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<td>Work on reflective summary.</td>
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</table>
APPENDIX C: CITY SEMINAR ENGLISH COMPONENT

Design Principles for Reading & Writing in the First Year

- Start from the known and work outward. Activating prior knowledge helps students to process texts more deeply, strengthening students’ comprehension and learning.
- Privilege depth over breadth. Teaching for depth helps students to recognize a discipline’s central organizing principles and questions, and to understand which concepts are most important and how to make connections among them. In the City Seminar English class there are relatively few types of activities students engage in, but these address skills and knowledge essential for understanding the case and becoming proficient academic readers and writers.
- Provide models. Through modeling and other kinds of scaffolding, the tacit knowledge of experts is made accessible to “novices.” Modeling allows students to develop skill gradually, through approximation accompanied by feedback. Types of models provided in the English course include instructor “think alouds,” papers written by students, journal questions, question stems and sentence templates modeling academic style.
- Teach students to be meta-cognitive. When students monitor their thinking and learning, they can become aware of difficulties and learn strategies for improving. In the English class, students learn to monitor and repair their reading comprehension, evaluate the kinds of questions they ask, and evaluate their performance on assignments.

First Semester (Block 1 & 2) Reading & Writing Skills

In the City Seminar Reading/Writing course, students will:

- Formulate and answer higher-order questions about the texts they read
- Use text structure to understand textual organization and comprehend content
- Make personal and inter-textual associations while reading and use these to deepen understanding of content
- Use strategies that help them monitor their comprehension, become aware of when they are not comprehending text, and locate the source of misunderstanding
- Take notes using outlines and graphic organizers (charts, timelines, webs, for example)
- Paraphrase and summarize course readings
- Practice outlining
- Practice writing formally using an outline and other graphic organizers
- Write and edit sections of a case-study paper in which they describe the context of a health-related case
Key assignments

Low stakes (weekly scaffolding assignments):

- **Questioning.** Students will be required to keep a “discussion journal” with questions that enable them to look deeply at issues around context. In the early weeks of class, journal questions will be modeled by the instructor; as the class progresses, students will be taught to create questions using question stems that focus on identifying, describing and reflecting on different aspects of context for the case. Discussion journals will help guide and frame their reading. Questions will be phrased to support higher-order reasoning. Students will later use question stem “templates” to create and answer their own and their colleagues’ questions.

- **Annotating text.** Students will re-read texts assigned in their case study class and annotate these with questions, personal associations, textual associations, inferences, etc.

- **Discussion.** Students’ discussion journals and text annotations will be used as the basis of small group discussions related to course readings.

- **Paraphrasing and summarizing.** Students will engage in activities focused on various aspects of paraphrasing and summarizing (identifying important ideas in a text, sentence combining and restructuring, using synonyms)

- **Outlining and drafting.** Students will write from outlines and other note-taking structures, and draft sections of their paper.
# English Component to the Public Health in New York City Module

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Activities</th>
<th>Assignments</th>
</tr>
</thead>
</table>
| 1    | The World of Medical Detective Work | - Students write brief personal accounts of “medical detection,” describing instances of family illness and how they resolved. They share these accounts in small groups and make observations about differences/similarities among them with respect to whether and how they involved others, and who those others were.  
- Class creates list of public health “actors”  
- Students read short (1 or 2 page) article on dimensions of public health  
- Instructor models annotating the beginning of this article with respect to questions and personal associations | - Annotate the remainder of the article  
- Write a journal entry relating the dimensions of public health to the accounts they shared in class  
- Annotate the City Seminar reading on Yellow Fever |
| 2    | The Metropolis & Public Health: The Origins & Evolution of NYC’s organized response to Public Health Crises: Influenza | Instructor models with an event from his/her life and then asks students to:  
- Identify and write briefly about an important event in their lives with respect to what caused it: a) biological ) social and/or economic; c) environmental factors  
- Share in small groups – discuss similarities and differences in context among group members  
- Class reconvenes and discusses the interactions among causes  
- Mini-lesson – teacher models how to recognize textual cues that signal causal information  
- Students add to their YF reading w/ respect to identifying marking different causal factors  
- Discuss annotations in groups  
- Groups choose one salient aspect of discussion to share with class | Annotate next CS reading (on influenza) w/ questions, personal associations, and causes, 2002) pp. 341-355.  
- Answer the rest of the questions in the discussion journal  
- Write initial ideas about one difference in context between the case of yellow fever and the case of influenza  
- Bring in article from CS final project packet that provides an introduction to your own case (students working on the same case bring in the same introductory article)  
- Write personal response to this article and annotate it. |
| **Comparing and contrasting cases** | Students meet in small groups to discuss their influenza discussion journals  
  - Introduce a graphic organizer that helps students to compare the contexts of the yellow fever and influenza cases with respect to who got infected, infrastructure initially in place, interactions among institutions and initial responses to crisis.  
  - Instructor models filling in the chart for one aspect of context.  
  - Students complete the rest of the chart in groups.  
  - Students meet to discuss article for the case they have chosen, using their annotations as the basis for discussion.  
  - Use the influenza discussion journal as a model to write up and answer questions for the article you brought in today  
  - Read and annotate the second article from your final project packet and bring to class |
| **Introduction to The HIV Epidemic in NYC** | Instructor models how to annotate an article by coding for different aspects of context  
  - In groups, students re-read an overview article discussing the early stages of the HIV epidemic in NYC; each group codes for a different aspect of context.  
  - Groups are reformed, to include members from each “expert group” so that all aspects of context are discussed.  
  - Students meet in groups to discuss the article they read and annotated for their final project; they include a discussion about context  
  - Code the second article from your individual project packet for different aspects of context  
  - Annotate your assigned reading from City Seminar. Include annotations about context. |
| **HIV in NYC: Who was Infected?** | What do we know about the early history of the disease?... what is significant – what should be discussed and why?  
  - Preparation for paper:  
    - In groups, students discuss the CS reading, using their annotations as the basis for discussion  
    - Instructor models how to use question stems to formulate questions about people affected or at risk for contracting the disease  
    - Students meet in groups to formulate questions using question stems  
    - Each group chooses one question to work with as a class; teacher models groups exchange questions and try to answer them using the article  
    - Based on all they have read so far, and the notes they have taken about context, the class brainstorms the kind of information they will probably need to include in their final papers  
  - Each group takes notes and practices paraphrasing  
  - Use notes to outline and summarize an article  
  - HW question stems: Read CS article – create a discussion journal focused on 2 aspects of context you think are important |
In classes 6 through 13, students will:

- Continue to annotate their readings
- Practice comprehension monitoring and repair strategies
- Formulate and answer questions in their discussion journals related to
  - descriptions of context and explanations of how different aspects of context intersect and why this is significant.
  - interests, concerns and relative power held by stakeholders
  - engage in “point of view” writing from the perspectives of different stakeholders; students will discuss and write paragraphs describing, comparing and contrasting the points of view of at least two stakeholders

- The instructor will model how to select sections of the text to paraphrase – reading with questions in mind; rereading to look for repetitions and relationships among details; talking the text.
- Students will practice these steps in pairs
- The instructor will model how to use paraphrasing to write summaries of sections of text
- Students will be introduced to the course portfolio rubric and learn to use it to help them revise and edit writing

Students will:

- Analyze model summary paragraphs written by students and identify the parts of the summary (description, explanation)
- Write summary paragraphs related to context and stakeholders.
- Use templates to help them practice paraphrasing with a focus on word and sentence.

In classes 13 and 14, students will reflect on what they have learned in the course through:

- Review of assignments
- Small group discussion
- Written reflection
- Selection of assignments to discuss in portfolio review in the final week of class
APPENDIX D: CITY SEMINAR QUANTITATIVE REASONING

NCC will choose quantitative materials wherever possible that resonate with themes in the City Seminar and the Professional Studies seminar. Using these materials students will investigate, interpret, analyze, and manipulate data using mathematics and make conclusions and recommendations using quantitative and qualitative information.

<table>
<thead>
<tr>
<th>Block</th>
<th>Topics</th>
<th>Learning Objectives</th>
<th>Activities</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Historical Trends of the American Workforce*</td>
<td>- Analyze graphs to interpret data, including misinterpretations and misrepresentation of data</td>
<td>Use simple mathematics to find proportional growth and slope for graphs, text, and data sets</td>
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<tr>
<td></td>
<td></td>
<td>- Calculate slopes of lines segments to answer relevant questions</td>
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<td></td>
<td></td>
<td>- Make comparisons in a written document</td>
<td>Develop proficiency in comparisons: this includes an ability to find faulty data or data irrelevant to the question at hand.</td>
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<td></td>
<td>*See Attachment for expanded guidelines of this Module</td>
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<tr>
<td>2</td>
<td>Using Data Sets</td>
<td>- Analyze multiple graphs and graphs with multiple indices</td>
<td>HIV infection rates in the 2000s, or homicide statistics of the past decade</td>
</tr>
<tr>
<td>3</td>
<td>Analyzing Data &amp; Making a Case for Institutional Action</td>
<td>- Use researched data to develop an argument</td>
<td>Use data provided along with researched data to construct graphs and do calculations regarding the pros and cons of the usage of the Catskills recreation space for development.</td>
</tr>
<tr>
<td>4</td>
<td>Using Data to Make a Prediction</td>
<td>- Draw conclusions and make predictions using quantitative data to inform qualitative findings and make predictions</td>
<td>Make predictions about NYC water usage and availability for the next 10 years</td>
</tr>
</tbody>
</table>
Similar to the reading and writing development that happens in the English section, learning objectives in Quantitative Reasoning are recursive and may be mapped across all the blocks as follows:

