

# Recommendations of the ICT Exploratory Committee

## January 20, 2011

### EXECUTIVE SUMMARY

**History, Purpose, and Process.** In early September 2010, Interim Provost (now Provost) Russell Moore formed the Information, Communication and Technology (ICT) Exploratory Committee 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. The Provost requested that the committee focus on research, scholarship, and creative work from which pedagogical and curricular elements would logically flow, consistent with the campus identity as an AAU research university. Consequently, the work of the committee focused on ICT research, scholarship, and creative work, and secondarily on related topics such as pedagogy, curricula, and staffing.

**Environmental Scan.** The ICT Exploratory Committee first undertook an “environmental scan” of ICT constituents and assets on campus, including individuals and programs that could be directly affected by the ICT Committee's work. Numerous meetings were conducted with campus programs, departments, colleges, schools, centers, and institutes, as well as interviews with individuals such as interested deans, chairs, faculty, and students. Importantly, we identified over 150 faculty in 50 units across campus who have research and creative interests intersecting with ICT topics. Peer ICT-related programs at other universities were reviewed and often interviewed. Finally, two public forums were held for interested individuals from on and off campus, and campus-wide emails were sent to faculty, staff, and students, encouraging input and comments.

**Information, Communication, and Media Technology (ICMT).** 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. 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.

The committee’s expansion of the original ICT focus in its charge to include not only information and communication but also media (ICMT) derives from a strategic analysis of the distinctive and focused mission that could be adopted by this new enterprise. Obviously, technology affects all areas of life. The committee proposes, however, that the new entity focus on three specific, interrelated realms in which technology is and will be transformative: information technology, communication technology, and media technology. (In other words, in this focus, “information,” “communication” and “media” are adjectives modifying the grounding noun “technology.”) In scanning other such entities around the country as well as current and potential campus strengths at CU Boulder, the committee determined that the campus has a unique opportunity in including not one, not two, but all three of these areas in a new focus. Whereas other such entities around the country have, for the most part, emerged from a single discipline and still bear the stamp and the overriding ethos of that discipline—generally computer science, library science, or film/media

studies—CU Boulder has an opportunity to build, from the ground up, an entity that fully combines technological, social science, humanistic, business, and artistic approaches. If it is to include undergraduate and graduate curricula, the new entity should educate students who understand not only how to advance the state of the art in information-, communication-, and media-related technologies, but also how to comprehend and interpret their aesthetics, history, and meanings.

The committee thus proposes an ICMT focus that, unlike those at other U.S. research universities, creates new technologies while simultaneously considering their meanings and their uses from social, artistic, humanistic, business, educational, and ethical perspectives. Equally important, the study, analysis, creative use, and internal deployment of ICMT will lead to understanding new technologies that should be created. Critically important is the committee's assessment that ICMT, although interdisciplinary, is in reality another example of convergence or transcending disciplines. This convergence is happening today in biosciences much as it did in computer science in the 1970s. The far-reaching interdisciplinary faculty in the new entity, together with their encompassing ICMT mandate, will create a unique educational and research environment that will, indeed, modulate the future and put CU Boulder on the vanguard.

**Proposed Models.** After much deliberation and discussion, the ICT Exploratory Committee arrived at three possible models and a recommendation for creating ICMT entities on campus.

**Model A – Create a School or College of Information, Communication, and Media Technology.**

Creating a new School or College of Information, Communication, and Media Technology would engage and advance the transformative potentials generated by the intersections of information, communication, media, and technology through research, creative work, and teaching. Goals of the School or College would be to (1) create an academic community of faculty and students whose work focuses on the intersections of technology with information, communication, and media; (2) create interdisciplinary curricula at the undergraduate and graduate levels; and (3) foster interdisciplinary research and creative work within and across subdisciplines of the unit.

Faculty of the School or College would be recruited to form a mix of scholars and artists balanced through their expertise in technical, cultural, and social domains, including jointly appointed or affiliated faculty who could remain rostered and tenured in other units on campus. Resources required by the new School or College would include a visionary Dean to lead the formation of the unit; contiguous office and meeting space; investment and reinvestment in new and replacement faculty lines; administrative support; and ongoing resources for operations. In return, the potential for increased student enrollment and generation of undergraduate and graduate student credit hours is likely to be significant. The possibility for large interdisciplinary federal and state grants should be impressive.

**Model B – Create an Institute for the Global Digital Future.**

Creating an Institute for the Global Digital Future would engage and advance the transformative potentials generated at the intersections of information, communication, media, and technology

through research and creative work spanning these fields. The Institute would focus on the contemporary problems, challenges, and opportunities of information, communication, and media technology, which could position CU Boulder as a leading voice in these changes.

Research, scholarship, and creative work in the Institute would be undertaken by faculty fellows and by Institute faculty, similar to other institutes on campus. The organization of the Institute would be fluid and thoroughly interdisciplinary. Faculty fellows would likely join the Institute for periods ranging from one semester to only a few years, with an explicit assumption that their work in the Institute will enrich their disciplinary work as well. Resources required by a new Institute would include a visionary Director to lead the formation of the unit; significant startup and ongoing funds for faculty fellowships in the form of seed grants for research and creative projects; funding capacity to recruit faculty fellows both nationally and internationally; contiguous office and meeting space; administrative support; and ongoing resources for operations. In return, the Institute would be an attractive recipient for federal and state grant funding, not only from science- and technology-related programs but also from such agencies as the National Endowment for the Humanities and the National Endowment for the Arts.

