

RECOMMENDATIONS OF THE INFORMATION, COMMUNICATION, JOURNALISM, MEDIA, AND TECHNOLOGY STEERING COMMITTEE

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EXECUTIVE SUMMARY

The ICJMT Steering Committee proposes that CU Boulder make the best use of its rich array of existing assets to create a College of Media, Design and the Arts. In addition to recognizing the many benefits of this new configuration for the Boulder campus, the Steering Committee's recommendations respond to the needs and interests of a growing body of students who seek to master digital media and information and communication technology (ICT) for successful careers in the fine and performing arts, journalism, design, organizational communication, and related fields, and who value an education that can provide them with a deep understanding of the meaning and impact of ICT across a wide range of human endeavors, from the local to the global and from the historical to the contemporary.

The College of Media, Design, and the Arts will bring together existing academic units and disciplines including Architecture and Environmental Design; Art and Art History; Communication; Film Studies; Journalism and Mass Communication; Music; and Theatre and Dance. (Because the College of Music has a different administrative structure and history than these other units, Music and the new College may engage in a deeply collaborative relationship rather than be merged.) The College will house and develop an important discipline new to CU Boulder, Information Studies, and will foster a cross-disciplinary effort in Design Studies. The College will invest significantly in curricula that focus on the uses of digital media and ICT to enhance artistic expression, journalistic practice, social and political communication, design expertise, and research about these practices. New areas of emphasis in the College, which could become topics for undergraduate and graduate degrees, minors, or certificates, will include the design, management, and study of social media; experimental digital arts and technology; gaming and animation; media entrepreneurship; multimedia digital publishing; narrative for emergent media; networked organizations; and sound/audio and visual design for digital arts and media. The College will emphasize creativity; media fluency; design thinking; collaborative, project-centered learning; practical, marketable skills and an applied curriculum; and a core education in the liberal arts and sciences.

The College will offer cross-disciplinary educational opportunities not only to its own students, but also to students from every other school and college on the CU Boulder campus. The College will build and maintain porous relationships with other disciplines, especially Business, Computer Science, Education, and Law, as well as partnerships with affiliated units such as the CU Museums, the Libraries, ATLAS, and the Interdisciplinary Telecommunications Program. Through these new interdisciplinary collaborations, the whole of the College will truly be greater than the sum of its parts: it will be a place where the foundations of design, journalism, communication, media, and the fine and performing arts are taught, and where opportunities abound to learn how those practices intersect with digital innovations.

The Steering Committee also proposes an Institute independent of the new College dedicated to research and creative work at the leading edge of innovation in ICT. The Institute will seek the participation of any CU Boulder faculty member whose research or creative work intersects with its broad interdisciplinary mission: the design, development, application, and analysis of ICT from the perspective of the arts, humanities, social and behavioral sciences, natural and physical sciences, and engineering. The desired outcomes of the Institute include developing technological prototypes that will help solve social problems and will enable advanced academic or creative work in scientific, business, engineering, legal, educational, social, humanities, and arts domains. The Steering Committee notes that this proposed Institute has significant overlap with the mission and activities of ATLAS, and that with further resources, ATLAS could encompass these roles.

RECOMMENDATIONS

I. PURPOSE AND PROCESS OF THE ICJMT STEERING COMMITTEE

On February 14, 2011, CU Boulder Provost Russell Moore released the final report of the ICT Exploratory Committee. This committee was appointed in Fall 2010, its report notes, “with a charge to undertake a high-level analysis of existing ICT assets on the Boulder campus and to determine how those assets might be organized to create a contemporary ICT program.” As the report’s introduction states,

The committee’s vision, if the campus implements the recommendations in this report, is that CU Boulder will be globally known for modulating the future in ICMT [Information, Communication, and Media Technology]. That is, CU Boulder will be a motivating force and respected voice in the ongoing digital revolution engendered by the intersections of information, communication, and media with technology.

Three possibilities were envisioned by the ICT Exploratory Committee: a college, an institute, or both. The committee’s recommendation was that an optimal plan include both a college and an institute.

In his letter accepting the ICT Exploratory Committee report, Provost Moore expressed his pleasure that the report met the spirit of his charge to the committee, as it offered “valuable guidance in our efforts to create a contemporary and forward thinking program” that both prepares students for careers “in an increasingly complex and rapidly changing information, communication, and technology landscape” and takes advantage of “considerable scholarly assets that are distributed across our campus.” In recognition that much further thinking needed to be done by the CU Boulder faculty, Provost Moore also said that his acceptance of the report should not be interpreted to mean that he agrees with the report’s specific recommendations, or that he will act directly on them; rather, he acknowledged his plans to use the report “in the formulation of [my] programmatic recommendations to the Chancellor and to the Boulder campus faculty as we move forward.”

In the spirit of that statement, Provost Moore took the next step of appointing the Information, Communication, Journalism, Media, and Technology (ICJMT) Steering Committee to offer a plan of action that would build upon the vision of the ICT Exploratory Committee. Provost Moore appointed Associate Vice Chancellor for Academic Affairs Jeffrey N. Cox to serve as the liaison between the Steering Committee and the Provost. AVC Cox subsequently appointed faculty conveners of eight faculty discussion groups, representing several schools and colleges across the CU Boulder campus, to address the following overlapping subjects that reflect many common interests in the design, development, and uses of information and communication technology applications:

1. Journalism, Documentary Filmmaking, and Creative Nonfiction
2. Media Studies, Communication, Mass Communication
3. Advertising and Design
4. Technology and Computation
5. Journalism, Science, and the Environment
6. Arts, Media, and Technology
7. Technology and Digital Humanities

8. Communication, Internationalization, and Globalization

The work of the Steering Committee and the eight faculty discussion groups took place in two phases. Phase 1 took place in Summer and Fall 2011 and involved the regular convening of the faculty discussion groups. At the end of the Fall 2011 semester, the discussion group conveners submitted the final reports on their discussions to the Steering Committee.

In Phase 2, which concluded in April 2012, the Steering Committee merged these ideas into this action plan, which we hereby submit to Provost Moore. This action plan follows the model recommended by the ICT Exploratory Committee in proposing both a new college and an institute or other, similar locus for interdisciplinary research and creative work. However, after consulting with the faculty discussion groups and with other faculty likely to be involved in founding a new college, the Steering Committee determined that the vision set out by the ICT Exploratory Committee will be best and most practically served through a new college more capacious in its footprint and its aims: a College of Media, Design, and the Arts.

II. PROPOSAL FOR A COLLEGE OF MEDIA, DESIGN, AND THE ARTS

Proposal

The Steering Committee proposes that the University of Colorado Boulder create a new College of Media, Design, and the Arts. This College will bring together the faculty and students from existing units and disciplines at CU Boulder, including Architecture and Environmental Design; Art and Art History; Communication; Film Studies; Journalism and Mass Communication; Music; and Theatre and Dance. (The Steering Committee recognizes the College of Music has a different administrative structure and history than these other units; it may well be that the College of Music and the new College will engage in a deeply collaborative relationship rather than be merged.)

In addition to affiliating existing disciplines, the College of Media, Design, and the Arts will house and develop an important discipline new to CU Boulder: Information Studies. It will also foster a cross-disciplinary effort in Design Studies that will touch upon and enhance all the disciplines and enterprises of the College. As a college, it will innovate new programs and curricula that build on and expand the teaching, research, and creative work of all these specific disciplines.