<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>Examples of Activities</th>
<th>Block 1 or 2</th>
<th>Block 3 or 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compute and calculate proportional growth</strong></td>
<td>Create a table showing proportional growth over time and make conclusions in writing, using the newly created graphs and compare those results with the original graph.</td>
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<tr>
<td></td>
<td>Compute percentage growth by hand to show proportional growth using the data presented (example: HIV infection rates over time and by age groups).</td>
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<tr>
<td><strong>Read and interpret data tables with 2 or more indices and draw conclusions based on that data</strong></td>
<td>Read and interpret historical data tables.</td>
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<td></td>
<td>Examine tables &amp; graphs of HIV infections by age group and create analytical graphs comparing between / within each age group over time OR compare homicide statistics across boroughs.</td>
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<td></td>
<td>Use historical data tables &amp; graphs – including disaggregated data – to identify the categories and trends in individual as well as cumulative data and compare those to the narratives in the CS section.</td>
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<tr>
<td><strong>Determine appropriateness of graphs and data sets</strong></td>
<td>Analyze different types of graphs to determine appropriate use of scale and units.</td>
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<tr>
<td></td>
<td>Determine whether data sets and graphs provided answer the question(s) being asked.</td>
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<tr>
<td><strong>Use quantitative data (calculated by hand and using Excel) to draw conclusions and support arguments</strong></td>
<td>Examine graph from American workforce data and use qualitative data to deduce rationales for highs and lows in the graphs.</td>
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<td>Make meaningful arguments around a data set, and manipulate the data using calculations like slope, proportion, differences, mean, and mode along with appropriate qualitative data.</td>
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<td>Make conclusions in writing using supporting documents and data.</td>
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<td></td>
<td>Construct a written and graphical argument using financial data to calculate mean, mode, median, standard deviation, and slope and know why / how / when it is needed.</td>
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<tr>
<td><strong>Determine &amp; obtain additional data relevant to construct meaningful graphs to inform researched materials</strong></td>
<td>Working in groups, students will prepare a class presentation on some aspect of water quality in NYC.</td>
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<td></td>
<td>Students will complete a report tied to their CS module regarding the availability and quality of water in NCY and its implications to the Catskills recreation area OR draw appropriate conclusions about a decision affecting the business sector.</td>
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**Expanded Guidelines for The First Semester in Quantitative Reasoning**

In conjunction with Professional Studies and City Seminar, students will spend the first module examining and constructing statistical graphs that illustrate the extraordinary transformation of the American economy in the twentieth century:

1. **The growth of the service economy.** The key data points are: 1900, 1950, and 2000; the key categories are: agriculture, manufacturing, and services. The data will show the massive shift of labor from the farm through the factory to the service sector.

2. **The growth of professions.** With the expansion of the service sector, there has been an exponential growth of various professions. Using the same data points, one might focus here on the ascendancy of managers, lawyers, and highly trained technicians of every variety.

3. **The growth of government.** The extraordinary growth of the governmental sector of the economy—federal, state, and local—is important to understand. Using the same data points, one can chart this development in a number of ways—the sheer number of workers employed by governments, the percentages of GNP that the aggregate salaries of government workers represent, and so on.

4. **Women’s participation in the workforce.** One of the big stories of the twentieth century is the entry of women into workplace, particularly into certain sectors of the labor force. This can be charted in any number of ways using the same data points. Particular attention to the feminization of certain occupations and professions.

**Approach to Teaching & Learning:**

1. Start with concepts that most students know – analyzing a simple historical graph of a sector of the workforce. Students learn to ask questions about the graphs – i.e. what is being compared? What are the units of measure? Do the data and the graph inform the text? Are the data relevant and accurate? Analyze various aspects of that graph. Beginning with an already acquired skill (reading graphs) provides a base from which to tie the quantitative data to the qualitative information in the text. Students explore more deeply the meaning and significance of various parts of the graph.

2. Gain deep understanding of the aspects of quantitative data presented as a table and in graphical form, focusing on one graph and one data set at a time. Students develop proficiency in the comparisons developed by creating coordinates, recognize the significance of high and low points, and the connections between the graphs, the tables and the text. Analysis of data includes an ability to find faulty data or data that is irrelevant to the question at hand.

3. Develop an ability to connect the graph with selected areas of the texts and make contextual arguments in writing for the parts of the graphs, i.e. high points, low points, areas of stability (flat), and great increases or decreases.
4. Using simple mathematics to find proportional growth and slope, the graphs, text, and data set, students draw conclusions and make predictions using quantitative data to inform qualitative findings.

Key assignments:
- **Analyzing graphs:** Use a data set showing the historical trends of a sector of the American workforce and answer related questions. Working in groups, they will examine the high and low points of a graph and using the text and other documents build a case for those data points – i.e. why did this sector of the workforce increase during this time? Why was the increase so great? What factors led to the decrease in this sector of the workforce? Students will answer the questions in writing and in a discussion format.
- **Calculate slopes of line segments to answer relevant questions:** With the same data, examine the steepness of the increases in the graph and use qualitative information to explain why the increase was greater at one time than it was at another. Using two points on the graph the student will compute the slope of the increase and compare it with the slope derived from two points at another interval of increase on the graph.
- **Make comparisons in a written document:** Compare data from the data set with its graph so that extreme points might be found and those points compared to the literature on the workforce sector.
- **Analyzing multiple graphs and graphs with multiple indices:** Use the data sets from the service industry, the professions, government, and women’s participation in the workforce students will work in groups to answer questions regarding the increase and decrease of workforce numbers over time. By hand and using Excel, students will graph all four indices on one graph and use the graph in a report comparing the trends in each sector.

**Key Assignments in Block 2** might include the following, depending on whether students are engaged in the Public Health or Emergency Services module:
- **Group report writing using graphs:** With current data from the module on emergency services, slope, proportion, qualitative data, mean, mode, median. Students will create a group report using data from the second module. The cumulative data will be for group use and categorical data will be for individual use and contribution to the group report.
- **Using data from the various categories of emergency response teams:** Students will calculate means, modes, medians and standard deviations for use in building an argument around the analysis of the data.
- **Development of individual reports:** Using homicide data by category and data from categories of emergency response teams, students compute means, mode, medians, and standard deviations of their individual data to create a report analyzing various aspects of the sectors of the emergency response teams and their relationship to homicides.
Work in groups to analyze historical HIV rates in NYC. Using the text and other documents, students will construct a written argument around the increase and decline of HIV infections over time to include qualitative reasoning and quantitative data. The report should include the graph constructed in excel.

Use the historical HIV rates broken down by a category like age group, socio-economic group, ethnic group, geographic location, etc. Each student will be given an individual data set of categories and common cumulative HIV data. Working in groups, students will create graphs and analyze their data against the cumulative data and against the other indices for trends. Using the text, the group will prepare a report on the findings in the trends, comparing the cumulative data with the grouped data.

Complete an individual report using a table of values, graphs, calculations and the text: Use a data set on HIV infection rates over time and by geographic location and its resulting graph and complete the following:
  - Compare and contrast the growth of the disease within the category.
  - Compute the percentage growth of the disease by category and graph the resulting proportional growth chart by year.
  - Use related documents to create a report on the HIV trends by category. The report should includes
    - An argument for the findings in the report using quantitative and qualitative information.
    - A comparison of the proportional growth to the actual growth.
    - Both graphs with appropriate labels.
**APPENDIX E: CITY SEMINAR SECOND SEMESTER CASE STUDY MODULES (BLOCK 3 OR BLOCK 4)**

**Second Semester**

3. **Environmental Science.** This block examines the habits of mind of policy-makers charged with maintaining standards to keep New York City safe from various kinds of environmental pollution. Every metropolitan area suffers from pollutants caused by vehicle-exhaust, electricity-generation plants, pesticides, excessive noise, contaminants released by destruction and construction of buildings, and sewage failures, to name only a few major hazards of city life. This module focuses on New York City’s water supply, arguably the most important environmental issue facing any metropolis. The block will explore the creation, development, and maintenance of the city’s justly esteemed municipal water supply. How has a city famous for its political contentiousness managed to supply its citizens the “champagne of municipal water” year in and year out? What trade-offs do policy-makers fashion with businesses—such as the important natural gas industry that depends on hydraulic drilling near the city’s watershed—and communities in upstate counties to keep the city’s water pure? What are the long-term threats to the purity of the city’s water and how do policy-makers address these? The module introduces students to the intricacies of city policy-making and to the crucial notion of trade-offs—that is, essential compromises to achieve desired goals.

4. **Business/Commerce.** This block examines the habits of mind of businessmen and businesswomen who seek, through their own enterprise, to make money by offering desired goods and services. Cities emerged as centralized places for trade and commerce and businesses remain the backbone of urban life. Great metropolises, New York City first among them, are the centers of banking and credit-allocation, the fonts of creative innovation, and, sometimes, the epicenters of financial catastrophes. This block examines business people’s conceptions of the notion of trade-off with particular attention to their decisions to invest moneys in areas fraught with environmental risks. The module introduces students to the cost/risk/benefit way of thinking characteristic of business in a world bounded by governmental regulations and complicated by adverse advocacy.

**Design Principles for Second Semester**

- Increased emphasis on the following:
  - analysis of evidence around key decisions
  - representation of points of view of key stakeholders
• Cases structured around the following organizing concepts:
  o historical context; institutions as originating and developing in response to human needs and interests
  o comparative analysis of stakeholders, options, and interests
  o analysis of resolution, raising questions such as defensibility, long-term sustainability, alternative options, trade-offs made, interests served, and questions of private and public good

• Cases organized around the following sequence:
  o dramatic opening situation
  o two historical cases
  o selection of contemporary cases for small group and individual work on parallel cases
  o modeling of the unpacking of a single contemporary case in the large group setting
  o small group and individual analysis and presentation of a related contemporary case

• Progression from instructor-provided sources to student search for and selection of sources

• Progression toward increasingly formal and independent work

• Final presentation and written paper requiring interpretation of stakeholders’ point of view and supporting evidence
A Mock-up of an Environmental Science Module

Bulletin Description: Environmental science is the study of the environment and the role that humans play in it. The case of New York City’s drinking water supply will introduce students to basic principles of ecology as well as the quantitative nature of ecology. Students will understand the value of ecosystems and how ecology informs human endeavors. Drawing upon the interdisciplinary nature of the field of environmental science, this module will engage student learning in the social, economic, and ecological applications of environmental science through an exploration of New York City’s drinking water supply.

The module will provide historical context of the development of NYC’s water supply system. This will include an assessment of the social, political, ecological, and economic struggles associated with the construction of the supply system. In addition, students will be introduced to the contemporary issue of NYC’s drinking water quality. In order to meet federal regulations to protect drinking water from microbial contamination, NYC was faced with a decision to either filter its water or demonstrate that it can maintain high quality water through watershed stewardship. Students will compare the options for addressing the federal regulations and will comparatively assess the options through the lens of various stakeholders (institutions). Finally students will analyze the resolution of this contemporary case and gain insight into the current perspectives of the stakeholders. This will include prospective analyses such as questioning the effectiveness of the resolution over the long-term (is it sustainable?) and what would be alternative solutions?