### **Model C – Combine Models A & B to create both a School/College and an Institute.**

Establishing both a School or College and an Institute combines the advantages of both models, while obviating the disadvantages of having just one. In the absence of the new School or College, the Institute would lack a solid and continuing intellectual community grounding its work. In the absence of the Institute, the new School or College would be pulled away from innovation and currency. The committee envisions that if both are established, the Institute's innovative research and creative directions would be closely tied to the more grounded and enduring aims of the new School or College. At the same time, Institute research and creative work would flow back into the School or College, keeping its curricula and ongoing research and creative work vibrant and current.

**Recommendation and Concluding Remarks.** The ICT Exploratory Committee supports Model C, believing that the creation of a new interdisciplinary School or College in tandem with a new global Institute is the ideal and preferred combination for facilitating distinctive research, teaching, and creative paths in communication, information, and media technologies. Additionally, the Committee believes that this new interdisciplinary School or College, through its innovative faculty structure and flexibility, can serve as an exemplary model for future research, creative, and pedagogical developments on campus and elsewhere.

## REPORT

### I. HISTORY, PURPOSE, AND PROCESS OF THE ICT EXPLORATORY COMMITTEE

The Information, Communication and Technology (ICT) Exploratory Committee was impaneled by Interim Provost (now Provost) Russell Moore in early September 2010. This group's charge was to provide a high-level analysis of existing ICT assets (i.e., faculty, funding, facilities, etc.) on the Boulder campus and determine how those assets might be organized to create a contemporary ICT program that would serve our students in the future, and that would place an emphasis on ICT research, scholarship, and creative work. Eight faculty members from across the university were invited to serve on the ICT Exploratory Committee. Deliberations began in mid-September and were completed by late December 2010. Much of the ICT Exploratory Committee's work represented an extension of the work already completed by the College of Information Task Force in Spring 2010. The ICT Exploratory Committee report, however, differs in significant ways from the first report because of the ICT Exploratory Committee's expanded charge.

After receiving its charge from Provost Moore, the ICT Exploratory Committee proceeded to define a process that would fulfill that charge. The first order of work was to complete an "environmental scan" of ICT constituents and related assets that existed on campus. In deliberations, this constituency array was referred to as a collection of "stakeholders," individuals and program entities that could be directly affected by the outcome of the ICT Committee's work. The final list includes programs, departments, colleges, schools, centers, and institutes, as well as related individuals such as specific deans, chairs, faculty, and students. Local, state, and national entities of interest were interviewed. This part of the committee process included a review of similar national peer programs that might provide working examples for our deliberations and planning.

Additionally, two public forums were held for interested individuals from on and off campus. Several campus-wide emails were sent to faculty, staff, and students, encouraging input and comments. An important part of this scan was to search throughout the campus community for faculty who might be interested in participating in a new ICT initiative. This process involved a preliminary identification of potential faculty participants and a look at what research and creative interests such individuals carried out, as demonstrated by their publications, professional presentations, exhibits, and other forms of communication.

In the course of its deliberations, the ICT Exploratory Committee established a primary guiding principle for generating all recommendations. In response to its charge, the committee agreed that any new ICT entity should be primarily dedicated to research and creative work that would explore and define the intersections of information, communication, media, and related technologies, and how such intersections could act as formative agents for life, art, science, technology, and society. Additionally, all pedagogical and curricular elements to be created within this entity would flow logically from the interdisciplinary research and creative work accomplished by participating faculty, students, and staff.

On September 1, 2010, the Chancellor had impaneled a program discontinuance committee to investigate whether the School of Journalism and Mass Communication (SJMC) should be discontinued for either budgetary or strategic realignment reasons. Since the charge from Provost Moore to the ICT Exploratory Committee included specific instructions relating to the SJMC, it was incumbent on the ICT Exploratory Committee to reflect upon any recommendations made by the Program Discontinuance Committee. In November 2010, the Program Discontinuance Committee recommended discontinuance of the SJMC. The discontinuance report was forwarded to the ICT Exploratory Committee, where it was reviewed and considered within the context of the committee's own planning efforts.

In December 2010, after reviewing its findings and engaging in weekly discussions, the ICT Exploratory Committee reached consensus on possible shapes, missions, and structures for the new ICT initiative. What follows is an explanation and presentation of those findings and recommendations. The first draft of the ICT Exploratory Committee report was forwarded to the Provost in early January 2011.

For a more detailed discussion of the history, purpose, and process of the ICT Exploratory Committee, including the text of the charge to the committee, see Appendix A.

## **II. FINDINGS RELATED TO ENVIRONMENTAL SCAN**

The committee's environmental scan resulted in six primary findings.