The Steering Committee assumes that the CU Boulder administration will work closely with the faculties and administrations of the academic units involved in the establishment of the College of Media, Design, and the Arts. Since curriculum is the purview of the faculty, the Steering Committee also assumes that the units moved into the College will bring their current curricula intact, and that faculty in the College will retain the same levels of curricular autonomy and governance as they do at present. With that said, the Steering Committee foresees many net benefits to the units that move into the College, in that they will have opportunities to expand their curricula by working closely with faculty and students from allied disciplines. In addition, the Steering Committee anticipates the possibility of increased resources (facilities, faculty lines) that will make possible the expansion of course and degree offerings within and across the units that join the College.

In sum, the Steering Committee's proposal is twofold. The first is to propose bringing together academic units and disciplines at CU Boulder that have many significant overlapping interests and needs. These are units and disciplines often linked together administratively at other

universities in the United States and abroad. The second is to propose several new areas for development within the new College. The capacity-building that is emphasized in these new areas pertains primarily to the potential for innovative uses of digital media to strengthen and expand the individual and collective missions of the units recommended for inclusion in the College. These new areas will build and enhance the capacities of the units within the College. Importantly, however, they will also serve the College as a valuable hub connecting its faculty and students with the rest of the campus.

Thus, while this proposal most immediately concerns units and disciplines currently housed in the College of Arts and Sciences and the College of Music, the new College it envisions is much more than a simple reorganization of existing units across a couple of colleges. Collaboration across disciplines—a goal elaborated further in Sections IV and V, below—marks this proposal as an exciting possibility for the campus community and a step away from the tradition of academic silos long known at CU Boulder and elsewhere. The College of Media, Design, and the Arts will be innovative in two crucial ways. First, it will accomplish a greater synergy between a professional education and existing campus strengths in scholarship, research, and creative work—in other words, between theory and practice—in a way that has been traditionally the province only of disciplines such as engineering. Second, it will plan, from its origins, to offer cross-disciplinary educational opportunities not only to its own undergraduate and graduate students, but also to students from every other school and college on the CU Boulder campus. This openness will position CU Boulder to look more like the kind of university that savvy and career-focused students, whatever their intended majors, might choose over more tradition-bound institutions.

Such ambitious goals might be accomplished, to some extent, by smaller and more incremental changes—for example, by starting some new cross-disciplinary certificate programs, creating a new department or two, or even creating a new division within an existing college such as the College of Arts and Sciences. But only the creation of a new college will allow for a truly new educational vision that connects to the entire campus, and only the creation of a new college will announce that CU Boulder wishes to perform on a national stage in these areas.

Vision Statement

The College of Media, Design, and the Arts will advance creative practice and enhance public discourse at the intersections of arts, scholarship, and civic life. Embracing approaches drawn from the social sciences, humanities, journalism, architecture, and the arts, the College will address the theory, conception, creation, delivery, and use of all forms of media content and artistic works. Across the College, faculty and students will design, develop, compose, and present artistic objects, productions, performances, and designed environments; will design, develop, compose, and present content for journalistic and creative media; will design and develop innovative technologies and applications for media, architecture, and the arts; and will seek to understand the history, meaning, and trajectory of the fine and performing arts, the designed environment, and the modes and media of human communication. Curricula will prepare students to understand and analyze media, design, and the arts, to respond effectively to their continuing transformations, and to be agents in creating their future. Through its teaching, research, scholarship, and creative work, the College will advance education in civic engagement, aesthetic judgment, creative expression, and professional practice.

Rationale

The Steering Committee proposes that the College of Media, Design, and the Arts bring

together CU Boulder disciplines that are currently divided among two CU Boulder colleges (Arts and Sciences, Music), one former CU Boulder school (Journalism and Mass Communication), and one bi-campus college in the process of review and transition (Architecture and Planning). We also propose that the College house and develop newer disciplines and cross-disciplinary areas having to do with media, communication, design, and the arts. Whether established or newer, these areas' inclusion in the same college offers an unprecedented opportunity for creating a vibrant and value-added new entity on campus.

The first and most important benefit to be derived from organizing these existing disciplines and newly added disciplines into one college is the opportunity it creates for innovative and enhanced teaching, research, and creative work. The College will exist to maintain and improve current programs in existing disciplines, as well as to foster and develop cutting-edge education, research, and creative work in new areas and in cross-disciplinary efforts. This report describes some of the new and cross-disciplinary areas envisioned by the Steering Committee, but we also wish to stress our conviction that the College's faculty and students will initiate and galvanize additional new educational programs and areas of research and creative work as the College moves forward—areas and programs not yet dreamt of at the time of these recommendations.

The Steering Committee, following upon the work of the ICT Exploratory Committee, attends particularly in this report to the College's potential for developing new initiatives and new programs that (a) focus on media design and media studies and/or (b) develop, study, and use technology for new and emergent media. The Steering Committee's intention is not to imply that media design, media studies, and media use subsume all of the curricular, research, or creative activities conducted by the proposed academic units included in the College or all the faculty or students in those disciplines. Nevertheless, these disciplines all have media in common. All depend on media in ways that other disciplines do not. Technologies old and new to record, transmit, receive, and use media content and artistic expression are instrumental to the existence of all these disciplines. All rely upon and/or innovate technological advances in media, specifically advances in digital technology. Information and communication technology (ICT) as it relates to matters of media is, therefore, one unifying component of the College, even though it is not necessarily a through-line for all its members and all its programmatic aspects. ICT serves media, design, and the arts in ways that students must appreciate and study if they are to understand and advance these disciplines. For these reasons, media design, media studies, and media use are cross-disciplinary themes frequently stressed in these recommendations.

Along with its potential for enriching education, research, and creative work, a College of Media, Design, and the Arts offers considerable promise for growth and for efficient, consolidated use of campus resources. Currently divided among the College of Arts and Sciences, the College of Music, the former School of Journalism and Mass Communication, and the bi-campus College of Architecture and Planning, students in the proposed College of Media, Design, and the Arts already represent a population of more than 3750 undergraduate majors and some 450 graduate students (based on 2010 data from the Office of Planning, Budget, and Analysis). These are numbers to be reckoned with. The Steering Committee expects that a new college that offers a concentrated and/or cross-disciplinary focus in media, design, and the arts, that fosters new ways of studying and creating media, and that offers practical career training and mentoring will be immensely attractive to new enrollment, as well as to students in other schools and colleges who wish simply to take coursework or obtain a certificate as an educational and credentialing experience. In turn, a College of Media, Design, and the Arts will make it possible to aggregate resources used by students and faculty who are currently splintered across a number of departments and programs—for example, studio and performance space, shared

teaching expertise, and other kinds of instructional and research support that are transferable across disciplines. In particular, the College will create a focus for common resources for the disciplinary, cross-disciplinary, and interdisciplinary research and creative work of faculty and students. The College could, for example, provide a common meeting place through conference room facilities. It should have a distinctive website for promoting scholarly and creative activities, housing working-paper archives, and the like. It should promote the various labs in the College whether they are student lab facilities, groups of researchers, or artistic studio groups. It will provide administrative support and guidance for bringing in contracts, grants, and gifts. It will have an administrative staff to support activities and to help manage performance and studio spaces. Many of these resources now are distributed across different units. Consolidating these resources will be facilitated by the unifying intellectual consistency of the College, and will create a greater, more vibrant, more visible, and more valuable sum than its constituent parts.

Finally, a College of Media, Design, and the Arts, with its impressive size, exciting mission, and potential for developing innovative programs, also creates major new capital-campaign opportunities, including naming opportunities for new performance, studio, and lab facilities. The Steering Committee expects that the College will consolidate, build upon, and increase the successful fundraising already ongoing in the current units and disciplines represented in the College.

