

**Self Study Design Proposal**  
**Carnegie Mellon University**  
**Middle States Commission on Higher Education**  
**September 29, 2006**

## **I. The University**

Carnegie Mellon University is a highly selective institution founded as the Carnegie Technical Schools in 1900 by Andrew Carnegie. Through much of its early history, it was a largely regional institution with an evolving national and international excellence in research in a variety of domains. With the formal creation of Carnegie Mellon University in 1967, its emergence into the national and international arena in all areas of endeavor took hold, and it stands today as one of the great success stories in American higher education during the 20th century.

The vision, mission and values of Carnegie Mellon are captured in the current strategic plan, excerpted below. The university will be launching a new strategic planning initiative in the coming academic year, likely maintaining the overarching model of six core dimensions of education, research, regional impact, internationalization, community success, and finances and infrastructure.

### **Vision and Mission**

Industrialist and philanthropist Andrew Carnegie laid the foundation for Carnegie Mellon University in 1900 when he established the Carnegie Technical Schools to provide educational opportunities for the children of Pittsburgh's steelworkers and coal miners. Carnegie Mellon's strengths in education and research developed from an early practical approach to problem solving, so that today Carnegie Mellon is a distinctive member of the small group of research universities shaping the world through leadership in education, research and their impact on society.

Carnegie Mellon's rapid and successful transformation can be attributed to a core set of institutional strengths and values that inspire the university's vision, and to the dedication and achievements of its faculty, students, staff and alumni. As Carnegie Mellon enters its second century, we must continue to build upon our fundamental strengths, to sharpen our priorities and to pursue the university's vision.

The university values the following attributes that make Carnegie Mellon distinctive among research universities:

- A tradition of innovation which is sustained by an entrepreneurial faculty and an institutional willingness to assume risk.
- A commitment to problem-solving that is reflected in all of the university's colleges and programs.
- Unusual success in interdisciplinary research.
- Relatively small size that allows Carnegie Mellon to be responsive to new opportunities.

### Our Vision

*Carnegie Mellon will be a leader among educational institutions by building on its traditions of innovation, problem solving and interdisciplinary collaboration to meet the changing needs of society.*

This vision acknowledges that higher education will be challenged to meet the needs of society in the 21st century. Carnegie Mellon must be positioned to accept this challenge and responsibility so that we can continue to lead advances in educational and technological innovation, scientific discovery, creative expression and artistic production by fostering an atmosphere of intellectual excitement, innovation and entrepreneurship.

To exploit our comparative advantages and to identify opportunities for fruitful collaboration beyond our boundaries, we remain committed to interdisciplinary research and education, not only within and across academic fields, departments, schools and colleges, but also across institutional, national and cultural boundaries. We shall continue to focus our attention and resources where we can achieve excellence and comparative advantage in achieving our mission.

### Our Mission

*To create and disseminate knowledge and art through research and artistic expression, teaching and learning; and to transfer intellectual products to society.*

*To serve our students by teaching them problem-solving, leadership and teamwork skills, and the value of a commitment to quality, ethical behavior, society and respect for one another.*

*To pursue the advantages provided by a diverse and relatively small university community, open to the exchange of ideas, where discovery, creativity, and personal and professional development can flourish.*

Carnegie Mellon will continue to develop as a distinctive research university, one in which research and education are integral. Our faculty share with one another and with their students the excitement of creative inquiry, discovery and expression. However, we are interested not only in theory and practice, but also in production, or *making*, for example, making devices and processes, art, hardware and software, new management tools and literary works.

To achieve fully our goals, we cannot limit our focus to internal concerns. We must also nurture a concern for the welfare of others and a commitment to improve the world. Through our education, research and creative expression, the university relates to an unusual extent to the world beyond its campus. Our activities have impact by creating knowledge, improving the quality of life, enhancing culture, and advancing economic and environmental sustainability. Our research-based graduate programs aim to develop future leaders for academe, industry and government. Doctoral education represents an essential component of our mission as a research university and of our contribution to society. The development of Ph.D. students is as important as the research products themselves.

The development of problem-solving skills within a liberal-professional framework is a hallmark of a Carnegie Mellon education. The undergraduate programs prepare our students to become accomplished professionals who are broadly educated, independent and humane leaders. A Carnegie Mellon education challenges students to create intellectual depth and breadth, as well as professional skills. We must provide a social environment that reinforces academic objectives and the personal development of students.

A diverse academic environment is essential to enrich intellectual exchanges and to enhance cultural understanding. Likewise, it is important for the diversity of our community to reflect our regional, national and global constituencies. We must be more successful than we have been

in realizing and nurturing a diverse community.

### Goals and Strategies

Carnegie Mellon continues to improve and to contribute to society in meaningful ways. The goals described in the following section reflect our highest priorities as we strive to fulfill our mission and realize our vision.

These university-wide goals are organized into three categories: our core activities, including education and research; our strategic areas of focus, including strategic areas of leadership, international initiatives and regional impact; and our foundation, including community success and financial strength.

#### **A. Education for Leadership**

A Carnegie Mellon education prepares students for life and leadership. In a continually changing world, the most important qualities we can help our students develop are the ability to think independently and critically, the ability to learn and the ability to change and grow. As future leaders they must have courage to act, be sensitive to the needs and feelings of others, understand and value diversity, and honor the responsibilities that come with specialized knowledge and power. The university has historically provided exceptional depth of educational experience, including intensive instruction, a focus on decision making and problem solving, and opportunities for research and practical training. We also reaffirm our broader educational mission, founded upon the ideals and tradition of the Carnegie Plan, for undergraduates, graduate students and, by extension, the lifelong development of all members of the university community.