The broad components of this module (historical, comparative, analytical) will be modeled through the New York City’s drinking water supply case so that the students become familiar with the unpacking of case. These skills will be translated into students’ own research on a case within the field of environmental science. Examples of cases students might explore may fall under topics such as waste management, waste-water treatment, emerging contaminants in waste-water, water-borne disease risks, industrial pollution, agriculture pollution, storm-water runoff, ecosystem goods and services, economic valuations, water filtration technologies, watershed management, agriculture best management strategies, ecosystem-based management, and environmental advocacy. These examples are tied into the disciplinary content of the New York City’s drinking water supply case and thus the students will have the background for working with pertinent literature.
Examples of Learning Activities in an Environmental Science Module

<table>
<thead>
<tr>
<th>WEEK 1</th>
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<tbody>
<tr>
<td><strong>Class 1:</strong> Demonstrate how disease epidemics and massive fires became an impetus for the development of a water supply system through reading dramatic accounts of the cholera epidemic of 1832 and the Great Fire of 1835.</td>
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<tr>
<td>Example reading: [F]ilth, Fever, Fire and Water in Gotham: a history of New York City to 1898 by Burrows and Wallace.</td>
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<tr>
<th>Class 2: Historical case: Social, political, and economic struggles associated with the construction of the Croton Water System. Also discuss the controversy over labor relations and ethnic divides.</th>
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<tbody>
<tr>
<td>Readings from:</td>
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<tr>
<td>Gotham: a history of New York City to 1898 by Burrows and Wallace.</td>
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**WEEK 2**

**Class 3:** Historical case: Controversy of the Catskill water system; issue of *eminent domain* - displacement of existing homes, businesses, villages, etc...

View the documentary “Deep Water,”
- use a viewing guide to structure note-taking on the factors shaping the development of the Catskill Supply of the NYC Water System
- identify and represent the key factors shaping its development

Readings from:
Gotham: a history of New York City to 1898 by Burrows and Wallace.

**Class 4:** Contemporary Environmental Science Issues in NYC.
Students are presented with a range of institutionally-targeted contemporary environmental science issues and further introduced to the notion of ‘case studies’. In groups (module 3) or individually (module 4) students will select case studies to work on for the rest of the module. e.g. Pollution of the Hudson River by General Electric, Endocrine disrupting chemicals in waste-water, Pesticide use in NYC, Improving New York Harbor water quality, Disappearance the salt-marshes of Jamaica Bay, PlaNYC 2030 water quality and water network initiatives, etc.

**WEEK 3**

**Class 5:** Introduce controversy in 1990s about NYC’s water supply. How to meet federal regulations for water quality?
- Introduce the options
- Introduce concept of watershed and geography of Catskills

**Class 6**
WEEK 4

**Different Points of View**
- Students are given packet of documents which contain different points of view on options: city and state environmental agencies, NYC Dept of health, residents, Catskills watershed council, Rod and Gun Club, Developer
  - Annotate two documents representing two different points of view
  - Create chart of similarities and differences in points of view

WEEK 5

**Consider whether or not NYC has a sustainable water supply**

**Assignment:**
- a) Prepare for a public hearing a position which provides some data from one of the visits and related material (tbd); b) write a reflection on the unit seeing oneself as a stakeholder in NYC having a sustainable water supply

**Role Play and wrap up**
Role play a panel representing the various points of view:
- some students present and other students ask follow up questions

**Reading and Writing:**
Student will preview and annotate the 1997 Memo of Understanding (MOA) between NYC and the EPA with an emphasis on rhetorical structures. Students will generate questions to take back to City Seminar
### WEEK6

#### Class 11

**Analyze 1997 MOA between NYC and EPA**
- the instructor will guide a discussion that focuses on the social, political, and economic issues in the MOA.
- Students will prepare for a visit by one or two current stakeholders by developing interview questions and establishing responsibilities to be carried out before, during, and after the visit.

#### WEEK7

#### Class 12

**Week 6 Outcomes of MOA**

**Class 1**  **Interview a stakeholder involved in NYC’s clean water**
- Students ask questions
- Students in groups summarize evidence provided and develop new questions based on evidence

**Class 2**  **Prospective analyses**
- Is the MOA a sustainable solution? Integrate the historical context and project to the future (history repeating?)
- What are alternative solutions that may be used in the future?

#### Class 13

**Week 7 Presentations**

#### Class 14

**Work on reflective summary**
## APPENDIX F: PROFESSIONAL STUDIES

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Activities</th>
<th>Assignments</th>
</tr>
</thead>
</table>
| 1    | **Best & Worst Jobs*** | - Large group brainstorm with ideas put on board  
- Individual writing elaborating  
- Small group sharing and distilling key characteristics  
- Large group presentation of key characteristics  
- Agreement on a preliminary list of key characteristics that contribute to satisfaction in work | With a work-oriented reading*** use the list of key characteristics to analyze the text.  
Homework: Interview a family member or friend about their best and worst work experiences. Identify key characteristics and write down suggestions for amending or extending the class “key characteristics” list. |
|      | *See Attachment for expanded guidelines of this activity | ***Possible Readings  
| 2    | **Doing a Good Job*** | - Large group brainstorm with ideas put on board  
- Individual writing elaborating  
- Small group sharing and distilling/listing characteristics  
- Small group analysis of their own list as compared to depictions of good work habits contained in reading passages  
- Small group asked to synthesize and come up with five most important work habits  
- Group presents five most important work habits to class | Choose one of the Five Skills and write in the journal through the week about how that skills manifests. (Ask students to make 5 sections in their journals—one for keeping journal entries on each skill as the module and semester goes on.) |
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<th>Week</th>
<th>Topics</th>
<th>Activities</th>
<th>Assignments</th>
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| 3    | *The Five Skills: Video Analysis* | ▪ Large group discusses the work habits in relation to those identified by NCC (the “Five Skills”)
▪ After large group discussion, students write journal entries on one habit or skill that they believe they are already good at and one that would be most useful for them to improve. | Interview three people about the habits that most help/hinder them at work
Write narrative account of the interviews (structured format) Choose one “habit of responsibility” and keep a journal tracking that habit throughout the week |
|      | Interview friends or family members re: habits that help or hinder them at work | ▪ Students are paired to discuss the assignment.
▪ They are asked to discuss options as to who they might interview, what that person does for work, how much they know about that person’s work situation—that person’s performance at work, their | |

*See Attachment for expanded guidelines for this activity*
feelings or attitudes about work.
- They are asked to brainstorm about questions they might ask to elicit quality/needed information required for the assignment.
- Pairs share out to large group
- In large group: discuss: what makes an interview question a good one? When, why, and how do we follow-up on something an interviewee said? How can we learn the most from our informant? What is informational interviewing? How is this different than a job interview?

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<tr>
<th>Week</th>
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<th>Activities</th>
<th>Assignments</th>
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| 4    | Work Habits | - Debrief interviews (of family, friends, neighbors regarding habits that hinder/help them at work)  
- small groups share interview reports and analyze for similarities and difference  
- analyses are shared in large group with feedback | Readings on job satisfaction |
|      | Work Satisfaction | - Instructor will provide data from surveys of job satisfaction.  
- Vocabulary will be reviewed and unfamiliar terms explained.  
- In small groups, students will look at the data and try to determine whether it agrees or conflicts with their own list of key sources of work satisfaction.  
- Students will report back into large group which will once again consider revising the list of key characteristics. | Writing assignment: Compare the measures of job satisfaction used in the social science surveys with those devised by the class |
| 5    | Debrief readings on job satisfaction | Use ideas from readings to add to interview questions | Write extended journal entry on:  
- what has been learned in the first 5 weeks, what has been most personally important, challenging, satisfying (or not)  
- experience over the four weeks with personal experience of one habit of responsibility |
**Preparation for interview of outside guest(s)**

- Discuss the format for the interview—what will happen?
- Discuss the ways in which interviewing with an audience is different from interviewing an individual in private
- Agree on what areas will be covered [Note that both sources of satisfaction—both best and worst work experiences—and habits that contribute to success should be included]
- Work in groups to craft questions to address each area.
- Report back and finalize list of questions
- Assign roles and role play:
  - Greeting and welcoming the guest
  - Introducing the guest
  - Conducting the interview (this might be a shared responsibility with 3 students each taking a particular area or sub-topic)
  - Taking notes in the interview (remaining students)
  - Establish ground rules for class participation in interview process

**Week** | **Topics** | **Activities** | **Assignments**
---|---|---|---
6 | Interview outside guest | Student welcomes guest<br>Student introduces guest<br>Student moderates Q & A<br>Student sums up important points<br>Student thanks guest on behalf of the group | Read several accounts of field observations.
6 | Response | Individual writing on what was most interesting about the interview and the process of preparing for it<br>Small group sharing<br>Small groups write thank you notes to guest<br>Large group shares feedback on how the process went | Write a “Personal Statement”—a reflective essay which describes what has been learned in the first six weeks of the class, and what has been most personally important, challenging, and satisfying (or not) experience over the six weeks with regard to one habit of responsibility. Students will draft this Personal Statement as a biographical narrative that might be used later in applications for jobs or further education.
| 7 | Reflection about Personal Statement | **Pair/Large group activity:**  
- Students review their Personal Statement assignments to identify 2 aspects of their learning in the class that they have written about—and discuss this with a fellow student  
- For example: they could be asked to identify and share one aspect about themselves—e.g., their own notions about what’s important to them to look for in a job and what may be less important than they had previously thought; and one aspect about the work world—e.g., their understanding of the range of occupations, types of workplaces  
- Each student is responsible to tell the class what they learned about their partner (this helps instill responsibility in the listener to ask questions for clarification and to engage in the dialogue actively)  
- Anyone from the class is able to ask fellow students questions about what was presented from the Personal Statement | Students are permitted to revise their Personal Statements after this class to turn in before Module #2 begins. |
| Thinking ahead | Discussion of sites to be visited, people to be consulted during the next module. |
Expanded Guidelines for Week 1:
“Best jobs/Worst jobs” Brainstorming Exercise

The purpose of this exercise is to begin the creation of a framework for evaluating jobs, occupations and workplaces—a set of questions that students can bring to both specific work opportunities and to occupational and career choices and a “language for investigating” the world of work.

In order to break the ice and to legitimate “complaining,” the instructor might begin by reading aloud an excerpt from one of the many oral histories and ethnographies of work: Studs Terkel, Barbara Garson, Barbara Ehrenreich. The idea is to draw students’ attention to the concrete details of work experiences that often shape our overall levels of satisfaction. For example, the following passage from Garson’s All the Livelong Day (pp. 3-4) could be read aloud to illustrate but there are many others that would work equally well.

“I met a girl named Cindy who worked for a while in a Ping-Pong factory.

‘My job was stacking the Ping-Pong paddles into piles of fifty. Actually I didn’t have to count all the way up to fifty. To make it a little easier, they told me to stack ‘em in circles of four with the first handle facing me. When there got to be thirteen handles on the second one from the front, then I’d know I had fifty. After a while of stacking I didn’t have to count anyway. I could tell fifty just by looking at the pile.