Educational Aims

Along with the particular disciplinary strengths that individual disciplines will convey to students in the College, these disciplines' affiliation will allow the shared emphasis of a number of important educational aims that will make the College distinctive both at CU Boulder and nationwide. From the reports of the faculty discussion groups and from the Steering Committee's meeting with the conveners and other representatives of those groups, the Steering Committee discerned a number of shared educational themes that should be emphasized across the College:

- *Creativity.* Whatever their disciplinary specialization, students in the College will hone their creativity in the design and use of their chosen media. Creativity in the College's disciplines obviously emerges in many forms, including artistic creation; dramatic, musical, and dance performance; visual and sound design and narrative/storytelling skills across many media; excellent academic and journalistic prose; technological innovation; and so on. The Steering Committee proposes that the College develop, in particular, a cross-disciplinary focus on the creative design and use of ICT for artistic expression and for the betterment of society.
- *Media fluency.* Rather than being consumers of media who do not know how media are made, or producers of media who do not know their underlying theories or understand their broader social impact, students in the College should understand how media are designed and made, why and how they are effective, and how they may affect society. Students should not exclusively learn either the theory or the practice of media, design, or the arts. Rather, as is already the case in the fine and performing arts, students will gain what is best termed "media fluency": a ground-up and top-down view of the making and meaning of media. The emphasis will vary from degree program to degree program, but media fluency in the digital and post-digital age will necessarily include some degree of expertise in ICT.

- *Design thinking.* The effective communication and presentation of media and the fine and performing arts now depend on compelling visual, sound, and narrative design. In turn, compelling design depends on mastering more than simply specific creative skills. The Steering Committee proposes that students in the College be exposed to (and, in some disciplines, be required to master) “design thinking,” the full creative process and set of tools for artistic or media production. “Design thinking” involves creating and refining prototypes based on a sophisticated determination of the needs of one’s audience; it thus requires interdisciplinary skills in social science (ethnographic, psychological, and sociological approaches), as well as in creative production and in marketing.
- *Collaborative, project-centered learning.* Successful learning in the design, use, and study of media more generally requires the mastery of collaborative skills, not just individual creativity. Following the model of the performing arts and of external disciplines like engineering, the College will emphasize collaborative projects at all stages of the curriculum, from lower-division to graduate levels. The Steering Committee proposes that all levels of the curriculum require “laboratory” courses for collaborative and potentially cross-disciplinary projects in media creation.
- *Practical, marketable skills and an applied curriculum.* Along with the specific kinds of expertise required for each disciplinary emphasis, the College will place a strong emphasis on marketable, applied knowledge and skills that require the uses of ICT to accomplish and enhance various forms of communication and expression (artistic, journalistic, commercial, political, social, and civic). Students will study the creative and collaborative tools that underpin the richness of current forms of expression and design. Drawing from successful models elsewhere at CU Boulder and beyond, the College will encourage student involvement in entrepreneurship, internships, and practical training.
- *Liberal arts core curriculum.* The College will design a core curriculum that ensures its undergraduates receive a broad education in the liberal arts and sciences. This core curriculum—a significant portion of which will no doubt consist of coursework taken outside the College—will give undergraduates the necessary context for the skills and knowledge gained within the College.

III. DISCIPLINES IN THE COLLEGE OF MEDIA, DESIGN, AND THE ARTS

The Steering Committee proposes the following existing CU Boulder units as members of the College of Media, Design, and the Arts: Architecture and Environmental Design; Art and Art History; Communication; Film Studies; Journalism and Mass Communication; Music; and Theatre and Dance. Inspired by the ICT Exploratory Committee’s recommendations, we also propose the development of one important new discipline within the College: Information Studies. Finally, we propose the development of a new cross-disciplinary effort that will touch upon and enhance all the disciplines and enterprises of the College: Design Studies. In this section, we detail how these specific disciplines and college-wide cross-disciplinary efforts relate to the mission and goals of the College.

In enumerating the disciplines we wish to see represented in this College, and as elaborated further later in this section, the Steering Committee is not proposing specific administrative or departmental structures. We assume that administrative and departmental structures will be

designed by the leadership of the campus, the College, and the particular units involved. Rather, we are proposing a model of affiliation that will benefit all the units involved through cross-pollination of ideas, methods, theories, and practices. Existing administrative structures may be retained as existing units move into the College, or opportunities for new administrative structures may arise.

Existing CU Boulder Academic Units and Disciplines

- *Architecture and Environmental Design.* The structure of the College of Architecture and Planning is currently under review, but the Steering Committee believes a compelling case may be made for locating these important disciplines having to do with the designed environment—architecture, planning, urban design, landscape design, and design studies—in the College of Media, Design, and the Arts. These disciplines exist at the intersection of design, the arts, and the needs of communities for livable and enriching environments. Students in Architecture and Environmental Design will benefit from membership in a college with a broad emphasis both on artistic excellence, and on the means and modes of communicating artistic expression to an audience whose reception of that expression is paramount. In turn, students in the College whose primary focus is not Architecture and Environmental Design may benefit from understanding how the arts exist in and transform public and private space as well as the lived, embodied human experience of that space.
- *Art and Art History.* Art and Art History trains students in both traditional and cutting-edge methods of making visual art, and in discerning the meaning of visual art from prehistoric times to the present. Art and Art History (like Film Studies, Music, and Theatre and Dance) is thus central to a college whose mission includes both the making and the study of artistic expression, and whose aim is to advance the media and the techniques of artistic expression. Students in Art and Art History will benefit from membership in a college whose educational aims include a broader application of the theory and practice of visual arts to other kinds of arts and media, and from cross-disciplinary initiatives such as Design Studies and digital archiving and curation. Similarly, students in the College whose primary focus is not Art and Art History may benefit from professional training in visual-art techniques, from applying art theory to other modes of media creation and conceptualization, and from extensive exposure to the high-quality collections of the CU Art Museum and to the expertise of its staff.
- *Communication.* The study of communication considers how forms of expression and discourse influence politics and public policy, affect how organizations function, and shape interpersonal relationships. Communication students learn to create, analyze, and critique the use of messages, and they learn how technology affects communication processes. Communication thus provides the College with a crucial theoretical and practical understanding of how and why human expression of all kinds works. Students in Communication will benefit from membership in a college that affords them the opportunity to test their skills in real-world media applications. Students in the College whose primary focus is not Communication may also benefit from grounding in theories of communication and from expertise in understanding specific communication contexts such as organizations, interpersonal relationships, or public institutions.
- *Film Studies.* With a faculty that specializes in the theory, history, and analysis of cinema as well as the making of narrative, documentary, and avant-garde cinema and fine arts animation, Film Studies (like Art and Art History, Music, and Theatre and Dance) is a

central contributor to the College's mission of making and studying artistic expression, as well as its mission of advancing new forms of media, in this case new cinematic techniques. Students in Film Studies will benefit from opportunities to apply their skills in cinematic theory and filmmaking to projects in allied disciplines such as journalism, theatre and dance, or multimedia arts performance. Students in the College whose primary focus is not Film Studies may also benefit from exposure to ideas and skills transferable to other forms of art, media, and design: an understanding of the history and theory of the moving image; expertise in basic cinematic skills such as camerawork and sound; skills required for experimental filmmaking (e.g., avant garde cinematic design); and skills required for narrative and documentary film (e.g., screenwriting).