1. *Research and creative work in this domain contributes to substantial societal needs.*

Representatives from multiple businesses and industries (such as consulting, media, broadcasting, law, computer application development, and health care) shared that technology related to information, communication, and media was occasioning extensive, dramatic, and continued change in their work. A scan of funding sources revealed significant interest in how to design and employ these new and developing technologies to address enduring societal problems. The committee heard an overwhelming consensus that the university should contribute its expertise to addressing these issues, opportunities, and challenges.

2. *This is a vital research and creative-work domain.* In every area of the academy, specific journals and conferences are devoted to research and creative work related to ICT. In addition, every year dozens of academic conferences specifically focus on interdisciplinary questions generated from the intersections of information, communication, media, and technology. Foundations invest in programs that seek to envision new directions or reenergize traditional disciplinary questions. Nearly all government funding in this area expects that sponsored research or creative work engage in a genuine interdisciplinary approach.

3. *Investment in this domain can leverage current and latent campus strengths.* The most important strength is faculty productivity. We identified over 150 faculty across approximately 50 units across campus who have research and creative interests intersecting with this area. A new entity can leverage this resource by creating the infrastructure to support and nurture bold scholarship and

creative work, to increase the connections among these faculty, and, through additional strategic hires, to add to these strengths. A second strength is existing infrastructure. Existing spaces (such as in ATLAS, the Armory, or the Discovery Learning Center) are currently suitable for collaborative research and creative work in this domain. Other spaces could be made ready with modest investment. A third strength is existing IT and ICT initiatives: for example, the evolving research computing initiative, the Digital Humanities initiative, Silicon Flatirons, and bio-informatics. A fourth strength is the campus's strong record of interdisciplinarity in several of the Institutes and in the emerging Initiatives in Energy and in Molecular Biotechnology.

*4. Investment in this domain can meet unmet campus needs relating to successful research and creative work.* In talking with faculty and administrators, the committee identified a number of challenges related to interdisciplinary work. Faculty have different levels of success and expertise in finding collaborative colleagues in disciplines other than their own. Often, potentially collaborative faculty in unrelated disciplines are physically separated across campus. The current college and school structure at CU Boulder can also hinder interdisciplinarity. For example, faculty engaged in interdisciplinary work must negotiate different standards for evaluation, and investment in shared resources is challenging across the lines of different schools and colleges. Each of these challenges may be addressed through our proposal.

*5. Distinctive investments will be required for the effort to be sustained.* All of the committee's findings demonstrate that this is an emerging, dynamic intellectual area. Consequently, investments in this area must be ongoing, flexible, and sufficiently variable to allow the campus to adapt quickly and effectively to the changing domain. Structures with similar missions at peer institutions vary in their success, in part, related to their dynamism and flexibility.

*6. A distinctive mission and vision will be required for this effort to be sustained.* The more successful entities at peer institutions appear to be strongly mission- and vision-driven and to have clearly articulated priorities.

### **III. GOVERNING PRINCIPLES**

No single or obvious model responds to the findings from the committee's environmental scan. However, certain core principles are essential for any further efforts to be successful at CU Boulder over the long term. These principles are critical to creating an entity of intellectual and institutional distinction among peer institutions.

First, interdisciplinarity is key to unlocking transformative potentials in this domain. What is distinctive about this environment is that it is thoroughly and simultaneously social, cultural, and technological. Each approach is necessary, none alone is sufficient. No approach is in service to the other. Thus, interdisciplinarity must be built into the content and structure of any proposed models.

Second, the relationship among technology, information, media, and communication is generative, itself unfolding. Their intersections become a new source of creativity and innovation: a resource for generating ideas, shaping the world, and solving problems. Thus, any proposed model must

emphasize and preserve intersections and generative structures, rather than hew to traditional disciplinary divides and classic academic structures.

Third, the resulting entity should be provided with the means to maintain flexibility and adaptability. Such possibilities as porous institutional boundaries, imaginative faculty appointments, and variously scaled support structures must be considered.

Fourth, the success of this entity will depend on engaging a faculty that share an ethos represented by these principles and by the vision of this report. Participants must possess a collaborative and open spirit, and must be willing to embrace shared governance.

#### **IV. A VISION FOR CU BOULDER: INFORMATION, COMMUNICATION, AND MEDIA TECHNOLOGY**

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. 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.

The committee's expansion of the original ICT focus in its charge to include not only information and communication but also media (ICMT) derives from a strategic analysis of the distinctive and focused mission that could be adopted by this new enterprise. Obviously, technology affects all areas of life. The committee proposes, however, that the new entity focus on three specific, interrelated realms in which technology is and will be transformative: information technology, communication technology, and media technology. (In other words, in this focus, "information," "communication" and "media" are adjectives modifying the grounding noun "technology.") In scanning other such entities around the country as well as current and potential campus strengths at CU Boulder, the committee determined that the campus has a unique opportunity in including not one, not two, but all three of these areas in a new focus. Whereas other such entities around the country have, for the most part, emerged from a single discipline and still bear the stamp and the overriding ethos of that discipline—generally computer science, library science, or film/media studies—CU Boulder has an opportunity to build, from the ground up, an entity that fully combines technological, social science, humanistic, business, and artistic approaches. If it is to include undergraduate and graduate curricula, the new entity should educate students who understand not only how to advance the state of the art in information-, communication-, and media-related technologies, but also how to comprehend and interpret their aesthetics, history, and meanings.