‘I had to work real fast. I had to keep three labelers and three packers supplied all the time.

‘After I stacked ‘em, the women would take ‘em off the stacks and put labels on the handles--for whatever brand it was. After that they got packed into table tennis sets, four paddles, two balls and a net.

‘Sometimes I got ahead building u these barricades of stacks. I would have liked to have finished three full walls all around myself but I never got that far ahead. As soon as I’d stack ‘em, they’d unstack ‘em.

‘Maybe it wouldn’t have been so bad if I could have seen all the piles I stacked at the end of the day. But they were taking them down as fast as I was piling them up. That was the worst part of the job.

‘No,’ she corrected herself. ‘That wasn’t the worst part of the job. The worst part was you had to stand up all day doing it.

“Why did you have to stand up?” I asked.

‘I don’t know,” Cindy answered. ‘All I know is you weren’t allowed to sit. Even between orders.
'There were a couple of retards they hired to shove the stuff around and sometimes you’d have to wait for them to bring you more paddles. Even then if I sat down the forelady, Alma, would come screaming at me.

'You couldn’t talk either. You wouldn’t want to anyway because it was too noisy and the way we were all spaced apart, you’d have to lean over and shout. But if you ever tried to talk, Alma would come running over with a lot more paddles or she’d yell, “Why aren’t you finished yet?” So you were alone with your head all day.

...at the time I was working in the Ping-Pong factory I was having domestic problems with the man I was living with. So I didn’t want to be alone with my head all day. And I didn’t want to be standing on my feet all day.

And I didn’t want to be hearing Anna yell at me all day. And at $1.85 and hour, I figured I could afford to quit.' “

After reading the piece, the instructor should ask students to describe the worst work experience they’d ever had, and to specify what made it so bad. The instructor should keep a list on the board. [If a student has never worked, (s)he can substitute the worst job of a family member or friend.]

After a list of the sources of stress and discomfort, frustration, and job misery has been compiled, the instructor should read aloud again, a brief selection about a well‐loved job. See, for example, Studs Terkel’s interview with a car parking lot attendant in *Working*, pages 299 and 300.

“In my younger days I used to be a wizard. I used to really roll. I could spin a car with one hand and never miss a hole. When I got a new car, I thought it was my car. It was a customer’s car and I was only going upstairs. I knew it wasn’t mine, ’cause at that time, I didn’t even own a car. And when I owned a car, I couldn’t own over a hundred‐dollar car. So it was a great feelin’ to drive anybody’s new car. When I’d take that car to drive, I thought it was just a dream car. …

I used to be a chauffeur and it was a dream for me driving, too. I’d drive him to his office and when I’d drop him off, the car was mine. (Laughs). I might not have to pick him up for a couple of hours. If I go south or ride around the Loop, I take the chauffeur’s cap off, put my hat on. It’s mine. You always tell the chauffeur driving the rich man’s car is the one really enjoyin’ it more than the rich man.

I quit chauffeuring. I make more money in a parking lot with tips and salary. When people ask what I do, I tell ’em I park cars....Only thing you got is a white collar, that’s okay with me. Working behind a typewriter, that’s fine. You’re a doctor, that’s cool. I got many friends, teachers. We meet sometimes, have a drink, talk. Everything is normal. Everybody got a job to do. My friends never felt superior to me.
Again, students should be asked to recount their most positive work experiences and then to explain what made them desirable.

After some free-ranging discussion, the instructor should introduce and explain the concept of intrinsic and extrinsic rewards, and students should try to classify the sources of satisfaction that have been mentioned in the discussion into these two categories. The instructor should also present the idea of the continuum—that most jobs are not "good" or "bad" but contain element that contribute to satisfaction and others that do not. These are dimensions along which a particular work experience, workplace, job, etc can be evaluated. Furthermore, the instructor should point out that not everyone has the same preferences and values. For some people, backing a car into a slot in a parking lot is a terrifying experience fraught with tension; but Al the "car hiker" claimed to love it.

Based on the class discussions and the items noted on the "best and worst" lists, the class should construct a (preliminary) list of key questions or essential characteristics of work and workplaces.

This will be an evolving list over the course of the semester but there are some fundamentals that need to be included. If they do not emerge spontaneously from the students' commentaries, the instructor should guide the discussion to make sure that the final list includes:

1. The nature of the job tasks: tedium, repetition, complexity, challenge. What actual activities does the job require and how do I feel about them? Does it involve initiating contact with strangers? Talking on the telephone. Using a computer terminal? Using delicate equipment? Touching body parts or body fluids?
2. What about the workplace?
   Is it clean? Well lighted? A comfortable temperature? Does it appear safe and healthy? Are workstations well equipped and comfortable? Is the noise level tolerable? [Students should be helped to distinguish here between the characteristics of a specific workplace, and characteristics that are associated with a particular type of work. A workplace may be uncomfortably cool because the boss is stingy with the heat or because it is a laboratory that requires cool temperatures.] Does the work take place in a single location, or does it involve travel, either locally or beyond, and what is my preference?
3. What about the social aspects of the job? Do I prefer to work alone, in pairs, on a team? [Or more accurately, what balance between individual and team
work do I prefer?] Do the social relations in this workplace appear friendly and supportive? Do employees appear to socialize? How formal or informal do interactions appear? Are employees on a first name basis? Is the workforce diverse?

4. What about autonomy and creativity? How much control does this job allow me to exercise over the pace and process of my own work? How much autonomy do I want?

5. What is the structure of authority? Is the workplace egalitarian or hierarchical? Is the supervisor respectful toward staff? Do there appear to be racial or sex biases in the allocation of power?

6. What about the culture of the workplace? Is there a dress code? A uniform?

7. How will this job articulate with my family responsibilities now and in the future? Does it require night shifts/weekends and holidays? Is it compatible with child rearing?

8. Is there a career path and are there opportunities for advancement?

9. Will the job permit me to develop my skills; will it be a learning experience?

10. What about the social impact of the work? Is this work that contributes to the well-being of society?

11. How well paid is this work? Consider benefits and other parts of the compensation package as well as salaries or wages. Do earnings appear to be fairly distributed? Privileges?

12. How is this work viewed by others; is it held in high social regard or low, and how important is such occupational prestige to me?

Expanded Guidelines for “What does it mean to do a good job?” Activity

- Large group discusses the frequent use of praise with children: “Good job!”
- Instructor elicits examples of situations in which the phrase is used.
- Small groups discuss times when they have been told “Good job” and when they have know themselves to do a good job.
- Individual writing on their own definition of doing a “good job” on a job.
- Small groups brainstorm their own list of characteristics of the behaviors exhibited by someone who consistently does a good job in a workplace.
  - Discussion is seeded with questions such as “Describe the ideal co-worker. Who would you want to work with?” “Imagine that you are an employer. Who would you want to hire?”
- Small groups analyze lists: Each group is given two or three short reading passages on good work habits in the workplace. Groups compare those lists with their own list, evaluate the different lists in light of each other, and create their own synthesis of the five habits that they believe are most important.
  - Readings might include pages from websites such as “5 Effective Work Habits for Fresh Graduates” (career-success-for-newbies.com) and portions of the SCANS skills (http://wdr.doleta.gov/SCANS).
- Each group presents their synthesis of five habits to the learning community.
- As groups present, listening students are asked to write feedback in their journal—identifying the good aspects of how each group presented their list of five habits.
- Large group: students then examine the five skills that have been identified as key for the NCC Professional Studies class and maps relationships between those skills and the synthesis that they have already created.
- Journal Entries: Individuals create journal entries on one habit or skill that they believe they are already good at and one that would be most useful for them to improve.
Appendix G: City Seminar & Professional Studies: Cohorts, Learning Communities and Course Sequences

The model allows Case Modules to be introduced in either the first or second 7-week slot in a semester, thus limiting the strain on city partnerships. Each faculty team shares 1 cohort of 75 students placed into 3 Learning Communities of 25 each (LC). The team member based in one of the college majors will lead the Case Study section for each LC. The Reading & Writing/English, Quantitative Reasoning, Professional Studies and Math Topics members will cover their respective areas. The Chart below demonstrates how each LC will move weekly across the various components (~ 1’20” periods).
APPENDIX

MATH TOPICS WORKING COMMITTEE REPORT
APPENDIX A: MATH TOPICS COMMITTEE PROCESS

The Committee process combined face-to-face meetings, examining materials at meetings, sharing readings, and working between meetings using the Academic Commons as the forum. The Committee met ten times during the period between October 8, 2009, and January 4, 2010. Two advisors participated in several meetings, contributing to the discussion with materials from their work.

The Committee’s work can be described as having three overlapping chapters. Initially, the Committee’s focus was on understanding its charge and the scope of its responsibility to frame one of the three foundational courses for the first year. From the outset, the Committee felt it important that the Math Topics course connect to the content of City Seminar and its problem-based learning approach, which includes a Quantitative Reasoning component. Moreover, making the Math Topics content meaningful to students’ lives, to skills needed in the workplace, and to the issues and problems being studied will foster student engagement in mathematical thinking. The Committee explored the relationship between Math Topics and the Quantitative Reasoning component of City Seminar in terms of content, pedagogy, and the ways the two can work together to build students’ fluency in manipulating, representing, and analyzing quantitative evidence.

Chapter two of the Committee’s work focused on defining the content and pedagogy for the Math Topics course and the competencies students should be able to demonstrate by the end of the first year. Integral to these discussions was how to develop a course that works with the diversity of knowledge and skills students have when they enter the NCC, and at the same time, engages students in challenging problem-solving and develops their capacity for higher order thinking. It was relatively easy for the Committee to agree on the key content all students should know by the end of the first year, but it was more challenging to determine how best to approach teaching the content to students who typically have not experienced success in learning mathematics. The Committee members started the exploration by sharing many examples of their own approach to teaching and then moved more broadly to published resources and materials.

The final chapter of the Committee’s work involved developing specific recommendations, course design principles, and pathways. These were developed, for the most part, individually then reviewed by the group. The Report was drafted by the Chair and staff liaison, with contributions by members of the Committee.
Drafts of the Report were reviewed by Committee members and by one of the advisors.