- Journalism and Mass Communication.* During the academic year 2010-2011, the School of Journalism and Mass Communication went through a comprehensive review that concluded by recommending that its administrative structure, but not its academic programs, be discontinued. As CU Boulder Chancellor Philip DiStefano wrote at the time in an op-ed column published in the *Colorado Daily*, "we are carefully considering recommendations by an exploratory committee for a new school of information, communication and media technology. This vision would, down the road, place journalism within an interdisciplinary school, further exposing our students to a range of new ideas, technologies and curricula." In pursuit of that vision, the Steering Committee recommends the movement of Journalism and Mass Communication's degree programs and research groups—advertising, journalism, and media studies, as well as the Center for Environmental Journalism, the Center for Media, Religion, and Culture, and the Digital News Test Kitchen—into the College. The College provides exciting opportunities to the existing Journalism and Mass Communication programs. Drawing from new resources within the College, students in Advertising will pursue new and fruitful interdisciplinary partnerships whose stronger emphasis on design and design thinking will significantly enhance the creative emphasis within the advertising program; they will also benefit from closer association with Art and Art History and the CU Art Museum. Students in Broadcast Journalism, Print Journalism, and Multimedia Journalism will take full advantage of the new areas of teaching, research, and creative work that the Steering Committee proposes for the College, benefiting from vital knowledge and skills in, for example, digital archiving and curation, multimedia publishing, narrative/storytelling for emergent media, visual design, and media entrepreneurship. Complementing the recently implemented Journalism-Plus program requiring additional coursework beyond the Journalism major itself, the cutting-edge skills College graduates will acquire will afford them significant advantages in the new media job market in which journalists now compete. Likewise, Media Studies students at both the undergraduate and graduate levels will benefit from new opportunities to acquire advanced research skills by learning about the archiving, preservation, and curation of digital image, text, and sound data, and they will learn new modes of presenting their research by studying multimedia publishing, data visualization, and more. All Journalism and Mass Communication students will benefit from other new areas of scholarship proposed for the College, including the study of social media and information policy. Students in the College whose primary focus is not Journalism and Mass Communication may benefit from exposure to journalistic skills in nonfiction communication and documentary film, to media theory, and to skills in broadcasting, graphic design, and commercial communication.
- Music.* As a locus for training in music performance, music composition, music education, and the theory and history of musical forms and traditions, the College of

Music (like Art and Art History, Film Studies, and Theatre and Dance) is a central contributor to the College's mission of making and studying artistic expression, as well as its mission of advancing new forms of media, in this case modes of presenting artistic expression in the form of innovative approaches to musical recording and musical performance. The College of Music has also been a leader in training students in entrepreneurship for the arts. Students in Music will benefit from opportunities to use their composition, performance, and analytic skills to develop and enhance allied media and artistic forms such as film, theatre, dance, and multimedia productions. Students in the College whose primary focus is not Music may also benefit from exposure to ideas and skills transferable from music to other forms of art, media, and design: an understanding of the history and theory of musical expression; exposure to the artistic and collaborative skills required for musical production; and expertise in sound design and recording techniques.

- *Theatre and Dance*. Perhaps the broadest and most interdisciplinary of the arts units on the CU Boulder campus, Theatre and Dance embraces creative work involving design and performance in visual, audio, musical, literary, narrative, performative, and embodied artistic forms. Theatre and Dance attends to established and new media, genres, and artistic design for both recorded and live performance; to the skills required for excellent theatrical and cinematic acting and dance performance; and to the history, theory, and analysis of theatrical and dance scripts, choreography, performances, and productions. Like Art and Art History, Film Studies, and Music, Theatre and Dance is thus a central contributor to the College's mission of making and studying artistic expression, as well as its mission of advancing new forms of media, in this case modes of presenting artistic expression in the form of innovative approaches to performance. Students in Theatre and Dance will benefit from opportunities to use their performance, scriptwriting, and analytic skills to develop and enhance allied media and artistic forms such as film, opera, and so on, and from exposure to new technologies that are transforming arts performance, such as digital media and motion capture. Students in the College whose primary focus is not Theatre and Dance may also benefit from exposure to ideas and skills transferable from theatre and dance to other forms of art, media, and design: an understanding of the history and theory of the inherently multimedia nature of theatrical and dance production; exposure to the artistic and collaborative skills required for effective theatrical and dance production; and expertise in acting and theatrical presentation.

Proposed New Academic Discipline: Information Studies

The Steering Committee proposes that the College of Media, Design, and the Arts establish and house a Department of Information Studies. Information Studies will complement and extend opportunities that arise from new interactions among existing units by providing a department-level locus for topics that have grown from prior interdisciplinary scholarly commitments, and that have recently emerged as focal areas with significant national scientific and industrial import. As digital media data become easier to generate and store, training and research on the meanings that may be derived from the availability of large-scale content and traceable social interactions complement the purely technical questions that already populate this line of inquiry. The Department of Information Studies will be a home for instruction and research in social and cultural matters of ICT use, including human-centered computing; social computing applications and analytics, including data visualization; digital data archiving, preservation, and curation; and information policy. These areas of scholarship work in concert with salient features of the

College, since empirical and creative explorations of ICT and the data their users produce are at the core of these areas' concern.

- *Human-Centered Computing.* Human-Centered Computing is an area of teaching and research that crosses computer science, design, social science, and, increasingly, the humanities and arts. CU Boulder already has a strong tradition in Human-Centered Computing, with cognitive science and computer science at the origins of that tradition. However, the area is now also moving in the direction of the proposed College, with new emphases on field-based forms of inquiry, innovative uses of data visualization and analysis, and design—all of which support a broad span of questions that face society. In addition, through connections to the arts as well as engineering, Human-Centered Computing in the College can support growth in the direction of the “maker” and “DIY” communities. Through connections to environmental design and architecture, urban computing is another area of possible growth. CU Boulder’s future strength in this area will support the education of students who have skills in unifying design, social analysis, and creative expression.
- *Social Computing: Analytics and Applications.* Digital technology and on-line social interaction have given rise to a new field of social computing, which employs social and communication theory in combination with large-scale data analysis to describe and visualize social structures and the behaviors that are exhibited within them. Today’s and tomorrow’s new media applications—Facebook, Wikipedia, Twitter, and so many others—are places for communication and interaction that require empirical analysis to be understood and applied to new domains as well as new forms of expression. Social Computing in the College will rely on education in Communication as well as connections to Computer Science and other areas of expertise on campus. As a new step forward, it will also rely on the arts to consider in what new forms socially generated “big data” could be represented. Data visualization and new modes of creative expression for representing these large data sets are opportunities for exciting directions in scholarship and creative work.
- *Digital Archiving, Preservation, and Curation.* A wide range of professional fields now increasingly require skills in digital archiving, preservation, and curation. Students studying to become artists, musicians, journalists, filmmakers, librarians, museum curators, archivists, social scientists, and scholars in the humanities will strengthen their careers and increase their professional opportunities by learning principles, practices, and tools for archiving, preserving, and curating digital sound, image, and text databases, as well as innovations to capture other kinds of media.
- *Information Policy.* Information Policy Studies is a broad and increasingly important subject that encompasses public policy issues including data security, privacy, intellectual property and fair use rights, and information access. Policy makers and analysts, as well as the general public, face many challenges that arise due to the rapidly changing digital information environment. An emphasis on information policy will prepare future policy makers and analysts and future information industry practitioners with knowledge about risks associated with this changing environment, as well as about rights and responsibilities that are affected by and accompany the technological innovations in the digital media and communication environment.