**Goal: Build upon our educational programs, distinctive in their rigor and focus, by expanding intellectual and personal development. Our students will become broadly educated and humane leaders who will have an important impact in their professions and communities.**

#### **Strategies:**

Broaden curricular experience and more fully integrate with learning opportunities outside the classrooms, studios and laboratories:

- Expand educational experiences beyond a student's major discipline.
- Expand opportunities for interdisciplinary educational experiences.

- Strengthen the coordination between educational and expanded extracurricular activities.
- Enhance student advising and mentoring with a focus on personal/professional guidance.

Enhance experiential learning opportunities:

- Extend the range of opportunities for intensive research experiences.
- Develop more opportunities to gain professional experience, such as internships.

## **B. Research**

Carnegie Mellon has established itself as a premier research university, drawing on its interdisciplinary culture to seek new opportunities, making research, artistic creation and education integral to one another, and including the whole campus in a wide array of research and creative endeavors. The external environment in which we operate is a world of rapid change. Carnegie Mellon must continually look for new opportunities and new collaborators, and assume a leadership role in defining future research directions. The university must invest in research and in artistic and scholarly creation, not just to maintain its current preeminent position, but also to reach higher levels of achievement in all its fields of endeavor.

**Goal: Lead in defining the national and international research agenda by leveraging our strengths across disciplines and exploiting opportunities to contribute to scientific and humanistic understanding, technological advances and artistic creation. Ensure that the benefits of the research experience - the power of collaborative discovery - help educate leaders for the next generation.**

### **Strategies:**

Foster an environment that promotes interdisciplinary collaboration within our university and among Carnegie Mellon, other universities, government and industry:

- Provide a supportive environment for entrepreneurial activities, such as establishing an interdisciplinary venture fund to support faculty research initiatives.

- Promote faculty, student and alumni interactions. For example, establish a database of capabilities and expand and promote forums for sharing ideas.

Continuously evaluate our position and either reinforce or refocus our strengths to exploit comparative advantages. As the external environment changes, we must reshape existing programs or initiate new programs to maintain or gain leadership positions.

Systematically evaluate and improve our infrastructure, including facilities, equipment, networks and libraries, to support research.

### **C. Strategic Areas of Leadership**

Carnegie Mellon strives to have an impact that is larger than its size would indicate. Our academic departments tend to be smaller and more narrowly focused than those of our competitors. The university makes focused resource investments in order to exploit areas of comparative advantage. We have compensated for our limitations in size through strategic positioning, building from core strengths and leveraging our limited resources through interdisciplinary collaboration. These strategies, along with reasoned risk-taking and the talent and entrepreneurial spirit of our faculty, have allowed us to compete effectively with larger, better-endowed universities. We will continue to pursue selected areas of comparative advantage.

**Goal: Aggressively develop and implement selected areas of focus that capitalize on strengths across the university and for which resources are obtainable.**

#### **Strategies:**

Extend our strengths in the development and use of information and communication technology:

- Prepare our students to excel in an information society.
- Pursue opportunities in areas such as entertainment technology, technology-enhanced learning, the universal digital library, advanced computing to solve

large and complex models, data storage and retrieval, and electronic commerce.

- Critically assess the impact of technology on society and individuals.
- Strengthen and maintain our information and communication infrastructure.

Reinforce and better coordinate our current educational and research strengths in environmental science, engineering and policy to advance our leadership in this area:

- Pursue opportunities in areas such as green design, the built environment and brownfield site development.

Take advantage of our unique strengths across the university to enhance our impact in biotechnology and health policy:

- Establish a task force to identify niche areas in which the university can exploit current strengths and emerging opportunities to attain a leadership position.

Capitalize on our unique strengths in fine arts and humanities to pursue an area of interdisciplinary strategic focus:

- Establish a task force to identify niche areas in which the university can exploit current strengths to attain a leadership position.

#### **D. International Initiatives**

In achieving its status as a premier research university, Carnegie Mellon has pursued selected international initiatives. These include: global recruitment of faculty and students, international faculty research collaborations, institutional alliances and consortia, student exchange programs with non-U.S. universities, distance learning programs, executive education programs and educational technology transfer. Still, as the university continues its progression from a regionally distinctive to a nationally and internationally prominent institution, we must expand our international activities and perspectives. This expansion is essential given the rapid progress of worldwide information connectivity, growing international economic integration and the increasing degree to which both our constituents and our competitors view their own environments as global.

**Goal: Selectively expand our international impact by building on existing strengths in order to compete effectively on a global basis for research and educational opportunities, academic talent and financial resources.**

**Strategies:**

Identify and pursue focal areas for international activities:

- Identify strategic educational, research or technology transfer activities.
- Identify high-opportunity geographical areas that relate well to our capabilities.
- Develop strategic partnerships in these areas with universities, industries and governments.

Define a range of innovative international educational experiences for our students so that our graduates can participate fully in a global society.

**E. Regional Initiatives**

Carnegie Mellon's education and research missions are aimed at establishing global excellence. At the same time, Carnegie Mellon has benefited significantly from the people and institutions of Pittsburgh, and the university's success is integrally tied to the success of its region, Southwestern Pennsylvania. Our ability to attract and retain the best faculty, staff and students is dependent on the educational, economic, cultural and social vitality of our regional community. Carnegie Mellon advances its own interest by helping advance the region.

**Goal: Use our strengths, in collaboration with other Pittsburgh institutions, to advance the educational, economic, social, and cultural opportunities of the region for all its citizens.**

**Strategies:**

Expand technology commercialization in order to attract, grow and retain businesses in the region through initiatives such as the creation of a venture capital fund, expanded technology transfer and business-support services.

Use issues and problems of the region for creative inquiry, research and educational innovations globally.



Provide regional policy leadership and strategic planning, matching the needs of the region with our strengths.