**Vision, Values, and the AMATYC Standards**
The Math Topics Committee recommends a common approach to teaching and learning framed by the *Standards for Introductory College Mathematics before Calculus* produced by the American Mathematical Association of Two-Year Colleges (AMATYC, 1995). The Standards document, *Crossroads in Mathematics*, emphasizes desired modes of student thinking and guidelines for selecting content and instructional strategies. The Standards were developed to serve all college students enrolled in courses below the calculus level. The AMATYC Standards are in keeping with the approach to teaching and learning promoted in the NCC Concept Paper. Michael Davidson from Cabrillo College, quoted in *Crossroads in Mathematics*, captures the imperative:

> “We must equip all of our students-- regardless of age, sex, ethnic background, educational goal, occupational goal, personal history or capabilities--to think for themselves, and to solve their own problems and those of society to the very best of their individual abilities. That’s what the right mathematics does.”

*Crossroads in Mathematics* includes Standards for Intellectual Development, Content, and Pedagogy. The principles underlying the AMATYC Standards express beliefs and values that should inform the first-year math curriculum:

- **All students should grow in their knowledge of mathematics while attending college.**

- **The mathematics that students study should be meaningful and relevant.** Basic skills, general principles, algorithms, and problem-solving strategies should be introduced to the students in the context of real, understandable problem-solving situations so that students gain an appreciation for mathematics as a discipline, are able to use it as a base for further study, and can transfer this knowledge to problem-solving situations at work or in everyday life. Intuitive justifications for mathematical principles and procedures should be emphasized.

- **Mathematics must be taught as a laboratory discipline.** Effective mathematics instruction should involve active student participation. In-depth projects
employing genuine data should be used to promote student learning through guided, hands-on investigations.

- **The use of technology is an essential part of an up-to-date curriculum.** Faculty and students will make effective use of appropriate technology. The technology available to students should include, but not be limited to, that used by practitioners in the field.

- **Students will acquire mathematics through a carefully balanced educational program that emphasizes the content and instructional strategies recommended in the Standards along with the viable components of traditional instruction.** While these standards emphasize problem solving, the use of technology, intuitive understanding, and collaborative learning strategies, skill acquisition and mathematical abstraction and rigor are still critical components of mathematics education. Furthermore, direct whole-class instruction (lecturing, questioning, and discussion) is a viable option when working with highly structured content (Secada, 1992).

- **Introductory college mathematics should significantly increase students' options in educational and career choices.** When students master the content of introductory college mathematics, they will have the problem-solving skills that are required in many disciplines and careers.

- **Increased participation by all students in mathematics and in careers using mathematics is a critical goal in our heterogeneous society.** Mathematics instruction must reach out to all students: women, minorities, and others who have traditionally been underrepresented in the discipline, as well as to students with learning difficulties, differing learning styles, disabilities, and language and socialization difficulties. Furthermore, faculty must provide a supportive learning environment and promote appreciation of mathematics.

The AMATYC Standards were developed for two-year colleges; therefore, the Committee has edited the Content Standards to fit its recommendations for the Math Topics and Quantitative Reasoning courses. The Intellectual Development Standards are consistent with real-world problem-solving approach to learning that characterizes the first-year experience and emphasizes the ability to communicate mathematically and explain mathematical concepts and procedures appropriately. The Intellectual Development Standards also place importance on understanding the language of mathematics and its connections to other disciplines.
The Standards for Pedagogy recommend the use of instructional strategies that provide for student activity and student-constructed knowledge. The Pedagogy Standards emphasize complex problem solving in contexts meaningful to students’ lives. Collaborative learning, working effectively in groups, and discussing concepts and problems, both orally and in written form, are promoted in the Pedagogy Standards.
Standards for Intellectual Development

**Standard I-1: Problem Solving**

Students will engage in substantial mathematical problem solving. Students will use problem-solving strategies that require persistence, the ability to recognize inappropriate assumptions, and intellectual risk taking rather than simple procedural approaches. These strategies should include posing questions; organizing information; drawing diagrams; analyzing situations through trial and error, graphing, and modeling; and drawing conclusions by translating, illustrating, and verifying results. The students should be able to communicate and interpret their results.

Emphasizing problem solving will make mathematics more meaningful to students. The problems used should be relevant to the needs and interests of the students in the class. Such problems provide a context as well as a purpose for learning new skills, concepts, and theories.

**Standard I-2: Modeling**

Students will learn mathematics through modeling real-world situations. Students will participate in the mathematical modeling of situations from the world around them and use the models to make predictions and informed decisions. Swetz (1991) describes the modeling process as "(1) identifying the problem, including the conditions and constraints under which it exists; (2) interpreting the problem mathematically; (3) employing the theories and tools of mathematics to obtain a solution to the problem; (4) testing and interpreting the solution in the context of the problem; and (5) refining the solution techniques to obtain a 'better' answer to the problem under consideration, if necessary (pp. 358-359). In some cases, faculty may select problem situations and ask students to collaborate on the development of models. In other cases, students may be asked to evaluate previously developed models. Does the model behave as intended in that the equations fit the assumptions of the model? How well does the model agree with the real world it is supposed to represent? Does the model perform well on a data set different from the one for which it was developed? Whether students develop their own models or evaluate models that are given to them, they should look beyond how well a
proposed model fits a set of data and attempt to provide mathematical or scientific reasons for why the model is valid.

**Standard I-3: Reasoning**
*Students will expand their mathematical reasoning skills as they develop convincing mathematical arguments.*

Students will regularly apply inductive and deductive reasoning techniques to build convincing mathematical arguments. They will develop conjectures on the basis of past experiences and intuition and test these conjectures by using logic and deductive and inductive proof, by framing examples and counter examples, and by probabilistic and statistical reasoning. They will explore the meaning and role of mathematical identities, support them graphically or numerically, and verify them algebraically or geometrically. Finally, students will judge the validity of mathematical arguments and draw appropriate conclusions.

**Standard I-4: Connecting With Other Disciplines**
*Students will develop the view that mathematics is a growing discipline, interrelated with human culture, and understand its connections to other disciplines.*

If students are to gain a sense that mathematics is a growing discipline, course content must include topics developed since the eighteenth century. Topics such as algorithms needed for computer-based solution processes, the use of probability in understanding chance and randomization, and the applications of non-Euclidean geometries lend themselves to a discussion of who developed the ideas, when they were developed, and what kind of human endeavors motivated their development. Students will need to research sources other than standard mathematics textbooks to determine how mathematics provides a language for the sciences; plays a role in art, music, and literature; is applied by economists; is used in business and manufacturing; and has had an impact on history.

**Standard I-5: Communicating**
*Students will acquire the ability to read, write, listen to, and speak mathematics.*

Students will acquire the skills necessary to communicate mathematical ideas and procedures using appropriate mathematical vocabulary and notation. Students will learn to read and listen to mathematical presentations and arguments with understanding. Furthermore, mathematics faculty will adopt instructional strategies that develop both oral and written communication skills within a context of real applications relevant to the particular group of students. As students learn to speak
and write about mathematics, they develop mathematical power and become better prepared to use mathematics beyond the classroom.

**Standard I-6: Using Technology**

*Students will use appropriate technology to enhance their mathematical thinking and understanding and to solve mathematical problems and judge the reasonableness of their results.*

Students will develop an ability to use technology to enhance their study of mathematics in two ways. First, technology can be used to aid in the understanding of mathematical principles. Shoaf-Grubbs (1994) found that graphing calculators provide "a means of concrete imagery that gives the student new control over her learning environment and over the pace of that learning process. It relieves the need to emphasize symbolic manipulation and computational skills and supports an active exploration process of learning and understanding the concepts behind the mathematics" (p. 191). In general, students can use technology to test conjectures, explore ideas, and verify that theorems are true in specific instances. For example, students can solve quadratic equations and inequalities graphically and then use their knowledge of the graphical solution to clarify the algebraic approach (Hector, 1992).

Second, students will use technology naturally and routinely as a tool to aid in the solution of realistic mathematical problems. "Those who use mathematics in the workplace--accountants, engineers, scientists-- rarely use paper-and-pencil procedures anymore. . . . Electronic spreadsheets, numerical analysis packages, symbolic computer systems, and sophisticated computer graphics have become the power tools of mathematics in industry" (NRC, 1989, p. 1). In addition, graphing calculators, dynamic geometry software, matrix software, and statistical packages should be included among the technology staples to be used by students. Technology should be used to enhance the study of mathematics but should not become the main focus of instruction. The amount of time that students spend learning how to use computers and calculators effectively must be compatible with the expected gain in learning mathematics.

**Standard I-7: Developing Mathematical Power**

*Students will engage in rich experiences that encourage independent, nontrivial exploration in mathematics, develop and reinforce tenacity and confidence in their abilities to use mathematics, and inspire them to pursue the study of mathematics and related disciplines.*

All students will have opportunities to be successful in doing meaningful mathematics that fosters self-confidence and persistence. They will engage in
solving problems that do not have unique answers but, rather, provide experiences
that develop the ability to conduct independent explorations. At the same time, they
will learn to abstract mathematical principles in order to promote transfer of
problem-solving strategies among a variety of contexts (Druckman & Bjork, 1994)
and to better appreciate mathematics as a discipline. Furthermore, they will develop
an awareness of careers in mathematics and related disciplines and have a vision of
themselves using mathematics effectively in their chosen fields.

Standards for Content (the Committee edited these standards to fit with their
recommendations for content)

Standard C-1: Number Sense  
Students will perform arithmetic operations, as well as reason and draw
conclusions from numerical information.
Number sense includes the ability to perform arithmetic operations, to use
alternative algorithms and multiple approaches to arithmetic, to estimate reliably,
to judge the reasonableness of numerical results, to understand orders of
magnitude, and to think proportionally.

Standard C-2: Measurement  
Students will begin with a real-world problem and progress through less
formal descriptions to accurate symbolic representations. Students will use
functions to model realistic scenarios and will be able to move between
verbal, numerical, graphical, and symbolic representations.
Suggested topics include translation of realistic problems into mathematical
statements, the solution of equations by appropriate graphical, numerical, and
algebraic methods, generalization about families of functions, use of functions to
model realistic problems, and the behavior of functions. Examples include:
  - moving between 4 types of representations
  - how parameters influence a function such as $y = mx + b$
  - possibly, comparison between linear and quadratic functions

Standard C-3: Probability and Statistics
Students will analyze data and use probability and statistical models to make
inferences about real-world situations.
Students will gather, organize, display, and summarize data, and interpret data
summarized by others. They will draw conclusions or make predictions from the
data and assess the relative chances for certain events happening. Suggested topics
include basic sampling techniques, tabulation techniques, creating and interpreting charts and graphs, data transformation, curve fitting, measures of center and dispersion, simulations, probability laws, and sampling distributions. Other suggested topics include permutations and combinations in the context of probability, and simple sequences: trends in a sequence, change, completing a sequence.