The Department of Information Studies within the College of Media, Design, and the Arts will complement, not duplicate, the offerings by the Department of Computer Science, which is located in the College of Engineering and Applied Science. Information Studies conjoins computing, social sciences, arts, and humanities in ways that pave new disciplinary directions in scientific inquiry, professional practice, and creative work. The Steering Committee expects that the Department of Computer Science will welcome the presence on campus of a new department whose work has a kinship to, but does not duplicate, its own. We envision inter-department interaction between Information Studies and Computer Science through curricular offerings, programs, and graduate advising. Joint or shared appointments between Information Studies and other departments on campus—for example, Computer Science, the Libraries, the Museum of Natural History, and the Interdisciplinary Telecommunications Program—may be desirable for both current and new CU Boulder faculty.

Proposed College-wide Cross-disciplinary Effort: Design Studies

In response to faculty interests in design and “design thinking” that cut across a wide range of the existing disciplines and the proposed new areas inside the College, and that relate to other interests at CU Boulder, the Steering Committee proposes a college-wide curricular and faculty development initiative in Design Studies. Design Studies will focus on the study, creation, and production of visual, sound, and narrative design across artistic, journalistic, social, and commercial media, including new and emergent (e.g., digital) media. Specific areas of Design Studies are elaborated in Section IV below. Although this initiative will be based in the College, it will embrace the spirit of the porous relationships that the College will seek both across the campus and with external constituents, as described further in Section V below. Design Studies will be important not only for students in Advertising, Architecture and Environmental Design, Art and Art History, Journalism, Music, and Theatre and Dance, but also for students in Business, Computer Science, and possibly other disciplines.

Internal Administrative Structure

With the two exceptions noted in the following paragraph, the Steering Committee proposes no alteration of the administrative structures of the units it recommends for movement into the College of Media, Design, and the Arts. Since curriculum (courses, degrees, minors, certificates) is the purview of the faculty, the Steering Committee assumes, as previously mentioned, that the existing curricula of the academic units proposed for the new College will not be affected by the move. Since the administration of units in the new College would need to relate to both existing and proposed new curricula, the Committee recognizes that further planning and faculty input would be required once the campus administration makes decisions in response to this proposal, and once the leadership structure of the College is established. As described elsewhere in this report, however, this recognition does not mean the Steering Committee sees no potential for administrative reconfiguration at a later stage, given its recommendations about new areas for curriculum development. For example, opportunities may arise for new curriculum development that spans the history and theory of two or more of the academic units currently delivering curriculum in art, film, media, theatre, dance, and music. Economies in equipment, facilities, and faculty may be realized through curricula that span film and journalism in areas such as introductory camera skills and video editing. Screenwriters and playwrights may choose to collaborate on new courses, as may musicians and visual artists. Likewise, the proposed Department of Information Studies and the proposed cross-college effort in Design Studies described above, as well as the “new areas” of cross-disciplinary study proposed below in Section IV, offer many new opportunities for interdisciplinary collaboration and new curricular development. One example would be a basic digital graphic design

curriculum that could benefit students from a number of areas, including Visual Arts, Film Production, Journalism, Theatre Design, and Advertising.

Two academic units in the College would require some structural decisions at the outset: the proposed Department of Information Studies, and the existing sub-units of the former School of Journalism and Mass Communication (JMC). The Steering Committee envisions the Department of Information Studies arising in part through partnerships with existing units that are not proposed for movement into the College, particularly the Department of Computer Science, the Libraries, the Museum of Natural History, and the Interdisciplinary Telecommunications Program. Similarly, although the Steering Committee defers to the faculty and administration of the new College on the specific details of how best to configure the subunits and curricula of JMC, the Steering Committee does envision possible new forms of structural reorganization in connection with curriculum development. For example, the JMC Advertising sequence, which focuses primarily on the creative aspects of the industry, would be greatly enhanced and perhaps even reinvented by a cross-college emphasis on Design Studies, and by a more thorough integration of “design thinking” into the curriculum. The Steering Committee anticipates that the undergraduate and master’s Journalism sequences that are already being reshaped by the newly implemented “Journalism-Plus” curriculum will gain further energy and enrichment as a result of the opportunities that students will have to pursue new areas in digital media, described below in Section IV. These opportunities will enable graduates of the College to become adaptive practitioners in the rapidly changing technological and industrial environment that journalists now inhabit. Undergraduate and graduate students in Media Studies will benefit greatly from closer associations with Film Studies, Communication, Theatre and Dance, Art and Art History, and other disciplines that offer important perspectives on media theory and history.

Affiliated Campus Units

In addition to the disciplines and cross-disciplinary efforts located within the College, the Steering Committee proposes that the College actively cultivate affiliations to other departments, programs, schools, and colleges that would augment the College’s teaching mission, or for whom the College may serve as a teaching resource. The College cannot and should not be an island unto itself. Its affiliations with other programs, on the contrary, will be a major source of the College’s strength and its attractiveness to students and faculty, and will also make the College a value-added asset to the entire campus. Depending on their major(s), the College’s students will benefit from cross-disciplinary work in, for example, Computer Science, ATLAS, English/Creative Writing, foreign languages and literatures, the Program for Writing and Rhetoric, the Interdisciplinary Telecommunications Program, and so on. In turn, students from those other programs may also benefit from coursework and certificate programs in the College. Some possible affiliations are described below in Section IV, on possible new curricular areas, and in Section V, on the Steering Committee’s recommendations for porous boundaries for the College. Similarly, the Steering Committee recommends that the College’s faculty have the opportunity to enhance their research and creative work through collaboration with colleagues both in and outside the College. Collaborative efforts in research and creative work within the College will need to be organized by the faculty and leadership of the College itself. As discussed below in Section VII, an Institute will offer a locus in which some faculty from the College may pursue collaborative research and creative projects with colleagues from outside the College.

IV. NEW AREAS FOR TEACHING, RESEARCH, AND CREATIVE WORK

Rationale

In addition to the complementary and energizing effect of bringing together academic units in media, design, and the arts into one college, the Steering Committee proposes below a set of new areas for teaching, research and creative work that should be developed within the College of Media, Design, and the Arts. These are areas that will build both practical capacity, through the creative uses of digital media and ICT, and theoretical expertise, through research about those practices, their histories, and their contemporary manifestations. These areas will cut across various disciplines in the College and provide new interdisciplinary opportunities for students and faculty to build upon the practice skills, specialized knowledge, and theoretical underpinnings of the specific disciplines within the College.

The areas below may be offered as concentrations, certificates, and/or majors. While directed primarily toward undergraduate programs, they may be also be loci for developing graduate programs such as professional master's degrees and even doctoral degrees or certificates. Furthermore, this list of areas is not exhaustive. The Steering Committee foresees that, once the College is organized, opportunities will arise for other new cross-disciplinary undergraduate and graduate concentrations, majors, minors, and certificates. At this time, the Steering Committee wishes primarily to stress that these new areas of study will immediately provide significant educational and career benefits for CU Boulder students. For example, an undergraduate student in Journalism may profit from a concentration or certificate in Multimedia Digital Publishing. A student enrolled in the combined BFA program in Theatre Design, Technology, and Management may profit from a concentration or certificate in either Visual Design for Digital Media or Media Entrepreneurship. An interdisciplinary graduate certificate or degree in Experimental Digital Arts and Technology may benefit students with expertise in Music, Art and Art History, Creative Writing, and so on.