The committee thus proposes an ICMT focus that, unlike those at other U.S. research universities, creates new technologies while simultaneously considering their meanings and their uses from social, artistic, humanistic, business, educational, and ethical perspectives. Equally important, the study, analysis, creative use, and internal deployment of ICMT will lead to understanding new technologies that should be created. Critically important is the committee's assessment that ICMT, although interdisciplinary, is in reality another example of convergence or transcending disciplines. This convergence is happening today in biosciences much as it did in computer science in the 1970s. The far-reaching interdisciplinary faculty in the new entity, together with their

encompassing ICMT mandate, will create a unique educational and research environment that will, indeed, modulate the future and put CU Boulder on the vanguard.

## V. PROPOSED MODELS

The committee recommends that CU Boulder form two new entities: the School or College of Information, Communication, and Media Technology; and the Institute for the Global Digital Future.

The committee recognizes that either a School or an Institute might be adopted as a distinct unit. Each model is thus presented in turn along with its advantages and disadvantages. An Institute alone would be the lowest-cost option; a School or College would be a medium-cost option. However, our recommendation is to form a School or College and an Institute at the same time. (The highest-cost option.) As elaborated at the end of this section, forming both a School and an Institute would create unique opportunities for each unit to foster and support the work of the other unit.

### **Model A. The School or College of Information, Communication, and Media Technology**

#### *Mission*

The School or College of Information, Communication, and Media Technology will engage and advance the transformative potentials generated by the intersections of information, communication, media, and technology through research, creative work, and teaching. Faculty in the School or College will employ existing technologies and applications in new ways; design and develop innovative technologies and applications; and seek to understand the history, meaning, and future of the connections among information, communication, media, and technology. Curricula will prepare students to understand and analyze these changing relationships, to respond effectively to their continuing transformations, and to be agents in creating these technologies' future.

#### *Name*

As described in Section IV above, the suggested name of the School or College of Information, Communication, and Media Technology derives from a strategic analysis of the distinctive and focused mission that could be adopted by this new enterprise as it unites research and teaching in three specific, interrelated realms in which technology is and will be transformative: information technology, communication technology, and media technology. Not incidentally, the new School or College will also represent a major naming opportunity for the campus, and we would urge the administration and the CU Foundation to pursue this opportunity.

#### *Goals and desired outcomes for the School or College*

- Create an academic community of faculty and students whose work focuses on the intersections of technology with information, communication, and media. The expertise of faculty might



include, for example, information technology and computational literacy, including computer science, telecommunications, and informatics; social-science and humanistic study of digital media and new media, including new journalistic media; digital creative arts; law and ethics as applied to the dissemination of information; public policy related to new media and information technology; and technology applications in education.

- Create interdisciplinary curricula at the undergraduate and graduate levels. Curricular areas would blend social, cultural, and technological aspects of media and technology. For example, core instruction might include skills in computational literacy, the history of ICMT, digital trends in society and media, or the relation of ICMT to ethics and governance.
- Foster interdisciplinary research and creative work in ICMT, both within and across subdisciplines represented in the School or College.

### *Faculty*

Achieving these goals depends on the School's or College's inclusion of a broad representation and involvement of faculty from a wide range of disciplines across campus. It will be the work of campus administration, as well as of the Dean of the new School or College, to organize who among current campus faculty might move into the new School or College. However, the new School or College would not attempt to include all current faculty members whose primary research or creative work might lie in this area. Rather, care should be taken to create a balanced faculty with sufficient expertise in technical, cultural, and social domains. These decisions should be driven by the overall mission and guiding principles stated above. The constituted faculty must be sufficiently interdisciplinary and adaptive, and must possess a shared ethos that is committed to the collaborative vision of the new School or College.

The success of the new School or College will depend on a mix of faculty scholars and artists, some having the capability and desire to develop new technologies, some focused on understanding the impact of technology on society and the planet, some focused on using new or existing technologies to express their creative vision, and some using this range of technologies to explore and answer deep and abiding questions in their traditional fields. To that end, the new School or College should be encouraged to cast its net widely across the campus, scanning all schools and colleges including the three divisions of the College of Arts and Sciences, to determine which faculty might contribute in this fashion. Some or many of the faculty of the School or College might—especially initially—hold joint appointments with other schools or colleges. Finally, the School or College would benefit from having affiliated faculty who remain both rostered and tenured in other units.

### *Possible degrees/certificates*

The School or College should offer degrees and participate in certificate programs at both the undergraduate and graduate levels. Because degrees should be appropriate to the subdisciplines represented, the School or College might be unique to the campus in offering BA and BS degrees and MA, MS, and MFA degrees, as well as the PhD. The character of degrees and certificates—including whether a program is better represented by a degree, by a concentration, or by an intra- or inter-college certificate—will be determined by future committees including members of this School or College. As well, degrees, certificates, and concentrations will evolve over time.