Standards for Pedagogy

**Standard P-1: Teaching with Technology**
Mathematics faculty will model the use of appropriate technology in the teaching of mathematics so that students can benefit from the opportunities it presents as a medium of instruction.

**Standard P-2: Interactive and Collaborative Learning**
Mathematics faculty will foster interactive learning through student writing, reading, speaking, and collaborative activities so that students can learn to work effectively in groups and communicate about mathematics both orally and in writing.

**Standard P-3: Connecting with Other Experiences**
Mathematics faculty will actively involve students in meaningful mathematics problems that build upon their experiences, focus on broad mathematical themes, and build connections within branches of mathematics and between mathematics and other disciplines so that students will view mathematics as a connected whole relevant to their lives.

**Standard P-4: Multiple Approaches**
Mathematics faculty will model the use of multiple approaches-numerical, graphical, symbolic, and verbal-to help students learn a variety of techniques for solving problems.

**Standard P-5: Experiencing Mathematics**
Mathematics faculty will provide learning activities, including projects and apprenticeships that promote independent thinking and require sustained effort and time so that students will have the confidence to access and use needed mathematics and other technical information independently, to form conjectures from an array of specific examples, and to draw conclusions form general principles.
APPENDIX C: MODEL STATISTICS COURSE

Metropolitan State University in Minnesota’s Introductory Statistics with Community-Based Projects

*Introductory Statistics with Community-Based Projects*, was developed with partial support from an NSF grant to the National Center for Science and Civic Engagement. NCSCE sponsors an educational program, Science Education for New Civic Engagements and Responsibilities. The Statistics course was developed and implemented at Metropolitan State University in Minnesota as part of this program. Metropolitan State University serves non-traditional working students.

Professor Cynthia Kaus developed the course to introduce students to the basics of descriptive and inferential statistics using problem-based learning focused on local, current issues. Articles from The New York Times, local newspapers and professional journals provide the context and content for investigating civic issues using statistical tools for evaluating data, the claims made with data and decision-making. The emphasis is on group work with real-world problems. The instructional strategy is a departure from most math courses in which students work from a textbook building a repertoire of discrete skills and then applying them to problems.

Professor Kaus provides the following information about her course, *Introductory Statistics with Community-Based Projects* (<http://serc.carleton.edu/sencer/stats_community/index.html>):

> By incorporating semester long community-based projects into an introductory statistics course, Metropolitan State University aims to connect the discipline of statistics to issues of immediate concern to students and to increase appreciation of how this powerful quantitative tool can improve their ability to make informed decisions in their professional, civic, and personal lives. Statistics I is a general education math course required for majors in mathematics, business, biology, social work and nursing. However, students majoring in many other disciplines regularly take the course to meet their general education requirement so that the course engages a very diverse group of learners whose strengths contribute to the group project format.

> Key statistics concepts, such as probability, regression, distributions, outliers, correlation and statistical significance, are taught "through"
issues of civic importance, such as voting results, the death penalty, drug use, or unemployment. Lectures are combined with in-class group work, in-class discussion projects and a semester long community-based group project on a topic of the students’ choice. Recent group projects have investigated the relationship of unemployment to housing foreclosures in the county, a comparison between the price of prescription drugs in local pharmacies and the price of drugs obtained on-line from Canada, and the correlation between actual mercury contamination in the Twin Cities area and Fish Consumption Advisories from the state department of natural resources. Though the course has only been taught since 2007, some students have already attributed their success in obtaining jobs to the projects they completed in this course, and assessment data suggests substantial gains in students’ confidence and their ability to understand statistics and its applications.

Course Learning Goals for Instructors and Students

Instructor Goals:
Instructor will teach students to:
• Understand and apply the principles and methods of statistics used in the description and analysis of data, including collection of data, design of experiments, sampling, correlation, regression, confidence intervals, and significance tests
• Recognize the relevance of mathematics and statistics to problem-solving and decision-making in their every-day lives

Student Goals:
Student should be able to:
• Read, understand, and evaluate statistical presentations in the media
• Think critically about social issues
• Increase their awareness that statistics and mathematics are useful tools for understanding complex social issues
• Determine what is reliable data and to look at statistical studies critically

To achieve these goals, the course was developed so that students could choose the topic of their group projects based on their own interests. In addition, daily in class group projects and discussion
projects were carefully chosen to highlight civic issues. Students were encouraged to read their free online *New York Times* on a daily basis and to present articles at the beginning of each class that involved statistics. The theme of social awareness was begun on the first day of class and carried on throughout the semester.

A student who successfully completes this course will know the principles and methods of statistics used in the description and analysis of data, including collection of data, design of experiments, sampling, correlation, regression, confidence intervals, and significance tests.
APPENDIX D

Recommendation for a resource and possible model for the Quantitative Reasoning component of the City Seminar

While it is expected that the case studies in the City Seminar will provide the content for solving quantitative problems and analyzing data, the Committee recommends a text that is compatible with the approach of solving authentic problems and can enhance the teaching of mathematical concepts. The text is Case Studies for Quantitative Reasoning: A Casebook of Media Articles, (Bernard L., Madison, Stuart Boersma, Caren L. Diefenderfer, Shannon W. Dingman, Pearson Custom Publishing, 2009, 2nd edition). This project was supported by an NSF grant. It covers the following topics:

- Using Numbers and Quantities
- Percent and Percent Change
- Measurement and Indices
- Linear and Exponential Growth
- Graphical Interpretation and Production
- Counting, Probability, Odds, and Risk

The text offers a way to introduce concepts and explore them through case studies that are articles from the New York Times and local papers. Each section contains:

- Introductory notes on basic mathematical concepts
- Warm-up exercises on the basic concepts involved in the case studies
- Articles that are the subject of the case studies
- Study questions on the articles
- Additional exercises for each section (in the back of the book)
APPENDIX

ASSESSMENT AND PORTFOLIOS WORKING COMMITTEE REPORT
APPENDIX A: ASSESSMENT AND PORTFOLIOS COMMITTEE PROCESS

Starting in October 2009, the Assessment and Portfolio Committee met on a regular basis to "help determine the role of assessment in the new college, and develop a framework for portfolio assessment that engages students and faculty in ongoing assessment of student learning."\(^1\) Although the Concept Paper was used as a starting point for the Committee’s early discussions, the recommendations presented include contributions from the literature on best practice, policy, and professional expertise.

Prior to crafting a proposed assessment system, the Assessment and Portfolio Committee reviewed several documents about assessment, e-portfolios, community college students, and program design that complemented our reading of the Concept Paper.\(^2\) From these readings and our own knowledge, we know that effective programs in community colleges are both integrative in nature and highly contextualized. Effective programs are based on the following instructional principles that also have implications for good assessment practice:

- Make expectations for student learning explicit.
- Build on students’ existing abilities.
- Identify beginning, developing, and advanced performance.
- Teach students to self-assess their learning.
- Develop assignments where students need to use what they know.

The closer the inter-relationship between assessments and instruction, the more useful the information and quality of decision-making one can derive from the assessment instruments. Any assessments used at the New Community College must themselves be evaluated against their ability to support the implementation of these instructional principles.

In addition to deep integration into instruction, the assessment system of the New Community College should also build on the assessment principles laid out in the CUNY Assessment Review Report of Spring 1996:

1. The chief goal of assessment is to facilitate teaching and learning; this must inform all considerations of assessment.

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\(^1\) Charge to the Assessment & Portfolios Working Committee, October 1, 2009.
2. The primary effects of assessment are on the students; every effort must be made to ensure that those effects are salutary. It must not be the purpose of assessment, then, to screen students out but to ensure that the educational goals developed for their benefit are being met.

3. The primary responsibility for the goals and standards of assessment rests with the faculty; every effort must be made to ensure that assessment practices are answerable to faculty concerns and objectives. Faculty must have an ongoing leadership role in the development, implementation, and oversight of assessment.

4. Effective assessment is hard work; every effort must be made to ensure that those involved in assessment are adequately supported. Moreover, such support cannot be narrowly construed: it must extend beyond those directly involved in assessment practices to those impacted by those practices in the form of mandated advisement, curricular or faculty development, and the like.

5. Effective assessment is expensive; every effort must be made to ensure that it is neither done on the cheap nor done at the expense of that greater good it is meant to serve: effective teaching and learning.

6. Assessment is fundamentally a measure of education's effectiveness; if in practice it should detract from the effectiveness of education, either by denying access to instruction or by denying resources to support instruction, that practice becomes self-defeating and insupportable.

7. Assessment, like the education it gauges and supports, is a collaborative enterprise; every effort must be made to involve as many stakeholders from as broad a spectrum as possible. Because the impact of assessment cuts across curricula, backgrounds, and campuses, so should the representation of those responsible for it.
APPENDIX B: ASSESSMENT AND PORTFOLIOS COMMITTEE VALUES

As we began our work, the Committee developed a set of beliefs and values about assessment, teaching and learning.

- There are a set of core competencies defined by the NCC working committees that every student should demonstrate at the end of the first year and upon graduation.
- Portfolios must be well thought out measures that capture the breadth and depth of student development. Those competencies should include non-cognitive as well as cognitive learning outcomes.
- Demonstration of competencies can take a variety of forms in addition to writing.
- Developing student portfolios requires faculty involvement and collaboration.
- Learning in the community college is a collaborative process; not just faculty with peers but faculty with students and students with other students.
- A well-designed portfolio system can help students connect learning and experiences across their coursework.
- The portfolio experience can create opportunities for students to understand their strengths and areas for improvement. Portfolios should inform the development of teaching strategies that enable improvement.
- Faculty will be able to articulate exactly what they expect from students and provide samples so that students develop a clear understanding of expected student learning outcomes, and how their progress will be evaluated.
- As faculty are hired, that their values and teaching philosophy are consistent with the collaborative inquiry based model of the NCC. (The antecedent is that the NCC will seek out faculty who can best develop, implement and refine the model.)
- Creating a system that meets the needs of the NCC does not involve full reinvention. There are existing tools and metrics that can be used as models to accomplish what is desired.
- Developing an authentic assessment system that serves students, faculty and the institution requires resources. Resources must be available not just on start up but on an ongoing basis.
- Using student learning assessments to rate or review individual faculty (not programs or systems) will cause antagonism and compromise the tool itself.
APPENDIX C: UNDERSTANDING PORTFOLIO TYPES

There exists a variety of portfolio types used in education today, and though at their most basic function are all designed in-part to collect student work products over time, some have the potential to transcend being used for presentation purposes alone by providing a nuanced approach to assessing student learning.