Proposed New Areas

- *Design, Study, and Management of Social Media.* Social media have emerged as places for self-organizing forms of interaction, but they also have become integral aspects of business, politics, and journalism. Students of Design, Study, and Management of Social Media will learn theoretical frameworks to understand behavioral phenomena exhibited through social media as well as new methodological forms of inquiry to examine those behaviors. They will learn about social structures, collective behavior, information diffusion, social movements, and discourse analysis, among other social science theories and approaches that explain this emergent communication and information space. Students will acquire basic knowledge about the manipulation of the “big data” generated by social media, including matters of collection, sampling, application programming interface access, and ethics of social media data and reuse. This rich background will be applicable as practical knowledge for generating effective social media campaigns, and for supporting other for-profit and non-profit business goals. A sampling of resources and model programs for a concentration in Design, Study, and Management of Social Media includes:
 - San Francisco State University Certificate in Social Media Marketing: <http://www.cel.sfsu.edu/socialmedia/>

- Birmingham City University, UK MA in Social Media: <http://www.bcu.ac.uk/courses/social-media>
- Georgetown University Certificate in Social Media for Government: <http://scs.georgetown.edu/programs/328/certificate-in-social-media-for-government>
- The New School for Public Engagement: Social Media for Social Change: <http://www.newschool.edu/media-studies/social-change/>
- *Experimental Digital Arts and Technology.* Research and creative work in experimental digital arts and technology investigate the recent and pervasive use of digital, networked, and mobile media communication technologies in the creation of new forms of art, literature, performance, theory, design, curation, exhibition, and publication. Students of Experimental Digital Arts and Technology will gain exposure to recent developments in research and creative work including social media art and theory, vernacular video, live audio/visual performance, networked and mobile media art applications for smart phones and tablets, interactive installation art, electronic writing and publishing, digital design literacy and fabrication, Internet art, and digital curation. In this area, creative work and research projects will be conducted in collaborative research labs, and students will develop their own collaborative research projects that interface with many of the research strands indicated above as well as new areas of inquiry that evolve in parallel to new technological developments. The students will gain expertise as both creative artists and interdisciplinary, practice-based researchers concentrating on developing groundbreaking artworks that hybridize digital forms of music, literature, dance, cinema/video, computer programming, design, and theory. (Note that training in Experimental Digital Arts and Technology may overlap with training in Sound/Audio and or Visual Design for Digital Arts and Media, areas also described in this section.) A sampling of resources and model programs for a concentration in Experimental Digital Arts and Technology includes:
 - RPI (Rensselaer Polytechnic Institute) Electronic Arts: <http://www.arts.rpi.edu/>
 - NYU-Poly Technology, Culture and Society: <http://www.poly.edu/memberships/Technology,+Culture+and+Society>
 - Meme @ Brown: <http://brown.edu/Departments/Music/sites/meme/>
 - UC Santa Barbara Media Arts and Technology: <http://www.mat.ucsb.edu/>
 - Carnegie Mellon Studio for Creative Inquiry: <http://studioforcreativeinquiry.org/>
 - University of Georgia "Dramatic Media" emphasis: <http://www.drama.uga.edu/media/>
 - East Tennessee State University MA in New Media Studio: <http://etsudigitalmedia.com/curriculum/>
- *Gaming and Animation.* The computer gaming industry has become one of the largest growth areas of digital media development. Students of Gaming and Animation will become versed in the history of gaming; the fundamentals of visual and audio design;

2D and 3D modeling and animation; the development of motion graphics for console, PC, online, and mobile gaming; and interactive storytelling. Abundant academic research opportunities also exist in the study of computer gaming, society, and ethics, and in games as cultural reflection and expression. A sampling of resources and model programs for a concentration in Gaming and Animation includes:

- Oklahoma Christian University BFA in Gaming + Animation:
<http://www.oc.edu/academics/art-design/degrees/gaming-animation/index.html>
 - Champlain University BS in Game Art and Animation:
<http://www.champlain.edu/undergraduate-studies/majors-and-programs/game-art-and-animation-x14301.html>
 - Eastern Michigan University BS in Simulation, Animation, and Gaming:
<http://www.emich.edu/cot/sag/>
 - George Mason University BFA in Computer Game Design:
<http://www.masongamedesign.org/>
 - Northeastern University combined majors in Game Design:
<http://www.northeastern.edu/ci/curriculum/>
 - University of Utah emphasis in Animation:
<http://www.film.utah.edu/index.php/site/detail/animation1/>
- *Media Entrepreneurship.* Digitization in the media industry has mediated artistic work and decentralized the gathering and dissemination of news and information, and students need to acquire the skills to flourish in a media climate requiring greater self-reliance and innovation. Building on programs for study that already exist in Music, Theatre and Dance, and Journalism and Mass Communication, students of Media Entrepreneurship will learn the basics of small business finance, communication law, the management of people and technologies, and the locating, building, and monetization of audiences for interactive media. An interdisciplinary capstone project may allow students to use their acquired skills to create a new media venture, service, or product. A sampling of resources and model programs for a concentration in Media Entrepreneurship includes:
 - American University MA in Media Entrepreneurship:
<http://www.american.edu/soc/journalism/degrees/MA-ME.cfm>
 - West Virginia University Minor in Media Entrepreneurship:
http://journalism.wvu.edu/academics/online_programs/minor-in-media-entrepreneurship
 - Stanford University graduate course in Digital Media Entrepreneurship:
<http://journalism.stanford.edu/courses/2011/dme/>
 - City University of New York MA in Entrepreneurial Journalism:
<http://www.journalism.cuny.edu/academics/entrepreneurial-journalism/>

- *Multimedia Digital Publishing.* Online publishing, whether the work is journalistic, academic, or fiction, requires an understanding of the language, strategies, and processes of publishing in a multimedia digital environment. Students of Multimedia Digital Publishing will learn writing and editing for the Web; self-publishing; self-archiving for open access; textual, audio, and visual tools for Web publishing; and online marketing. Among those who will benefit from training in multimedia publishing are students who wish to become adept at “backpack journalism” or “collaborative reporting,” Studio Arts and Music majors who want to push the boundaries of artistic expression through innovative uses of digital media, and Media Studies and Film Studies students who want to learn how to prepare and present and publish work that relies on unique combinations of image, sound, and text in non-linear formats. Students will also get hands-on experience with the most up-to-date desktop publishing software and may use the skills they acquire to create a marketable online publishing presence. A sampling of resources and model programs for a concentration in Multimedia Digital Publishing includes:
 - NYU Professional Certificate in Digital Publishing: <http://www.scps.nyu.edu/areas-of-study/publishing/professional-certificates/digital-publishing.html>
 - NYU Graduate Program in Publishing: Emphasis in Digital and Print Media: <http://www.scps.nyu.edu/areas-of-study/publishing/graduate-programs/ms-publishing/curriculum.html>
 - Oxford Brookes University, UK Graduate Program in Digital Publishing: <http://www.mastersportal.eu/students/browse/programme/5273/digital-publishing.html>

- *Narrative for Emergent Media.* Storytelling across the disciplines represented in the College—including film, television, various digital media platforms, and nonfiction forms such as documentaries and long-form journalism —requires advanced literacy in narrative structure, strategies, and analysis. As well, new and emergent media require new narrative modes. Students will learn the elements of narrative design, how meaning becomes structured through narrative design, and the cultural and political implications of meaning within narrative, through both the theoretical study and the practical design of conventional and experimental storytelling techniques. This area will include training in, for example, the development and analysis of narrative and non-narrative content for gaming; narrative development and analysis of storytelling for nonfictional narratives in television, film, and digital media; and narrative development and analysis of storytelling for documentaries and long-form journalism. A sampling of resources and model programs for a concentration in Narrative for Emergent Media includes:
 - Northwestern University Medill School course in Long-Form Nonfiction Narrative: <http://www.medill.northwestern.edu/journalism/grad/page.aspx?id=184134>
 - Harvard Extension course in Narrative Nonfiction: <http://www.extension.harvard.edu/courses/23695>
 - University of Wisconsin Academic Technology resource in narrative structures for digital media: <http://narrativestructures.wisc.edu/>