However, given the current strengths on campus, we envision that the School or College will offer degrees, concentrations, or certificates in such fields as Digital Media and Creative Arts; Transmedia and Cross-Platform Journalism; Scientific and Health Informatics; Information and Media Law and Policy; Information Technology and Computational Literacy; and Media Management.

*Relationship of the School or College to other units on campus*

Initially, the most important and delicate task involving other units will be moving, jointly rostering, or affiliating current campus faculty into or with the new School or College. Moving current faculty partly or wholly into the new School or College will require clear understandings with those other units about how the transfer of teaching and other resources might be recompensed.

The committee believes the new School or College could exist concurrently and build important relationships with the ATLAS Institute and its programs for faculty development and student enrichment, such as the Center for Media, Arts and Performance. The committee also endorses the recommendation of the College of Information Task Force that ATLAS graduate degree programs, the MS in Information and Communication Technology Development and the PhD (an interdisciplinary degree in precisely those fields contained within the new School or College), should be absorbed into the new School or College and supervised by its faculty in a timely fashion. ATLAS's undergraduate minor and certificate in Technology, Arts, and Media might also, in time, logically be offered by the new School or College if faculty and instructors currently involved with ATLAS are rostered in the School or College.

Like other schools and colleges on campus that offer undergraduate degrees, the new School or College should be able to admit both freshmen and transfer students into its undergraduate program. However, the new School or College will be unique in its partnerships with all the other schools and colleges on campus; it will exist in order to serve the campus community as a whole, not stand apart from it. Students in degree programs across campus will very likely be interested in the new School or College's offerings, whether as a double major, as a certificate program, or merely as a resource for coursework. Thus, students with majors across campus should be able to enroll easily in the new School's or College's offerings. Similarly, undergraduate majors in the new School or College should be encouraged and given leeway to pursue a second major outside the School or College as a way of acquiring an especially dynamic and well-rounded education.

There might be student demand for professional training and development. Because such training would not be provided by the new School or College, other units including the Division of Continuing Education and Professional Studies might be solicited as partners to provide suitable courses, workshops, or short courses.

*Resources required for the School or College*

- A Dean whose visionary leadership will include initial and ongoing scans of the campus to recruit faculty who are a good fit with the School's or College's research and creative-work

mission and who will be instrumental in the School's or College's development of innovative, interdisciplinary curricula. The Dean will also seek opportunities to build programmatic links with other schools and colleges across campus, including the academic units and the University Libraries. We recommend hiring such a founding Dean through a national search; faculty currently on campus should be welcomed to apply. Hiring the founding Dean should be the first step in any implementation.

- Shared space. While shared space is important for the cohesion and success of any academic or research unit on campus, it is particularly crucial for the new School or College because its interdisciplinary mission reaches across campus, bridging technological, humanistic, artistic, social-science, and professional fields. The founding faculty will need a shared space immediately as they plan the School or College. However, if this new School or College is as successful as we predict it will be, the campus should immediately begin to plan for future space needs and options. While not fully fluent in the undoubtedly many constraints, the committee suggests that Fleming would be an excellent choice for the new School or College.
- Building a faculty through investment or reinvestment of faculty lines. The committee forecasts that approximately thirty current faculty from across campus might initially request to join the School or College. To provide a balanced, interdisciplinary faculty as well as opportunity for the founding Dean, at least fifteen lines should be reinvested over the next five years. This would bring the number of faculty directly in the School or College to at least forty-five. Additional lines should be invested in the School or College if it is as successful as the committee believes it will be.
- Administrative, advising, and technical staff support.
- Funds sufficient to purchase and upgrade existing equipment, equip space, and purchase additional resources as needed. Because information, communication, and media technologies change rapidly, a continuing budget sufficient for repair and replacement is also necessary. Once the curricular programs are in place, this budget might be maintained through program or course fees.

### *Resources generated by the School or College*

The potential for student enrollment and for the generation of student credit hours, both undergraduate and graduate, in the new School or College is likely to be significant. For example, a recent advertisement in the Chronicle of Higher Education seeking a new Dean of the College of Informatics at Northern Kentucky University (total enrollment approximately 15,000) revealed that this new college, though but four years old, has already garnered more than 1400 undergraduate majors—an indicator of high student interest in areas of study involving communication, information, and media technologies. Although Northern Kentucky is not a peer institution of CU Boulder, we predict that our campus, not only because of its larger size but also because it resides in the tech-savvy state of Colorado, would attract even greater undergraduate numbers.

One indication of potential undergraduate enrollment is the interest already on campus in degree programs that have some overlap with the new School's or College's proposed mission. For example, the School of Journalism and Mass Communication hosts more than 1400 majors and pre-majors and generates more than 5000 undergraduate student credit hours and more than 500 graduate student credit hours in a typical semester. While program discontinuance for the SJMC