## **F. Community Success**

The people of Carnegie Mellon are its greatest asset. The accomplishments of Carnegie Mellon's students, faculty, staff and alumni will ultimately determine our ability to realize our vision of being a leader among educational institutions. We must ensure an environment that promotes individual and community success. This environment should challenge and enable all of our members to reach their fullest potential. A diversity of talents, perspectives and experiences is essential to intellectual strength. We value an inclusive, ethical and nurturing community. The challenge of new ideas, energies and vigorous debate generates new fields of inquiry, stimulates discussion of accepted ideas and standards, shifts models and improves professional practice.

**Goal: Provide a rewarding environment that enables our students, faculty, staff and alumni to succeed in advancing the university mission.**

### **Strategies:**

Increase diversity of perspectives and backgrounds of students, faculty, staff and Trustees, and enrich and nurture the intellectual and ethical growth of all members of the university:

- Significantly improve recruitment and retention of underrepresented populations.
- Promote multicultural awareness and tolerance.
- Foster personal and professional integrity and ethical development.

Create extraordinary value for our students through their experience at Carnegie Mellon, and enhance the successful transition of our students to post-graduate activities and the world of work and citizenship.

Enhance departmental and university-wide mentoring and development activities to help faculty and staff realize their fullest potential as contributors and leaders within their disciplines and across the university.

Create and sustain a supportive work environment that promotes employee success by providing training for all supervisors and ensuring performance feedback mechanisms to foster employee development.

Establish lifelong connections between the university and our alumni in order to stimulate their ongoing intellectual growth and to provide professional support.

## **G. Financial Strength**

Carnegie Mellon's endowment is significantly smaller, and its operating budget is more dependent on tuition and research funding than its competitors. While we have managed our limited resources effectively in order to compete with larger, better-endowed universities, our financial position is a limiting factor in our future. Tuition and research revenue will not experience substantial growth over the next several years; yet we will need internal venture funding to stimulate continued innovation. The university will also require funding to support expansion and improvements so that we can achieve high-priority university-wide and college goals. Facility requirements include: expansion space for all of the colleges and the libraries; renovation of existing laboratories, studios, classrooms and offices; expansion of technology-supported classrooms; and deferred maintenance.

**Goal: Expand and diversify our financial base to enable us to achieve our mission.**

### **Strategies:**

Significantly increase the real value of the endowment through actions such as expanding fund-raising capacity, and reevaluating our investment and spending strategies.

Pursue high-margin opportunities whose net revenues would support our broader education and research mission.

Continuously evaluate our programmatic achievements and position, and either maintain, reinforce or redirect our investments and ensure a resource allocation process that reinforces this evaluation throughout the university.

Streamline university-wide administrative and decision-making processes in order to deliver the highest value services for the least cost to our students, sponsors, faculty and staff.

In realizing its vision as outlined in the above strategic plan, Carnegie Mellon relies on a tradition of efficiency. This is enhanced by a well-orchestrated relationship between governance and administrative structures, by a relatively decentralized structure, and through the collaborative interplay between various governing and administrative councils and committees.

Recently, the university has undertaken an initiative to confirm explicit primary and secondary metrics in each of the six core strategic foci, providing a particularly useful set of measures for the Board of Trustees and senior administration in tracking progress in critical areas of impact.

## **II. Self-Study Nature, Scope and Desired Outcomes**

The Middle States accreditation process comes at a fortuitous time in the institution's strategic planning, and has allowed for particular attention in the areas of assessment. In consultation with Middle States staff liaison, Linda Suskie, we have chosen to translate this into a Selected Topics Self Study approach with an emphasis on undergraduate education.

Specifically, the Self Study will focus on five selected standards:

- Standard 2: Planning, Resource Allocation, and Institutional Renewal;
- Standard 3: Institutional Resources;
- Standard 7: Institutional Assessment;
- Standard 12: General Education;
- Standard 14: Assessment of Student Learning.

Additionally, the Self Study will address the assessment fundamental elements of all other standards, plus the fundamental elements relating to information literacy and technological competency.

The specific outcomes of the study will be dependent upon the product of the work groups, but it is important to note that the university is committed to utilizing the process to continue to progress in a variety of important dimensions. Specifically, Carnegie Mellon is known as an institution that is continually striving, not enamored of the status quo, and engaged in an intentional and unwavering process of self-improvement. To this end, issues of assessment, planning, leveraging resources and extracting the greatest value from our educational initiatives in and outside of the classroom will be well served by our commitment to this process.

### **III. Process to Date**

Between March and August of 2006, the university engaged in the process of “roadmapping” the fundamental elements that will not be covered in the self-study, resulting in interim approval by Middle States on August 2.

Between June and August, this process allowed for considerable involvement in and by the colleges, further driving a self-study design which, while complex, reflects the unique nature of the institution. Moreover, this allowed for considerable discussion throughout academic and non-academic areas about the appropriate structure for the self-study. The result is somewhat complex, while ensuring both centralized, institution-level focus and sensitivity to distinct needs and interests at the college and school levels.

Notable here is that most of the work groups detailed below have essentially “pre-launched” and bolstered our confidence that the process to date has served us well, that the design is the right one, and that the forgoing structure will, in fact, work, both in the immediate focus of each group and in the efficacy of the steering and coordinating committees.

### **IV. Structure**

In order to ensure an integrated study, engaging all aspects of the university community, we have set forth a design that is at once comprehensive and efficient. This includes three oversight committees and 15 working groups. (A corresponding number has been noted parenthetically after each committee or work group, for clarity.)