- University of Texas course on narrative strategies for fiction film and television:
<http://rtf.utexas.edu/undergraduate/courses/spring-2012/rtf-317-narrative-strategies-0>
- CU Boulder Brakhage Center Symposium on Experimental Narrative in film:
<http://brakhagecenter.net/symposium/index.htm>
- University of North Texas certificate in Narrative Journalism:
http://catalog.unt.edu/preview_program.php?catoid=4&poid=801
- *Networked Organizations*. Digitization provides new opportunities for information-sharing across geographical boundaries but also creates challenges that must be studied. Students of Networked Organizations will learn about methods of developing efficient systems of e-commerce, e-government, library services, health care and social services, and other networks online as well as the challenges that developing such networks presents to business productivity, social welfare goals, and the effectiveness of both domestic and international government policies. Not only will students be exposed to practical curricula of creating more efficient and effective networked organizations, but they will also study the socioeconomic and cultural implications of such organizations in both domestic and global frameworks. A sampling of resources and model programs for a concentration in Networked Organizations includes:
 - UT Austin McCombs School of Business Center for Research in Electronic Commerce: <http://cism.mcombs.utexas.edu/overview>
 - University of Virginia Certificate Program in E-Commerce:
http://records.ureq.virginia.edu/preview_program.php?catoid=18&poid=1438&returnto=305
 - University of Illinois-Chicago E-Government Certificate:
<http://www.uic.edu/cuppa/pa/egovernment/>
 - Paper on the State of Network Organization by Marshall Van Alstyne at the MIT Sloan School of Business:
<http://ccs.mit.edu/papers/CCSWP192/CCSWP192.html>
 - George Brown College Digital Publishing Foundation Certificate:
http://coned.georgebrown.ca/owa_prod/cewskcrss.P_Certificate?area_code=PA0003&cert_code=CE0036
 - Paper from Alma Swan of the University of Southampton on Self-Archiving
<http://eprints.soton.ac.uk/261006/>
- *Sound/Audio Design for Digital Arts and Media*. Similar to visual design, digital sound design incorporates sound engineering and musical composition for digital media in several industries. This area of study has both practical and artistic applications. On the practical side, students of Sound/Audio Design for Digital Arts and Media will learn the basics of recording and microphone techniques, mixing, sound effects, audio playback and speaker techniques, soundscapes, and sound editing for film, television, radio, and digital productions, and will gain exposure to crucial knowledge regarding digital

intellectual-property law. On the artistic side, students may apply music theory and composition to digital works as well as experimental music presentations. (Note that training in Sound/Audio Design for Digital Arts and Media may overlap with training in Experimental Digital Arts and Technology or Visual Design for Digital Arts and Media, areas also described in this section.) A sampling of resources and model programs for a concentration in Sound/Audio Design for Digital Arts and Media includes:

- Boston University Audio Production Certificate:
<http://www.cdiabu.com/audio-production/audio-production-certificate/>
 - University of Sydney, Australia Master's Degree in Interactive and Digital Media: <http://sydney.edu.au/courses/Master-of-Interactive-and-Digital-Media>
 - Dakota State University degree in Audio Production:
<http://www.dsu.edu/majors-programs/dad-audio-production.aspx>
 - Bournemouth University, UK MS in Digital Music and Audio Production:
<http://courses.bournemouth.ac.uk/courses/postgraduate-degree/digital-music-audio-production/none/1081/>
- *Visual Design for Digital Arts and Media.* Visual design crosses several industries, from entertainment to marketing to traditional media. Students of Visual Design for Digital Arts and Media will develop the conceptual thinking skills needed for both artistic and practical forms of visual communication through digital graphic design, web design, and digital photography, and will gain exposure to crucial knowledge regarding digital intellectual-property law. Students will also have access to the most up-to-date graphic design and editing software. (Note that training in Visual Design for Digital Arts and Media may overlap with training in Experimental Digital Arts and Technology or Sound/Audio Design for Digital Arts and Media, areas also described in this section.) A sampling of resources and model programs for a concentration in Visual Design for Digital Arts and Media includes:
 - University of Brighton, UK program in Graphic Design, Illustration, Digital Arts:
<http://arts.brighton.ac.uk/study/media-arts>
 - NYU Certificate in Digital and Graphic Design Production:
<http://www.scps.nyu.edu/areas-of-study/design-programs/professional-certificates/digital-and-graphic-design-production-tech.html>
 - Quinnipiac University BA in Interactive Digital Design:
<http://www.quinnipiac.edu/academics/colleges-schools-and-departments/college-of-arts-and-sciences/departments/visual-and-performing-arts/ba-in-interactive-digital-design>
 - Baruch College, CUNY Digital Design Certificates in Graphic Design and Web Design: <http://www.baruched.com/shop/certificate.aspx?id=3055> and <http://www.baruched.com/shop/certificates/Default.aspx?id=3056>

V. POROUS RELATIONSHIPS TO THE COLLEGE OF MEDIA, DESIGN, AND THE ARTS

In order to offer a broad set of forward-looking degrees, certificates, and programs, the College of Media, Design, and the Arts will leverage the combined strengths of the College, the CU Boulder campus, and the larger community. The Steering Committee envisions an exciting rethinking of existing curricula to achieve the College's vision, one that will lead to new course offerings and revisions of existing courses. Even for courses that continue unchanged, a change in their significance will likely follow as they become incorporated into new degree, certificate, and minor offerings.

The Steering Committee sees the College as adopting various and open relations to the rest of the campus. The College will have porous relationships to other schools and colleges, as well as to the relevant professions. To facilitate and recognize these exchanges, faculty from other units may and are encouraged to seek joint appointments with the College.

Like every college on campus, the College of Media, Design, and the Arts must draw on outside courses and faculty to be successful. In every college, students fan out across the university to meet core and elective requirements, and students in the College of Media, Design, and the Arts will be no different. More critical is when a college's degree requirements draw on courses outside that college. As an example, the College of Engineering and Applied Science curriculum requires math, physics, and chemistry courses offered by the College of Arts and Sciences. These Arts and Sciences departments have increased student teaching loads as a result. The Steering Committee expects resources to flow with the student credit hours to meet these loads. Such resource questions should be directly addressed as the College defines curricula that present new demand in other colleges.

The curricula envisioned for the College of Media, Design, and the Arts will require a wide range of faculty, and those faculty will take time to hire. At first, the College may look to faculty from other schools and colleges at CU Boulder to help support the program. However, even in the long term, certain expertise may better reside in other parts of campus. Cross-college buyout arrangements will make these exchanges possible. This flow of students and faculty will go in both directions, however. Students from other colleges will take courses from the College of Media, Design, and the Arts to meet either core or elective requirements, and College of Media, Design, and the Arts faculty will teach courses outside the College. The College will also work with other units on cross-college curricula such as certificates and minors. Graduate courses will have similar student and faculty exchanges. Thesis committees with outside faculty are expected to be the norm rather than the exception. Similarly, the research and creative activities of students and faculty within the College will draw on and contribute to the efforts of faculty and students from across campus. Future possible faculty joint appointments between the College and, for example, Computer Science, the Libraries, the Museum of Natural History, and the Interdisciplinary Telecommunications Program will help cement such relationships. The proposed Department of Information Studies will be an especially attractive locus within the College for joint faculty appointments, as mentioned above in Section III, but it will not be the only one.