would mean that all of its current undergraduate students will have graduated or left the university in three years' time, the level of interest in the SJMC's majors, particularly as they might be reframed within the context of new media technologies and networked digital structures, should remain strong. Similarly, burgeoning student interest in ATLAS's TAM (Technology, Arts, and Media) undergraduate certificate and undergraduate minor, as well as projected student interest in the proposed BA in Computer Science in the College of Arts and Sciences, indicates that many of our current and future students would find the academic programs in the new School or College compelling and attractive. This interest is likely to skyrocket if, as we propose, it is easy for students to double-major or gain a certificate in the new School's or College's programs while obtaining a degree in another unit. For example, Engineering students who wish a broad, interdisciplinary approach to information technology, rather than one based solely within Engineering, would welcome such an opportunity. Students in Business would likely be eager to earn a double major or certificate in Media Management. Similarly, students in any number of Arts and Sciences majors would likely welcome the opportunity to combine their disciplinary expertise with an understanding of how that discipline now reaches the world through new information, communication, and media technologies. The new School's or College's graduate degrees and certificates will similarly attract students at the graduate level. Finally, because this program will be the first in Colorado higher education, it will draw students from across the state, nation, and world who would otherwise pursue ICT degrees outside Colorado.

If the new college brings faculty together from such intellectually diverse areas as computer science, film, art, music, theater, digital media, law, sociology, psychology, engineering, business, the humanities, international affairs, and areas of journalism, the possibility for large interdisciplinary federal grants should be impressive. Local contracts and grants also seem possible, particularly related to entrepreneurial efforts in digital media and to growing concerns over safeguarding personal information.

#### *Advantages of the School or College model*

A School or College of Information, Communication, and Media Technology offers a singular opportunity to recruit, retain, and graduate undergraduate and graduate students who wish not only technical but also analytic and artistic expertise in a rapidly developing field that is shaping every aspect of the twenty-first century, from social interaction to global diplomacy. In particular, the School or College offers an area of growth for the campus: as mentioned above, the committee predicts that the program's existence will attract students who would not otherwise have enrolled at CU Boulder. The new School or College also promises to forge a faculty whose habit of thought is to work and teach between and among disciplines. As well, it will be an important tool for recruiting and retaining faculty who have heretofore not found CU Boulder an entirely congenial home for their research and creative foci.

The outreach potential of the School or College is enormous. We see tremendous potential for interaction between the School or College and the local and state business, technical, journalistic, and artistic communities in the form of, e.g., conferences and roundtable-style gatherings; student internships; and ongoing dialogue with potential employers of graduates. Again, it is important to

note that the new School or College will be unique in Colorado higher education, and thus will draw attention throughout the state and the Rocky Mountain region.

*Disadvantages of and challenges for the School or College model*

A traditional School or College is not the most limber of beasts. It inevitably settles into comfortable patterns of accomplishing its tasks. While individual faculty and groups of faculty always undertake cutting-edge research and creative work, curricula and degrees cannot always be transformed quickly—a particular need in the rapidly changing ICMT field. If the new School or College is too large, if departments or other subgroups of faculty are formed along disciplinary lines, or if a disproportionate number of its faculty are from a single discipline or subdiscipline, the entity could easily lose sight of its interdisciplinary mission. Visionary leadership and considerable faculty buy-in will be required to resist instant or accretive siloing of faculty according to longstanding disciplinary categories. In particular, the committee recommends that the School or College not form departments immediately, and perhaps not even in the long term, since a departmental structure practically ensures siloing. Rather, as recommended by the College of Information Task Force, the committee recommends that the School or College be organized in “faculties” or similar fluid subgroups. Even with such a fluid organization, however, the new School or College runs the risk of not regularly engaging faculty outside the School or College for research or creative-work partnerships, unless incentives and rewards for such partnerships are built into new School's or College's structure and annual merit review process.

Finally, the establishment of a new School or College will undoubtedly affect the programs and the personnel of other schools and colleges. Inevitably, the creation of a new unit with such large resources will be disruptive for the rest of the campus. The campus administration must meliorate these other units' perceptions of loss from the creation of the new School or College, for example, by providing sufficient replacement for faculty and other personnel. While in the short term the redeployment of faculty lines might seem a zero-sum game, the committee fully believes that, in the end, the revenue enhancement for the campus, including for other schools and colleges besides the new one, will be a net positive.

*Sequence of future action to establish the School or College*

1. Campus administration conducts a national search for a founding Dean of the School or College, with faculty on campus welcomed to apply.
2. Campus administration identifies contiguous space on campus for the School or College. The Fleming Building is one possibility.
3. The Dean, in collaboration with an interim Executive Committee appointed by campus administration, recruits faculty from across campus who are committed to the interdisciplinary mission of the School or College. The Dean might also be supported by an external advisory team who could provide independent advice at the beginning of founding the new entity. The Dean, interim Executive Committee, and founding faculty determine the internal organization of the School or College and establish the initial curricula.

4. The Dean scans the campus for additional resources and potential partnerships and, in conjunction with the Director of ATLAS, explores the appropriateness of and, if applicable, the timeline for incorporating ATLAS curricula into the new School or College.
5. Campus administration invest and reinvest lines for new faculty hires that either contribute to the initial research and creative foci and curricula of the School or College, or establish new foci and curricula.