The two primary types of portfolios that the Committee reviewed included those that are utilized and assessed in a summative manner and those designed to be utilized and assessed in a formative manner. A summative portfolio, also sometimes referred to as a product, showcase or presentation portfolio, is a tool through which the student submits their “final” or “best” work product to be assessed by faculty. The intention behind the summative portfolio assessment is to determine at a specific point in time (end of the semester, end of the year, immediately prior to graduation etc.) what students know compared to established learning outcomes. The assessment of these “final” or “best work” products exhibited in the portfolio in some cases are additionally evaluated to determine credit allocation and also to what extent the student is prepared for the next level of instruction.

Unlike a summative portfolio, a formative portfolio, also sometimes known as a learning, process or progress portfolio, is not designed to be a depository for a student’s “final” or “best” work products, but rather a place where they can exhibit a range of assignments that are at various stages of completion. To that end, this type of portfolio allows for the evaluation and re-evaluation of a student’s work on an ongoing basis with the intent being to provide consistent feedback to help facilitate student development and encourage transparency with regard to expected learning outcomes. It is through this process that the Learning Portfolio not only allows faculty to perhaps better understand the learning process of their students (assessing works in progress rather than solely assessing final products), but for the students themselves to better understand and be reflective of how they learn as well. One of the key functions of a formative portfolio is to empower students to take ownership of their academic growth so as to better allow them to: identify which accomplishments they feel best represent their strengths, present and discuss the evolution of a work product, recognize continuity in academic content throughout their entire educational experience, recognize patterns in areas of interest and among other things, be more proactive about planning future academic goals.
APPENDIX

ENROLLMENT AND PERSISTENCE WORKING COMMITTEE REPORT
Appendix A: Enrollment and Persistence Committee Process

The Committee comprised individuals representing the perspectives of the many groups that would have a stake in the process: a College Discovery counselor, a faculty advisor, a director of career development, a program coordinator of a college women’s center, the director of a CBO that runs a collaborative program for youth on a CUNY campus, the CUNY Director of Recruitment, a CUNY faculty member, a member of the original NCC Concept Paper planning team, and a CUNY student. The co-chairs, an Associate Professor of Human Services from a community college and an HEO director of academic services and learning communities from a senior college, facilitated weekly meetings and met with consultants. Donna Linderman, CUNY Director of ASAP, consulted with us, as did others from the CUNY community. Because of the broad and deep level of expertise on the Committee, we were able to construct the process from many different viewpoints. There were no silent members; each voice was heard, and all points of view were integrated into the recommended plan. No issues were considered too controversial or taboo. The Committee addressed issues of faculty governance, the role of HEO versus faculty counselors, the concept of assessment, the definition of student success and efficacy, open enrollment, and more. We tried to establish a culture of consensus; this effort was clearly made easier because of the thoughtful and open-minded sensibility that each and every member brought to this work.

We read the Concept Paper many times and developed a deep appreciation for how fully it was thought out and researched. Yet, the Committee understood its charge to create a framework for a process by which students are recruited, admitted, developed, and supported (academically first and foremost, and, where necessary, socially, financially, and emotionally). In this context, the Concept Paper was interpreted as a guide—not inviolable law.

The Committee met weekly through the fall of 2009. Co-chairs met via telephone or in person between meetings to process the work, integrate ideas more comprehensively into the plan, and develop agendas for Committee work sessions. Because the enrollment and persistence process encompasses the totality of a student’s higher-education journey, we employed a wide variety of strategies intended to ensure that all aspects were understood and addressed. We started by using a very low-tech process—flipcharts taped up on the walls—a group free-write of sorts, where we posted our visions, nightmares, and best practices related to enrollment and persistence. Throughout the months of meeting together, we created tables, flow-charts, and narratives to carefully delineate the process.

Models and ideas from the “field” of higher education institutions throughout CUNY and beyond were mined for the most student-centered and evidenced-based qualities. The Committee, however, did more than re-iterate and re-package best practices. We broke new ground, developing an innovative model that fundamentally re-configures the roles and scope of work of admissions officers,
faculty members, advisors, and counselors, as well as the active role that students will play in the admissions process. Specifically, there are a number of brand new conceptual parts of the enrollment and persistence process outlined and introduced in the Report:

- The widespread belief that community college is a default choice is challenged right from the start as students are assisted in developing their educational goals through the recruitment and interview process described in the report. This process will be spearheaded by admissions officers whose roles are expanded from filling seats to orienting students to the New Community College, then comprehensively and firmly connecting them through to the next step, the Summer Bridge Program, at which point they will begin to work with a student support specialist. In order to make sure that students apply early, the New Community College will need to work with high schools and community-based organizations to shift the mindset about when students can/should apply.

- The student support specialist re-imagines the role and scope of work of a counselor. Even before students are formally enrolled in the New Community College, they will meet this supportive and trained specialist who will have a structured role throughout their tenure at the NCC. The Specialist will co-facilitate the Group Workspace along with a faculty member from the disciplines. Here, with the guidance of the faculty member, students will develop academic skills and focus on personal development and cooperative learning strategies. In addition to this innovative group facilitation role, the specialist will meet regularly with faculty and professional staff (FA counselors, registrars, administrators, etc.) in an effort to discuss students’ academic and non-academic progress. The Specialist will be the “sinew” maintaining a relationship with each student in her/his caseload from entrance through graduation.

The following issues will also have to be addressed as the NCC recruits and admits students:

- Should the NCC limit UAPC allocation to first choice-only applicants? Will this be permitted by the University?

- Will the NCC engage in direct admission?

- Will the NCC accept transfer credits? Life experience credits? If so, is there a maximum? Who will assess (registrar, program heads) and how will they be evaluated?
• If students are not admitted into a declared program/major on entry, how can the NCC assure that programs are not over/under subscribed, and what implications does this have for TAP and programs such as COPE?

• How will NCC admit students if demand exceeds capacity? – a first-come, first-served wait list? A lottery? What are the implications for diversity of these different methods, especially when class numbers are initially small?

The Committee’s Report represents what we believe to be a plan that is consistent with the principles set forth in the Concept Paper as well as the values that underpin CUNY’s overall mission of educating the citizens of our city. It also envisions a process for enrolling, empowering, and embracing students in a truly New Community College.
Appendix B: Milestones Addressed
Appendix C: Student Support Special Job Description

Student Support Specialist Responsibilities:

The student support specialist will be responsible for working with a total of 75 students primarily through Group Work Space and Professional Studies Courses. The SSS/SSA will work closely with faculty members to assess, identify, teach, and develop academic and personal skills that are necessary for success in college and beyond.

The student support specialist will be introduced to the student during the group info sessions and next step meeting.

The student support specialist will be a key member of two teams (each consisting of three faculty members and seventy-five students) and will be responsible for monitoring the academic progress and financial aid status of participants, referring students to counseling and external resources when necessary, providing advisement and support in the development of collaboration and study skills, and serving as the primary resource and support person for 75 students.

**MINIMUM QUALIFICATIONS:** Master’s Degree in Social Work, Psychology, Guidance and Counseling, or related area. At least three to five years experience working in an educational setting; superior communication skills; comfort in working with a team, group work, facilitating discussions, and working in a classroom environment.

**PREFERRED QUALIFICATIONS:** Experience with underprepared high school or college students (especially community college students). Knowledge of career development. Familiarity with Valencia College Life Mapping, or other systems intended to cultivate collaborative and independent skill-building for students.
Appendix D: ASAP Enrollment Agreement

ASAP ENROLLMENT AGREEMENT

Print Clearly
(Last name)_________________________________ (First name)____________________________

I accept the continued invitation to be enrolled in CUNY ASAP at Queensborough Community College for the 2009-2010 academic year. If, for any reason, I am not deemed eligible to stay enrolled in ASAP, I may enroll at Queensborough Community College as a non-ASAP student and thus forfeit all benefits I receive from the ASAP Program.

As an ASAP student, I understand that I will be expected to meet the following responsibilities:

_____ Do everything in my power to sustain the reputation and uphold the values of the ASAP Program so future generations of students may have the opportunity to participate in ASAP

_____ Complete at least 12 academic or equated credits in my designated program of study each semester, maintain good academic standing and complete the requirements for an Associate Degree in no more than six semesters (3 years)

_____ Attend all of my bi-weekly meetings with my student manager and any supplementary meetings at my student manager’s discretion

_____ Attend a minimum of six ASAP and/or QCC events and enrichment activities each semester

_____ Spend two to three hours on campus each week in addition to my classes and meetings

_____ Attend mandatory meetings with the Student Management Coordinator in addition to seeing my student manager if my grade point average falls below a 2.0 or if my student manager deems these meetings appropriate

_____ Submit a completed application for financial aid in a timely manner each year, if I wish to receive ASAP tuition assistance

_____ Maintain updated contact information and agree to check Tigermail/email and postal mail relating to the ASAP Program

_____ In class, be respectful to my instructors and fellow students in order to never hinder the learning process

As long as I remain in CUNY ASAP at Queensborough Community College, ASAP will:

• Provide advisement and programming of all courses required for my program of study, so that I can obtain my degree in no more than six semesters
- Supplement my academic studies with academic support services, activities and special learning opportunities designed to complement my program of study

- Waive the unpaid balance of tuition and fees not covered by a combination of any federal and state financial aid programs for which I am eligible

- Supply textbooks for all classes each semester at no cost

- Supply free Metrocards during the academic year

- Offer career advisement and job placement assistance for summer employment and part-time employment during the academic year

- Assist me with securing a position in my career field or with transfer to a baccalaureate-degree granting college or university upon completion of my degree

I further understand and agree that:

_____ I may not receive a free monthly Metrocard during the academic year if I do not fulfill my ASAP obligations.

_____ I may participate in ASAP but will be responsible for **full payment** of tuition and fees, if I do not file a full and timely application for financial aid.

_____ I will return all textbooks to the bookstore at the end of each semester on the designated ASAP book return day. I have the option to purchase the textbook if I so choose.

SIGNED: _______________________________ DATE: _______________________________

Student Manager Name: _______________________________

Student Manager Signature: _______________________________
APPENDIX

LIBRARY, TECHNOLOGY, STUDENT AND FACULTY RESOURCES
WORKING COMMITTEE REPORT
APPENDIX A: LIBRARY REPORT

New York State Education Department
Information Needed for Reviewing Proposals for Degree Authority
http://www.highered.nysed.gov/ocue/aipr/InfoNeededforDegreeAuthority.htm

The list that follows identifies the minimum information needed. A careful review of proposals will identify additional information needs.