Another key feature of the College is that it will have a porous relationship with outside practitioners. Students will be exposed to artists, professionals, subject-matter experts, and industry leaders to connect the classroom with the real world. A culture of "doing" and "engagement" will be nurtured through several means. Internship and shorter externships will bring students into the field. To be successful, these internships will require dedicated staff at

the college and department level to reach out to potential host organizations and to maintain these relationships. The benefit is direct exposure and participation in the doing that solidifies learning. Resident practitioners, such as resident musicians, game designers, journalists, and researchers who can guide students in shorter workshops, may bring in valuable experience. Intensive Maymester workshop-like classes in, say, non-Western narrative styles could accommodate a distinguished guest. Other visitors may support the practicum and lab courses that are envisioned throughout the curriculum. For example, weekly evening sessions led by a local journalist could teach approaches to building a story. The key here is to cultivate relationships and leverage the strengths of CU Boulder and Colorado, especially easily accessible resources in the Boulder and Front Range areas.

Faculty should also be encouraged to spend time outside of the university in order to bring back valuable experience, and various kinds of institutional support for faculty to maintain external relationships should be explored. In addition to sabbaticals, faculty in the College should be able to compete for single-course buyout grants in order to have the time to work on external projects. Entrepreneurial projects bring especially valuable leading edge knowledge. Well-defined procedures need to be put in place for issues such as the relationship for untenured faculty between entrepreneurial ventures and the tenure clock.

VI. RELATION TO THE CU DENVER COLLEGE OF ARTS AND MEDIA

The proposed College of Media, Design, and the Arts at CU Boulder will, naturally, contain units and disciplines that are also represented in the College of Arts and Media on the CU Denver campus, which includes departments of Visual Arts; Theatre, Film, and Video Production; and Music and Entertainment Industry Studies. Just as both campuses house departments of Chemistry, Economics, English, and so on, both campuses already foster the study and creation of music, theatre, film, and art; both also have departments of Communication. To that extent, the overlap that will exist between the new college at CU Boulder and the existing college at CU Denver is nothing new. The fact that both campuses already support a large number of degree-seeking students and a large number of services courses in these fields indicates the strong student demand for these disciplines at both CU Boulder and CU Denver.

However, the proposed College of Media, Design, and the Arts at CU Boulder differs significantly in its mission and overall design from the existing College of Arts and Media at CU Denver. At CU Denver, the College of Arts and Media comprises the fine, performing, and filmic arts and the business of those arts; the word “media” in the college’s title refers to the different artistic media taught. The proposed College of Media, Design, and the Arts at CU Boulder, in contrast, will include the fine, performing, and filmic arts as part of a larger context: the theory, conception, creation, delivery, and use of all forms of media content and artistic works. The inclusion of other existing CU Boulder disciplines—Journalism, Communication, Mass Communication, Architecture, and Environmental Design—within the proposed College means that CU Boulder, by reconfiguring its existing assets, will create an academic division focused on the creation, delivery, and reception of human communication and artistic expression in all its forms.

Furthermore, at a historical moment in which rapidly evolving technology can convey whatever humans want to express farther, faster, and in larger quantities than ever before, the College of Media, Design, and the Arts will comprise disciplines that tell us how such technology should best be developed and used, and to what ends. The new areas that the Steering Committee proposes for the College—(a) a newly developed Department of Information Studies, (b) a

cross-college focus on Design Studies, and (c) hiring and facilities to deliver curricula in the design, management, and study of social media; experimental digital arts and technology; gaming and animation; media entrepreneurship; multimedia digital publishing; narrative for emergent media; networked organizations; and sound/audio and visual design for digital arts and media—would augment the interests shared by many faculty and students in the technology of media, design, and the arts. These new areas would span the units inside the College, and the impact of their efforts would be felt beyond the College through certificates and service-course offerings and through fruitful partnerships for teaching and scholarship with other colleges including Business, Law, Engineering, Education, and many of the departments in Arts and Sciences. In short, the reach and mission of the College of Media, Design, and the Arts at CU Boulder would thus extend significantly beyond that of CU Denver's more targeted College of Arts and Media.

VII. PROPOSAL FOR AN INSTITUTE

The Steering Committee endorses the ICT Exploratory Committee's proposal for an Institute at CU Boulder dedicated to research and creative work at the leading edge of innovation in information and communication technology. The Institute's mission will be broadly interdisciplinary, including current and planned projects involving the design, development, and application of ICT for the arts, humanities, social and behavioral sciences, natural and physical sciences, and the engineering disciplines. The desired outcomes of the Institute include developing technological prototypes that will help solve social problems and will enable advanced academic or creative work in scientific, business, legal, educational, social, humanities, and arts domains. The Institute will also analyze and forecast the past, present, and future of ICT.

The Steering Committee notes that this proposed Institute has significant overlap with the mission and activities of ATLAS. With further resources and seed funding, ATLAS could be expanded to encompass the roles described in this section.

The Steering Committee envisions the Institute supporting relationships and projects that involve engineering faculty who design and develop new ICT hardware and software applications (for entertainment, for commercial design, for health informatics, for journalism, etc.); social scientists who study ICT impacts in a variety of contexts (from the very local to the global, from the arts to mass media to commerce to governments); arts, humanities, and journalism faculty whose tacit knowledge and whose ICT needs are relevant to engineers and to social scientists; law and policy researchers who study ICT-related issues like privacy, intellectual-property and fair-use rights, and media and information access; business and media faculty who are interested in research and practice related to digital media entrepreneurship, media management, e-commerce, etc.; education faculty who are interested in research and practice related to media literacies (digital, visual, etc.); libraries faculty (perhaps working with engineers) who study new methods of information storage and retrieval, including hardware, software, and interface issues; computer science and communication faculty who study various forms of interaction between people and ICT; and studio and performing artists and designers who use ICT to push the limits of new modes of communication and expression.

The Institute will be neither a subset nor a superset of the College of Media, Design, and the Arts. Rather, it will be an independent unit that seeks the participation of any CU Boulder faculty member whose research or creative work intersects with its broad mission. While the College will contain faculty whose research or creative work does not engage with ICT, all of the

Institute's faculty members will have significant investments in this area. Institute members will focus on ICT innovation and expression to advance progress on critical issues facing society, and to enhance the human lived experience in general. Such pursuits are inherently multidisciplinary. The Institute will therefore be a model for how higher education may enter into important discussions affecting all aspects of society regarding the design and use of current and future ICT.

Since Institutes are self-funded, it will be important that the Institute be organized around funded research programs with a goal of developing an overall program at the multi-million dollar per year level. The Institute will be funded through government and private sector research contracts and grants, and through private gifts and endowments. It will be able to draw funding from a broad range of sources, including the National Science Foundation, the Department of Homeland Security, the Department of Defense, the National Institutes of Health, the World Bank, and other government funding sources, corporate sponsors, foundations, and gifts. Examples of funded areas with a strong ICT focus that are of current and future interest include health informatics, emergency communications, cyberphysical systems, and analysis and representations of "big data," especially with respect to data generated by interactions among people, and between people and their designed environments. For areas such as these, the Institute will be a strategic platform for cross-campus groups to propose large multidisciplinary ICT projects.