## Leadership

### *Steering Committee (1)*

The institutional Self Study is being directed by a steering committee, appointed by the President, which currently includes the following members:

- Catherine Davidson, Senior Development Writer, University Advancement (Self-Study Editor)
- Joseph (Jay) Kadane, University Professor of Statistics and Social Sciences
- Stacey Lopez, Director of Institutional Research and Analysis
- Michael Murphy, Associate Vice President
- Indira Nair, Vice Provost for Education and Professor of Engineering & Public Policy
- Russ O'Lare, Director of Planning (Co-Chair)
- Gloriana St. Clair, Dean of University Libraries (Co-Chair)
- Additional faculty & staff (nominated) so that each college is represented

A core group (co-chairs R. O'Lare and G. St. Clair, plus J. Kadane and M. Murphy) will be specifically responsible for the basic administration of the self-study, ensuring that the larger steering group does not become consumed with the minutia of an extensive work group design.

## Work Groups

The structure of the self-study allows for two primary thrusts: 1) institutional effectiveness, and 2) education. These thrusts are largely consistent with the Middle States foci on institutional context and educational effectiveness. The only area distinct in our delineation is the inclusion of Standard 8, Student Admissions and Retention, in the institutional effectiveness realm.

### *Institutional Effectiveness Committee (2)*

The institutional effectiveness committee will include the following members:

- Romaine Botti, Director of Strategic Finance (Co-Chair)
- Russ O'Lare, Director of University Planning (Co-Chair)
- Stacey Lopez, Director of Institutional Research and Analysis (Co-Chair)
- James Mercolini, Assistant General Counsel (Co-Chair)
- Barbara Smith, Associate Vice President for Human Resources (Co-Chair)

- Michael Steidel, Director of Admission (Co-Chair)
- William Elliott, Vice President for Enrollment
- Cheri Hays, Director of the President's Office and Corporate Secretary
- Holly Hippensteel, Coordinator of Student Development
- Karen Khan, Project Manager, Office of the President
- Michael Murphy, Associate Vice President
- Everett Tademey, Associate Vice President and University Ombudsman
- Melissa Taranto, Planning Analyst II

This committee will focus on:

- Standard 2: Planning, Resource Allocation, and Institutional Renewal;
- Standard 3: Institutional Resources;
- Standard 7: Institutional Assessment;

while including the assessment fundamental elements of:

- Standard 1: Mission & Goals;
- Standard 4: Leadership & Governance;
- Standard 5: Administration;
- Standard 6: Integrity;
- Standard 8: Student Admissions and Retention.

### *Undergraduate Education Committee (3)*

The undergraduate education committee will include the following members:

- Indira Nair, Vice Provost for Education and Professor of Engineering & Public Policy (Co-Chair)
- Gloriana St. Clair, Dean of University Libraries (Co-Chair)
- Susan Alexander, Manager of Computer Education
- Jennifer Church, Dean of Student Affairs
- Eric Grotzinger, Associate Dean of the Mellon College of Science & Teaching Faculty of Biology
- Joseph "Jay" Kadane, University Professor of Statistics and Social Sciences
- Michael Murphy, Associate Vice President
- Russ O'Lare, Director of University Planning

- Daniel Resnick, Director, Center for History of the University and Emeritus Professor of History
- Other faculty (to be named pending preliminary design approval).

The committee will focus on:

- Standard 12: General Education;
- Standard 14: Assessment of Student Learning;

while including the assessment fundamental elements of:

- Standard 9: Student Support Services;
- Standard 10: Faculty;
- Standard 11: Educational Offerings (plus information literacy & technological competency);
- Standard 13: Related Educational Activities.

The Undergraduate Education Committee (3) will coordinate the activities of two subcommittees, one dedicated to examining General Education (4), and the other dedicated to examining the Assessment of Student Learning (5).

*Standard 12: General Education (4)*

- Barbara Anderson, Professor and Associate Dean, College of Fine Arts
- Dan Boyarski, Professor and Department Head, School of Design
- Elizabeth A. Bradley, Department Head, School of Drama
- John Carson, Department Head, School of Art
- Mark Cato, Assistant Department Head, School of Art
- Milton Cofield, Senior Lecturer and Executive Director, BS in Business Administration, Tepper School of Business
- Jay Devine, Associate Dean, Humanities and Social Sciences and Director, Undergraduate Academic Advisory Center
- David Dzombak, Associate Dean and Professor, Carnegie Institute of Technology
- Gregg Franklin, Professor and Associate Dean, Mellon College of Science
- Rebecca Freeland, Associate Dean, Mellon College of Science and Associate Department Head, Chemistry
- Eric Grotzinger, Professor and Associate Dean, Mellon College of Science
- Laura Lee, Professor and Department Head, School of Architecture

- Dan Martin, Associate Dean, Heinz School and Director ICME and Associate Professor of Drama
- Michael Murphy, Associate Vice President
- Indira Nair, Vice Provost for Education and Professor of Engineering and Public Policy
- Russ O'Lare, Director of University Planning
- Dan Resnick, Director, Center for History of the University and Emeritus Professor of History
- Luis Rico-Gutierrez, Special Faculty of Architecture and Associate Dean, College of Fine Arts
- Gloriana St. Clair, Dean of University Libraries
- Mark Stehlik, Professor and Assistant Dean, School of Computer Science
- Kristina Straub, Professor and Associate Dean, Humanities and Social Sciences
- Klaus Sutner, Professor and Associate Dean, School of Computer Science
- Marilyn Taft Thomas, Interim Department Head, School of Music

*Standard 14: Assessment of Student Learning (5)*

- Susan Ambrose, Associate Provost for Education and Director, Eberly Center for Teaching Excellence and Professor, Department of History
- Marc DeGraef, Professor, Department of Materials Science and Engineering
- Stephen Garoff, Professor, Department of Physics
- Brian Junker, Professor, Department of Statistics
- Kenneth Keeling, Professor, School of Music
- Michael Murphy, Associate Vice President
- Indira Nair, Vice Provost for Education and Professor, Engineering and Public Policy
- Russ O'Lare, Director of University Planning
- Denise Rousseau, H. J. Heinz II Professor, Heinz School
- Gloriana St. Clair, Dean of University Libraries
- Klaus Sutner, Professor and Associate Dean, School of Computer Science