Resources, Facilities, Equipment and Library
- Certified audited financial statements for the past three years.
- Description of existing space with the address of the location, the square footage, the layout and use of rooms.
- Description of plans for new/additional space, with the details cited above and date of occupancy, and copies of new and existing leases and/or construction contracts.
- List of existing computers, with copies of maintenance/repair contracts, type, location and use.
- Similar information for proposed new computers with the date(s) of installation.
- List of the scientific, medical, and technical equipment needed to support the proposed programs, with the type, location and use.
- Similar information for proposed new equipment.
- Description of the library that includes square footage, shelf space, desk and workspace for librarians, and seating facilities for students.
- Library hours and times a professional librarian is present.
- Number and type of computers in the library and what databases students can access; any plans to expand this capability with details, dates, and costs.
Listing of the money spent in each of the past three years on the acquisition of books, periodicals, software, or other materials such as technical manuals and slides.
- Names and resumes of all professional librarians employed by the institution, with their assignment(s) and copies of any reports or recommendations they have submitted.
- Names and resumes of all library consultants employed by the institution, with their assignment(s) and copies of any reports or recommendations they have submitted.
- Copies of all agreements with other institutions or libraries for the use of their collections, indicating what services will be provided to students and
faculty, what material will be ordered that supports program offerings, what fiscal contributions the institution provides for these services, and the name and telephone number of the contact person at each cooperating library.

**Middle States Commission on Higher Education**
http://www.msche.org/

Library related statements from the *Characteristics of Excellence* document:

P10: Under section: Fundamental elements of institutional resources:
“... recognition in the comprehensive plan that facilities, such as learning resources fundamental to all educational and research programs and the library, are adequately supported and staffed to accomplish the institution’s objectives for student learning, both on campuses and at a distance.”

P35: Under section: Student support services – optional analysis and evidence:
“...analysis of support services available to students, including any distinctions among physical sites or modes of delivery and the particular support services those sites/modes require (instructional technology support, library/learning resources support, etc.).”

p42: Under section: Educational offerings
“Several skills, collectively referred to as “information literacy,” apply to all disciplines in an institution’s curricula. These skills relate to a student’s competency in acquiring and processing information in the search for understanding, whether that information is sought in or through the facilities of a library, through practica, as a result of field experiments, by communications with experts in professional communities, or by other means. Therefore, information literacy is an essential component of any educational program at the graduate or undergraduate levels.

These skills include the ability to:
- determine the nature and extent of needed information;
- access information effectively and efficiently;
- evaluate critically the sources and content of information;
- incorporate selected information in the learner’s knowledge base and value system;
- use information effectively to accomplish a specific purpose;
- understand the economic, legal and social issues surrounding the use of information and information technology; and
- observe laws, regulations, and institutional policies related to the access and use of information.
Closely tied to information literacy is the need for technological competency at all levels within an institution and its curricula.

P44: Under section: Fundamental elements of educational offerings
- learning resources, facilities, instructional equipment, library services, and professional library staff adequate to support the institution’s educational programs;
- collaboration among professional library staff, faculty, and administrators in fostering information literacy and technological competency skills across the curriculum;
- programs that promote student use of a variety of information and learning resources;

p46: Under section: Optional analysis and evidence
- evidence of local and remote information resources, access structures, and technologies adequate to support the curriculum;
- evidence of information literacy incorporated into the curriculum with syllabi, or other material appropriate to the mode of teaching and learning, describing expectations for students’ demonstration of information literacy skills;
- evidence of accessible reference tools to ascertain where relevant materials exist and are located;
- assessment of information literacy outcomes, including assessment of related learner abilities;
- evidence of trained instructional and reference staff, or other support services, available on-site or via remote access, to help students and teaching staff locate and evaluate information tools and resources;

p47: Under section: General Education:
Institutions should identify and provide a recognizable core of general education that:
- expresses the educational philosophy of the institution for each undergraduate degree program or cluster of degree programs;
- incorporates essential knowledge, cognitive abilities, and an understanding of values and ethics;
- enhances students’ intellectual growth; and
- draws students into new areas of intellectual experience, expanding their cultural and global awareness and sensitivity, and preparing them to make enlightened judgments outside as well as within their academic specialty. What are presented here as general education skills are not necessarily distinct and apart from each other. There is an inherent relationship among these skills. This interrelatedness is evident in the concept of “information literacy,” which embraces all of the specific general education skills (see Context, Standard 11).
P49: Under section: Optional analysis and evidence

- evidence of articulated expectations of student learning outcomes for written communication, speech communication, quantitative reasoning, scientific reasoning, information literacy, technological competence, and critical analysis and reasoning for all undergraduate degree students

See also publication: *Developing Research & Communication Skills: Guidelines for Information Literacy in the Curriculum*

http://www.msche.org/publications_view.asp?idPublicationType=5&txtPublicationType=Guidelines+for+Institutional+Improvement

Association of College and Research Library Standards for Libraries in Higher Education
http://www.acrl.org/ala/mgrps/divs/acrl/standards/standardslibraries.cfm

American Association of Community Colleges
http://www.aacc.nche.edu/Pages/default.aspx

**AACC Position Statement on Information Literacy**

*5/4/2008*

An important element of both teaching and learning in today's information age is information literacy -- the set of skills needed to find, access, retrieve, analyze, synthesize and use information effectively and ethically. A community college curriculum offers students an array of general education and workforce content through credit and noncredit coursework, continuing education and distributed education. Effective curricula offer both current and classic content across disciplines within a design that engages students, meets their learning needs, aids in student success in courses and retention in academic programs. Best practices in curriculum design and content include active learning techniques, a variety of formats that take learners beyond the textbook, the establishment of context, real life relevance, the integration of technology, meaningful assessment, and an integration of critical thinking that promotes the questioning and discussion of ideas. Classroom faculty should partner with library and learning resource center staff to form instructional teams to encourage information literacy outcomes in credit and noncredit instruction.

Information literacy, which encompasses information fluency and information technology mastery, is critical to success in higher education and lifelong learning. Rapid and continual changes in technology and the proliferation of information resources present students with an abundance of information through a variety of
vetted and unvetted formats. This wide variety of choices raises questions about the reliability, authenticity, and validity of content and poses challenges for students trying to evaluate, understand, and apply the information. The Association of College and Research Libraries, in its Information Literacy Competency Standards for Higher Education, notes that information literacy is considered a key outcome by several regional and discipline-specific accreditation bodies because of its close ties to students' competency with evaluating, managing, and using information.

Community college students must be information literate learners who can:
- Determine the extent of information needed
- Access needed information effectively and efficiently
- Evaluate information and its sources critically
- Incorporate selected information into their own knowledge base
- Use information effectively to accomplish a specific purpose
- Understand the economic, legal, and social issues surrounding the use of information
- Access and use information ethically.

Colleges should identify and provide personnel and resources appropriate for providing information literacy skills for all students.

http://www.aacc.nche.edu/About/Positions/Pages/ps05052008.aspx

AACC Position Statement on Library and Learning Resource Center Programs

1/5/2003

Community colleges are comprehensive institutions that provide a full array of educational programs. Library programs, as part of that full array, are indispensable to the teaching/learning mission of the community college. In today's world, libraries are not just a place, because many library resources and services are online and accessible from anywhere. Community colleges continue to need libraries as a physical space, as long as students need assistance to conquer the digital or information divide and there is a need to house and provide access to materials not available electronically. Whether the term used is Library, Learning Resource Center, or Instructional Resource Center, it describes a set of programs and services that provide an organized universe of knowledge to users. Library programs have long served a vital role in the mission of the community college. In fact, the concept of the learning resource center—one of creatively merging access to traditional library services with media and instructional support—had its genesis in the community college. From the beginning, library programs have promoted dynamic and efficient access to knowledge for all learners. Indeed, the management of these varied learning resources using limited budgets, consortial arrangements, and internal and external partnerships has added complexity, technical
sophistication, and greater economic responsibility to librarians who staff these centers.

The term librarian describes a professional member of the academic community with, at a minimum, an appropriate master's degree in the disciplines of library science and information management. Librarianship is uniquely structured and systematized by its professional members to serve the constantly changing knowledge management needs of students, faculty, and the local community. The library profession has long shown exceptional and immediate responsiveness to managing access to widely diverse knowledge resources. Today more than ever, librarians are educators and teachers of information literacy for faculty and students, as well as the local and worldwide community. A growing percentage of information resources are digital (online indexes, full-text databases, websites, e-books and e-journals). Yet this new format will not replace the large number of useful knowledge resources that will continue to be in print (e.g. books, newspapers, periodicals and other documents), or to be available in magnetic and optical media (e.g. tapes, CDs, DVDs). In collaboration and partnership with other faculty, librarians teach members of the community the information literacy skills necessary to access and to evaluate critically the myriad of available resources.

Learning resources programs that provide information literacy skills are essential to the development of the independent lifelong learner. Tenets of information literacy include the ability to:

- Determine the nature and extent of information needed
- Access and use needed information effectively and efficiently
- Evaluate information and its sources critically, and incorporate selected information into one's knowledge base and value system
- Use information effectively to accomplish a specific purpose
- Understand many of the economic, legal, and social issues surrounding the use of information.

Libraries and librarians help to establish the foundation on which all lifelong learners can build. An information-literate person has the ability to be a knowledgeable, active participant in the workforce, the community and the democratic society in which we live.

For these reasons, the Board reaffirms the vital role of library and learning resource center programs and librarians to formal education, information literacy and to lifelong learning as a core value.

*Approved by the AACC Board of Directors November 8, 2002*

http://www.aacc.nche.edu/About/Positions/Pages/ps01062003.aspx
APPENDIX B: TECHNOLOGY REPORT

Action Plan

Initial Implementation - The Committee understands that its proposal is ambitious and achieving each of the goals will require an institutional commitment in terms of resources. As is the case with any innovation, the plan also carries risk. For the NCC administrators and staff who will be faced with implementing this vision, the Committee offers the following as a conceptual guide for implementation. Instead the Committee suggests there are groups of tasks that must be synchronized across several dimensions (See Figure below).
Implementation Tracks. These are the categories of tasks that implementation will require. This abstract model is meant to illustrate the range of work involved and the need to synchronize the work in each area. The bidirectional arrows that link all categories illustrate that decisions in one process may inform others across category boundaries. A more detailed set of project plans will indicate the optimal sequencing of tasks as explicate the interdependencies.

Develop Policies and Procedures – IT governance, privacy/security, standards for course content in LMS

Assemble and Train Staff:

Develop Infrastructure: Data center and DR facility; wired and ubiquitous wireless network; offsite broadband access for students; mobile communications.

Implement Tools: scheduling, degree audit, LMS, ; incorporate social networking features across the tools.