## **Model B. The Institute for the Global Digital Future**

### *Mission*

The Institute for the Global Digital Future will engage and advance the transformative potentials generated at the intersections of digital information, communication, media, and technology through research and creative work spanning these fields. The research and creative work of Institute faculty and fellows will employ existing technologies and applications in new ways; design and develop innovative technologies and applications; and analyze and forecast the social, scientific, artistic, and cultural changes occasioned by developments in the field. The Institute will especially focus on the contemporary problems, challenges, and opportunities of information, communication, media, and technology. This focus will provide a logical and consistent core of inquiry from which many other threads of discourse can spring.

### *Name*

The suggested name for the new Institute represents its forward-looking and international scope, described below.

### *Goals and desired outcomes for the Institute*

Digital technologies related to information, communication, and media have played and will continue to play a significant role in shaping the future, across all professional, public, and social domains. The purpose of the Institute is to position CU Boulder as a leading voice in those changes. The Institute will be a model for how higher education can enter into important discussions regarding future technologies' design and appropriate uses, their impact on governance and public policy, how they reshape social and artistic practices, and how they remake business and professional work.

Research and creative work in the Institute will be closely tied to new and emerging areas, structured around specific, time-delimited projects. The organization of the Institute will be fluid and thoroughly interdisciplinary. Teams will be problem-oriented so that the individual expertise of Institute faculty and fellows can be leveraged across different projects and domains. All fellows will have a shared stake in the Institute's priorities, with an ethos not of building an individual research or creative team, but rather of meeting the objectives of the Institute as a whole. At any time, the Institute may be engaged in projects that are at base societal, scientific, technological, humanistic, or artistic—the Institute's distinction is not in the range of projects. Instead, it is in the selection of domains that can be addressed uniquely through the intersections of information,

communication, media, and technology: for example, health care, education, homeland and national security, journalism, digital media, ubiquitous computing, smart environments, and digital arts. Within these domains, the Institute will foster problem-solving that could not be accomplished by a single discipline alone. For example, CU Boulder does not have a department or school of homeland security, of health care informatics, of public policy relating to information flow, of digital media design, or of educational technology. While any number of units on campus have a strong interest in some of these topics (Education, Computer Science, Law, Business, etc.), they are not capable of fully embracing the rapid pace of change that befalls us. A highly interdisciplinary approach is the only way to address these game-changing problems.

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, journalistic, humanistic, and artistic domains. The Institute will also sponsor focused research analyzing or forecasting the past, present, and future of information technology.

#### *Relationship of the Institute to other units on campus*

The mission and goals envisioned here are clearly suited to the strengths of an Institute structure. Yet the distinctive organization of this Institute means that it will have a unique relationship to other units on campus. Because the Institute will be designed around delimited research and creative projects, it will be unlike other Institutes in that its faculty fellows will have permanent tenure homes and rostering elsewhere on campus. Faculty fellows will likely join the Institute for periods ranging from one semester to only a few years, with an explicit assumption that their work in the Institute will enrich their disciplinary work as well. Partnerships between the Institute and other units will thus be of paramount importance. Indeed, because the vitality of the Institute depends on identifying and leveraging the talents and innovations of all domains of the academy, the Institute will have a specific obligation to nurture related intellectual work undertaken in departments in all colleges and schools on campus. The Institute will have porous boundaries, brokering new connections and collaborations, assisting with faculty development and faculty recruitment in ICMT areas, assisting with grant proposals, and disseminating resources such as technical staff assistance. As well, the Institute will work collaboratively with home departments, providing adequate incentives and compensation to cover costs of the faculty fellows.

#### *Resources required for the Institute*

- A Director whose visionary leadership will include initial and ongoing scans of the campus to recruit faculty who are a good fit with the Institute's interdisciplinary research and creative-work mission. We recommend hiring a founding Director through a national search, with faculty currently on campus welcomed to apply.
- Significant startup and ongoing funds for faculty fellowships in the form of seed grants for research and creative projects. These grants will give faculty incentive to participate in the Institute. Grants will be tailored to the needs of faculty within a particular discipline and project. For example, a research project involving computing in the humanities might require funding for course release for a humanist, and for technology development for a computer scientist.

- Capability and funding capacity to recruit faculty fellows both nationally and internationally.
- Contiguous space for administration and staff and for research and creative-work group meetings.
- Administrative and technological support staff.

#### *Resources generated by the Institute*

The Institute for the Global Digital Future would have considerable capacity for generating federal and even state grant funding, not only from science- and technology-related programs but also from such agencies as the National Endowment for the Humanities and the National Endowment for the Arts. Indeed, major external funding is part of the University of Colorado's expectations for an Institute. Partnerships with business and industry could lead to innovations in technology that would be patented or copyrighted or would accrue other kinds of intellectual property rights.

#### *Advantages of the Institute model*

An Institute is limber and fast-moving. It can be highly flexible and adaptive, and can accommodate the rapid growth, evolution, and dissolution of research and creative-work groups as new questions arise and older ones are wrapped up or abandoned. It can comprise both successes and failures; indeed, one of the marks of a successful Institute is that it can fail fast and gracefully when a research or creative direction does not succeed. By focusing on critical contemporary problems in an interdisciplinary fashion, the Institute can make important and constructive contributions to the future of information and its impact on society. Such contributions will also probably garner the greatest interest from funding agencies and organizations, which the Institute will require for its long-term prosperity.