As noted, the focus on undergraduate education, and specifically on general education and assessment of student learning, will be enhanced through the efforts of designated work groups in each of the colleges and schools, plus a specific work group to focus on issues of information literacy and technological competency, as follows:



*Carnegie Institute of Technology (Engineering) (6)*

- David Dzombak, Professor and Associate Dean, Carnegie Institute of Technology (Chair)
- James Garrett, Professor and Associate Dean, Carnegie Institute of Technology
- tbd (to be named pending preliminary design approval)

*College of Fine Arts (7)*

- Luis Rico-Gutierrez, Special Faculty of Architecture and Associate Dean, College of Fine Arts (Chair)
- tbd (to be named pending preliminary design approval)

*College of Humanities & Social Sciences (8)*

- Jay Devine, Associate Dean, Humanities and Social Sciences and Director, Undergraduate Academic Advisory Center
- Kristina Straub, Professor and Associate Dean, Humanities and Social Sciences
- tbd (to be named pending preliminary design approval)

*Heinz School of Public Policy (9)*

- Dan Martin, Associate Dean, Heinz School and Director ICME and Associate Professor of Drama (Chair)
- tbd (to be named pending preliminary design approval)

*Mellon College of Science (10)*

- Eric Grotzinger, Professor and Associate Dean, Mellon College of Science (Chair)
- Steve Garoff, Professor of Physics
- Karen Stump, Director of Undergraduate Studies and Teaching Faculty in Biology
- tbd (to be named pending preliminary design approval)

*School of Computer Science (11)*

- Klaus Sutner, Professor and Associate Dean, School of Computer Science (Chair)
- Mark Stehlik, Professor and Assistant Dean, School of Computer Science
- tbd (to be named pending preliminary design approval)

*Tepper School of Business (12)*

- Milton Cofield, Senior Lecturer and Executive Director, BS in Business Administration, Tepper School of Business (Chair)
- tbd (to be named pending preliminary design approval).

*Information Literacy & Technical Competency (13)*

- Susan Alexander, Manager of Computer Education
- Erika Linke, Associate Dean, University Libraries
- Jean Alexander, Head, Hunt Library Reference
- Daniel Hood, University Libraries, Hunt Reference
- Donna Beck, Engineering Librarian

Finally, given the distinctive nature of each of the schools within the College of Fine Arts (CFA), a work group has been established in each of the five CFA schools to focus on undergraduate education and assessment of student learning within each particular school. The work groups within the College of Fine are as follows:

*School of Architecture (14)*

- Laura Lee, Professor and Department Head, School of Architecture (Chair)
- tbd (to be named pending preliminary design approval).

*School of Art (15)*

- John Carson, Department Head, School of Art (Chair)
- Mark Cato, Assistant Department Head, School of Art
- tbd (to be named pending preliminary design approval).

*School of Design (16)*

- Dan Boyarski, Professor and Department Head, School of Design (Chair)
- Melissa Cicozi, Assistant Head, School of Design
- Mark Mentzer, Professor, School of Design
- tbd (to be named pending preliminary design approval)

*School of Drama (17)*

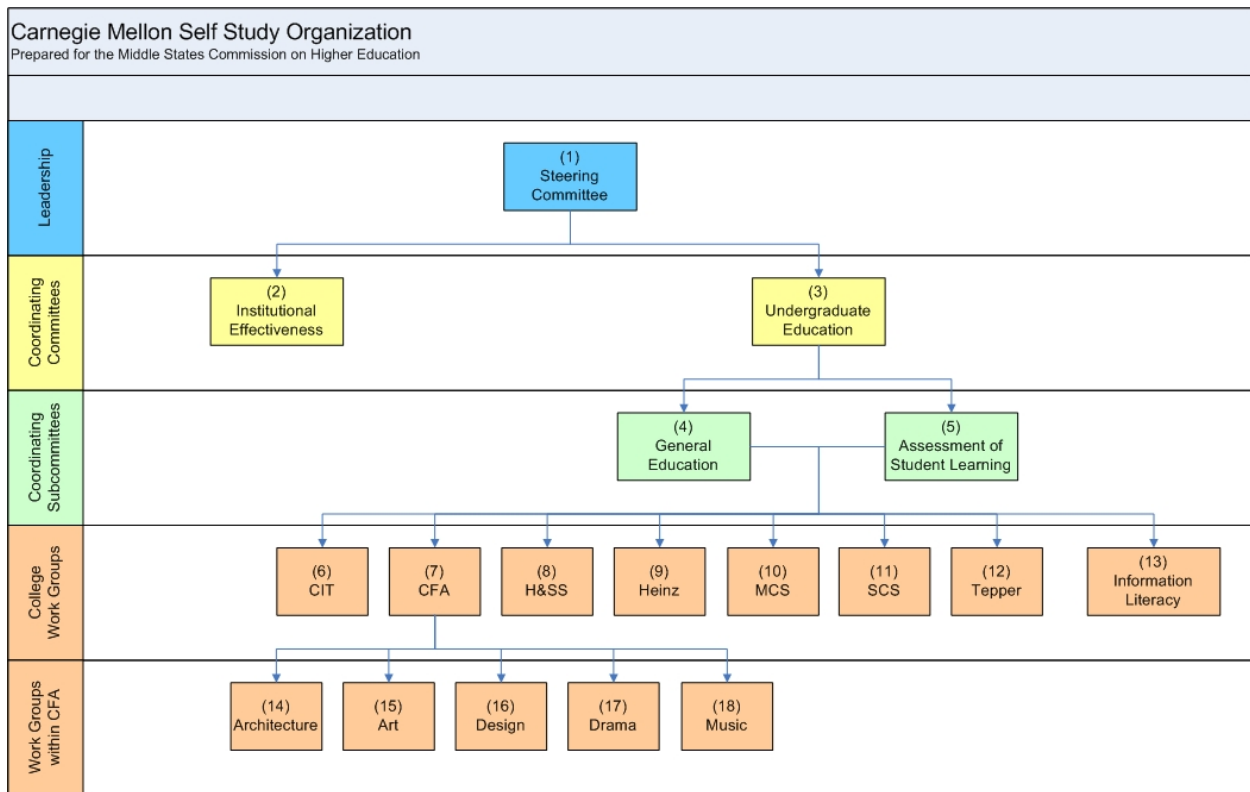
- Elizabeth A. Bradley, Department Head, School of Drama (Chair);
- Barbara Anderson, Professor and Associate Dean, College of Fine Arts
- Barbara Mackenzie-Wood, Associate Professor, School of Drama
- tbd (to be named pending preliminary design approval)

*School of Music (18)*

- Marilyn Taft Thomas, Interim Department Head, School of Music (Chair)
- Sharon Johnston, Academic Advisor, School of Music
- Natalie Ozeas, Professor and Associate Department Head, School of Music
- tbd (to be named pending preliminary design approval)

It should be noted that, in many cases, these work groups are the entirety or a subset of a standing committee, ensuring the appropriate context for their focus and maintaining the appropriate engagement for the long-term benefit of the self study process.

*Diagram of Carnegie Mellon's Self Study Organization and Working Groups*



## V. Research Questions

Critical to the value of the self-study process is structuring around essential questions that will drive the committees and work groups, engage the campus community, benefit the university, and allow for appropriate attention focus on the standards—and, more specifically, fundamental elements—under the review of the visiting committee. To this end, the university has identified a small number of general questions, with each cascading down with greater specificity within the individual units.

In the area of *institutional effectiveness*, the essential questions are:

- What are the highest priority outcomes that we seek as a university and how do we ensure that these are understood and embraced throughout the campus community?
- Against what standard(s) do we judge our achievement in these areas, and through what process(es) do we assess our impact and refine our activities to these ends?
- How well calibrated is our resource base, both current and anticipated, to our current and anticipated goal set and the activities necessary to meet those outcomes, now and in the future?

In the area of *undergraduate education*:

- How does the central vision for education manifest itself through the curricula in the colleges and schools and in the metacurricular experience of students?
- What are the essential outcomes desired for our students, and how does the tailoring of general education requirements in each college contribute to both their discipline-specific education and to these broader essential outcomes?
- What are the ways in which we assess anticipated outcomes in the educational experience of our students and use that information to continuously enhance their interests and abilities?

These questions have been generated with input from various individuals involved to date. The refinements and detail of research questions within the various working groups will occur primarily in the September 18 – 29 period, though may be subject to further clarification after the formal working group launch of 10/1. Specific research questions in each work group will relate back to these essential questions, driving the dual agenda of using the accreditation process for

institutional advancement, while ensuring appropriate attention focus to the individual characteristics of excellence and related fundamental elements. Ensuring that both objectives are met is the fundamental desired outcome of the steering committee.

## **VI. Self Study Report Organization & Format**

The organization and format of the final Self Study report will likely undergo modification, consistent with ongoing progress in the work groups. As a baseline template, the final report is expected to include the following elements, in turn, summarized from the Middle States proposed format:

1. Executive summary of major findings and recommendations, including the rationale for the self-study approach and selected topics
2. A copy of the Eligibility Certification Statement
3. Institution overview
4. Description of self study process
5. An overview of the *institutional effectiveness* research questions, structured as follows:
  - a. Summary of administrative foci
  - b. Summary of analysis and intra-study cross-reference
    - i. Institutional effectiveness research question #1 inquiry and outcomes
    - ii. Institutional effectiveness research question #2 inquiry and outcomes
    - iii. Institutional effectiveness research question #3 inquiry and outcomes
  - c. Translation to specific standards\*
    - i. Standard 1 (assessment element)
    - ii. Standard 2 (complete)
    - iii. Standard 3 (complete)
    - iv. Standard 4 (assessment element)
    - v. Standard 5 (assessment element)

- vi. Standard 6 (assessment element)
    - vii. Standard 7 (complete)
    - viii. Standard 8 (assessment element)
  - d. Articulation of relative strengths and weaknesses
  - e. Recommendations going forward
  
- 6. An overview of the *undergraduate educational* research questions, structured as follows:
  - a. Summary of educational foci
  - b. Summary of analysis and intra-study cross-reference
    - i. Undergraduate education research question #1 inquiry and outcomes
    - ii. Undergraduate education research question #2 inquiry and outcomes
  - c. Translation to specific standards\*
    - i. Standard 9 (assessment element)
    - ii. Standard 10 (assessment element)
    - iii. Standard 11 (assessment element and information literacy elements)
    - iv. Standard 12 (complete)
    - v. Standard 13 (assessment element)
    - vi. Standard 14 (complete)
  - d. Articulation of relative strengths and weaknesses
  - e. Recommendations going forward

## 7. Major conclusions

\*It is expected that 5.c. & 6.c. will be summaries footed to marginal annotations throughout and appendicized tables summarizing fundamental element compliance,

This design, drawn largely from Middle States' recommended design, covers all substantive components of the Self Study report,. The design allows for clarity in institutional response, with inclusion of the product of the various work groups, as detailed below.

The specific format for the final product and work group reports is expected to follow the design elements of this design proposal, incorporating the same font, margins, heading and related style. Reference of appendices will be made through parenthetical notation, enumerated in the final draft, as will references to roadmap or self-study documents. Artwork, the incorporation of

diagrams and charts, and other specific design details will be handled at the direction of Catherine Davidson.

## **VII. Work Group Facilitation**

The charge to the various work groups flows from the entirety of the self study design, and the leader of each work group has been involved in substantive discussion that the context of the complete study is clear. Specifically, each work group will be directed to answer the research questions relevant to their domain, and to utilize a format that will allow for integration into the final report. Moreover, Catherine Davidson, the writer for the project and a member of the steering committee, will have ongoing contact with work group leaders to ensure continuity of flow, especially between coordinating committees and relevant work groups.

The basic template for the work group reports will follow directly from the Middle States proposal, summarized below:

1. An overview of charge and questions addressed;
2. Analytical discussion of inquiry and outcomes;
3. Findings and conclusions addressing specific relevant standards;
4. Discussion of connection to or collaboration with other groups;
5. Recommendations for improvement moving forward.

See Appendix A for preliminary self-study document tables for use by Work Groups in each area of focus, which will be supplemented throughout the process.

The overarching support for the work groups will be provided by the coordinating committees, by the steering committee generally, by Russ O'Lare in the administrative areas specifically, by Gloriana St. Clair in the educational areas specifically, and by Michael Murphy and Catherine Davidson, as noted.

The formal charge to each working group will follow the following format:

[Begin example of formal charge. . .]

## Introduction

Let us begin by expressing our appreciation for the hard work that you and your colleagues in the college have put in over the last three months in preparation for our upcoming Middle States accreditation visit. By virtue of your effort, we have been able to tailor the focus of our self study in ways that hold real potential to benefit our students in the years to come. We look forward to working with you in the coming 18 months as we continue down this path.

As you know, the accreditation process is a necessarily complicated one, and we would urge your close scrutiny of the attached self study design proposal so that you have this context for your own work. While the charge to your specific work group flows naturally from the design proposal, we have summarized it here for clarity. As we have discussed, much of the work will take place in the individual colleges and schools—perhaps even departments and programs, as you see fit—with coordination provided by the General Education work group, chaired by Gloriana St. Clair, and the Assessment of Student Learning work group, chaired by Indira Nair. Further, an overarching work group on educational effectiveness will ensure that these inter-related pieces tie together.

Your work group is charged with answering the following three questions as they relate to <your area of focus--college/school model below>:

- How does the central vision for education manifest itself through the curricula in the colleges and schools and in the metacurricular experience of students?
- What are the essential outcomes desired for our students, and how does the tailoring of general education requirements in each college contribute to both their discipline-specific education and to these broader essential outcomes?
- What are the ways in which we assess anticipated outcomes in the educational experience of our students and use that information to continuously enhance their interests and abilities?

As to the format of the report of your work group, we ask that you follow the relatively simple template laid out in the design, specifically:

- An brief overview of charge, questions addressed, committee composition and process (est. 1 page);



- Analytical discussion of inquiry and outcomes in response to each of the three questions posed (est. 2-3 pages per question);
- Findings and conclusions addressing specific fundamental elements, as follows (est. page per element + 1-3 page summary per standard); <college/school model below>

a. Standard 11

i. Fundamental Element M

Assessment of student learning and program outcomes relative to the goals and objectives of the undergraduate programs and the use of the results to improve student learning and program effectiveness

b. Standard 12

i. Fundamental Element A

A program of general education of sufficient scope to enhance students' intellectual growth, and equivalent to at least 15 semester hours for associate degree programs and 30 semester hours for baccalaureate programs; (An institution also may demonstrate how an alternative approach fulfills the intent of this fundamental element.)

ii. Fundamental Element B

A program of general education where the skills and abilities developed in general education are applied in the major or concentration

iii. Fundamental Element C

Consistent with institutional mission, a program of general education that incorporates study of values, ethics, and diverse perspectives

iv. Fundamental Element D

Institutional requirements assuring that, upon degree completion, students are proficient in oral and written communication, scientific and quantitative reasoning, and technological competency appropriate to the discipline

v. Fundamental Element E

General education requirements clearly and accurately described in official publications of the institution

vi. Fundamental Element F

Assessment of general education outcomes within the institution's overall plan for assessing student learning, and evidence that such assessment results are utilized for curricular improvement

c. Standard 14

i. Fundamental Element A

Clearly articulated statements of expected student learning outcomes (see Standard 11: Educational Offerings), at all levels (institution, degree/program, course) and for all programs that aim to foster student learning and development, that are:

appropriately integrated with one another

ii. Fundamental Element A

Clearly articulated statements of expected student learning outcomes (see Standard 11: Educational Offerings), at all levels (institution, degree/program, course) and for all programs that aim to foster student learning and development, that are:

consonant with the institution's mission

iii. Fundamental Element C

Clearly articulated statements of expected student learning outcomes (see Standard 11: Educational Offerings), at all levels (institution, degree/program, course) and for all programs that aim to foster student learning and development, that are:

consonant with the standards of higher education and of the relevant disciplines

iv. Fundamental Element D

A documented, organized, and sustained assessment process to evaluate and improve student learning that meets the following criteria:

systematic, sustained, and thorough use of multiple qualitative and/or quantitative measures that:

maximize the use of existing data and information

v. Fundamental Element E

A documented, organized, and sustained assessment process to evaluate and improve student learning that meets the following criteria:

systematic, sustained, and thorough use of multiple qualitative and/or quantitative measures that:

clearly and purposefully relate to the goals they are assessing

vi. Fundamental Element F

A documented, organized, and sustained assessment process to evaluate and improve student learning that meets the following criteria:

systematic, sustained, and thorough use of multiple qualitative and/or quantitative measures that:

are of sufficient quality that results can be used with confidence to inform decisions

vii. Fundamental Element G

A documented, organized, and sustained assessment process to evaluate and improve student learning that meets the following criteria:

systematic, sustained, and thorough use of multiple qualitative and/or quantitative measures that:

include direct evidence of student learning

viii. Fundamental Element H

A documented, organized, and sustained assessment process to evaluate and improve student learning that meets the following criteria:

support and collaboration of faculty and administration

ix. Fundamental Element I

A documented, organized, and sustained assessment process to evaluate and improve student learning that meets the following criteria:

clear, realistic guidelines and timetable, supported by appropriate investment of institutional resources

x. Fundamental Element J

A documented, organized, and sustained assessment process to evaluate and improve student learning that meets the following criteria:

sufficient simplicity, practicality, detail, and ownership to be sustainable

xi. Fundamental Element K

A documented, organized, and sustained assessment process to evaluate and improve student learning that meets the following criteria:

periodic evaluation of the effectiveness and comprehensiveness of the institution's student learning assessment processes

xii. Fundamental Element L

Assessment results that provide sufficient, convincing evidence that students are achieving key institutional and program learning outcomes

xiii. Fundamental Element M

Evidence that student learning assessment information is shared and discussed with appropriate constituents and is used to improve teaching and learning

xiv. Fundamental Element N

Documented use of student learning assessment information as part of institutional assessment

- Discussion of connection to, or collaboration with, other groups;
- Recommendations for improvement moving forward.

While this is a fairly straight-forward design, it fits well with the ultimate document template and will allow us to integrate the reports with greater clarity. The rub here is the capacity to focus on the second and fifth elements in earnest, while ensuring that the third element is clear and unambiguous.

We have had many questions about the probable length of the final work group reports. The final university level report is suggested to be no more than 200 double-spaced pages, or a maximum of 50,000 words. One might guess that the reports coming from the college and school work groups would then be no more than the indicated total pages, plus appendices and external document references. We offer this as a very rough indication—more a simple point of calibration than anything that should be unduly constraining.

#### Summary Detail

As to the detailed format of the report, this will evolve, but for now we are suggesting simply a format—font, margins, typeface—consistent with that you see in the design document. In fact, the final report will make considerable use of marginal annotations to foot responses to the research questions to specific relevant standards. You should not hesitate to incorporate charts, graphs, diagrams - even pictures, if they support answering the research questions and addressing the fundamental elements. We have the great fortune to have Catherine Davidson, a professional writer in University Advancement, working with us, and she will be meeting with you in the coming weeks.

You have seen the overall schedule, so we will just summarize by noting that we would like some manner of preliminary report by the start of the spring semester, with the final due on April 1. We will have much collective discussion on all of this, but please do lock in those dates as you strategize moving forward.

You may use whatever materials or background you deem of value. We have attached a brief list of relevant documents, drawn largely from your own great work on the self study document

tables. While no central budget exists for this initiative, if there are expenditures that you feel would be valuable to make and which you are unable to cover, contact us and we will do whatever we can to accommodate your needs.

We are indeed here to help in any way, and we look forward to working with you.

[...end example of formal charge].

## **VIII. Broader Community Involvement**

Underscored throughout the accreditation process as put forward by Middle States--and consistent with Carnegie Mellon's tradition--involvement by the community will be essential to this process. To date, this has included primarily essential stakeholders and those who will be involved in guiding this process. As the working groups formally launch—embedded, as noted, in many existing councils and committees—there will increasing opportunity for input from a variety of constituencies. Central to the product of the self study, it is also essential to the ultimate support for the outcome of the self study. This fits well with other strategic initiatives, as noted, while reinforcing that we need to be careful to manage the process with open access and opportunities for input, while being sensitive to the time commitments involved.

Several faculty members have been involved in the process to date, and others have been nominated and will be involved if the self study design is approved. Staff involvement is secured, though will be expanded somewhat in the coming weeks. Student involvement has not yet been secured, though it is expected that many of the work groups will have student members.

The opportunity for involvement by the whole of the community, beyond work group participation, will be secured by the transparency of the process and, specifically, by the open review, comment and amendment process slated for the late summer and early fall of 2008, as designed. An active and thoughtfully designed website will ensure the tracking of the accreditation process internally for all members of the campus community.

## **IX. Visiting Evaluation Team Profile**

The composition of the visiting evaluation team is critical to the value of the entire process, both in this instantiation and for the overall respect for the accreditation process. To this end, it would be ideal to have individuals who have the right set of responsibilities, come from relevant academic disciplines, and have experience at institutions with a parallel set of opportunities and constraints. The list below is intended to meet that objective, while bringing specific talent and experience in assessment and related functions to bear.

- Chief Executive Officer
- Provost
- Dean of Libraries
- Vice Provost for Education or Dean of Undergraduate Studies or Liberal Arts
- Five faculty members: Business/Public Administration, Engineering/CS, Humanities/Social Sciences, Science, and Performing Arts
- Chief Financial Officer
- Director of Institutional Research & Assessment

Additional details about the preferred qualifications of the visiting evaluation team (i.e., specific institutions and specific individuals) will be submitted to the Middle States staff liaison, Linda Suskie, before the first of December.

## **X. Process Moving Forward**

One valuable tool to date has been the issuance of a schedule for the entire process, with heightened granularity of detail for events in the immediate future. The current schedule is as follows:

9/8/06	First Draft of Self Study Design Proposal Delivered
9/11/06	Initial Document Collection for Self Study (current state work group pre-reads)
9/14/06	Linda Suskie Official Visit
9/15/06	Linda Suskie Document Review & Detailed Process Consultation
9/22/06	Second Draft of Self Study Design Document
9/29/06	Final "Pre-launch" Self Study Design Document
10/1/06	Formal Work Group Launch
1/1/07	Work Group Interim Reports



4/1/07	Work Group Final Drafts
7/1/07	Self Study Preliminary Draft
8&9/06	Campus Self Study Draft Review & Comment
10/1/07	Self Study Final Draft
11/07	Chair Preliminary Visit
12/08	Document Review Visit ("Roadmaps")
1/1/08	Self Study Final Copy
2/1/08	Delivery of Self Study to Committee
3/08	Committee Visit