From the committee's survey of organizations studying information, digital media, and informatics at peer institutions, it does not appear that any of them has organized itself in the manner outlined above: not around a unified topic or approach, but around a set of crucial problem domains addressed by specialists across a number of disciplines. This organization could be a point of distinction and success for the Institute. As well, since each problem domain will bridge a number of disciplines, the Institute can, over time, involve a very large number of individual faculty and faculty groups across campus. The Institute could be an important focus of graduate-student and postdoctoral research and creative work, as well as a powerful recruiting tool for faculty across many units. It could also be a major instrument of national and international outreach through partnerships with business and government, and through affiliations with external scholars, including international luminaries, as Institute fellows.

#### *Disadvantages of and challenges for the Institute model*

Though it can foster research and creative work and hence education on the graduate level, an Institute does not reach into the intellectual growth and development of undergraduates, and thus will be something of a shadowy presence for most of the campus. An Institute tends to look outward from campus rather than seeking to cultivate campus culture as a whole. The proposal to have faculty research and creative-work groups move in and out of the Institute, forming and



dissolving as need be, means that no permanent interdisciplinary identity in information, communication, and media technology would be built on campus.

*Sequence of future action to establish the Institute*

1. Campus administration conducts a national search for a founding Director of the Institute, with faculty on campus welcomed to apply.
2. Campus administration identifies contiguous space on campus for the Institute's administrative and meeting needs. The Fleming Building is one obvious possibility.
3. Campus administration invests resources for seed grants for faculty fellows.
4. The Director establishes a faculty fellows program that involves research and creative groups across campus and also recruits affiliated fellows nationally and internationally.

**Model C. Our recommendation: combine models A and B to create both the School or College of Information, Communication, and Media Technology and the Institute for the Global Digital Future.**

*Advantages of our recommendation*

Establishing a School or College and an Institute at once combines the advantages of both models, while obviating the disadvantages of having just one. In the absence of the new School or College, the Institute would lack a solid and continuing intellectual community grounding its work. In the absence of the Institute, the new School or College would be pulled away from innovation and currency. The committee envisions that if both are established, the Institute's innovative research and creative directions would be closely tied to the more grounded and enduring aims of the new School or College. At the same time, Institute research and creative work would flow back into the School or College, keeping its curricula and ongoing research and creative work vibrant and current. Students of the new School or College would be able to engage in lab- or studio-type experiences by working with Institute faculty and fellows. Research and creative work begun in the Institute could continue into long-term ventures in the School or College.

*Disadvantages of and challenges for our recommendation*

Establishing both a School or College and an Institute will require a large investment of resources: not only financial and physical-plant resources, but the combined energies and good will of the deans of the other Schools and Colleges and the chairs of the units whose faculty may be involved with one or the other. All must recognize and buy into the enormous benefits that these two new units can bring to the campus as a whole. At the same time, the leaders and participants in the new School or College and especially in the Institute must recognize and prioritize the ways in which their activities can nurture work across campus.

*Sequence of future action to establish both the School or College and the Institute*

1. Campus administration conducts a national search for a founding Dean of the School or College, followed by a national search for a founding Director of the Institute. The new Dean

would help recruit the Institute director. Faculty on campus should be welcomed to apply for both positions.

2. Campus administration identifies contiguous space on campus that can house both the School or College and the Institute. The Fleming Building is one obvious possibility.
3. The School or College and the Institute develop both separately, as outlined above, and in continuous consultation with each other. The research and creative-work mission of the School or College will foster faculty projects that can be developed further in the Institute. The Institute will incubate research and creative innovations that will enrich the teaching, scholarly, and creative activities of the School or College, as well as those of the other units on campus.

## V. CONCLUDING REMARKS

The ICT Exploratory Committee believes that creating a new interdisciplinary School or College in tandem with a new international Institute is the ideal and preferred combination for facilitating distinctive research, teaching, and creative paths in information, communication, and media technologies. The committee also recognizes that this is the most resource-intensive solution. To fulfill a vision of this magnitude will require that significant resources be assembled and allocated. But as this report expresses, this campus already possesses a significant number of “assets” or resources—intellectual, physical, and financial—that can be called upon to help power this new entity into successful being.

Additionally, the committee believes that this new interdisciplinary School or College, through its innovative faculty structure and flexibility, can serve as an exemplary model for future research, creative, and pedagogical developments on campus and elsewhere. The successful implementation of the School or College could, in fact, help redefine how we structure and invent other academic entities in the future. The new School or College could, for example, model for other interdisciplinary entities how to handle such challenges as evaluating interdisciplinary research and creative work for faculty promotion or merit reviews.

The world is in the midst of a revolution in information, communication and media technology that is affecting every aspect of our lives. In the academy we are partners in creating this revolution and in using these technologies to study and address both old and new questions, and we are also fundamentally engaged in studying the impact these technologies have on society. Currently these wide-ranging topics are addressed across most departments in the university. However, this revolution is fundamentally interdisciplinary with no respect for boundaries. For CU Boulder to become a national and global leader in creating, using, and understanding this new world, the campus needs a matching institutional activity. The proposed School or College and Institute are an appropriate structure to provide both a campus focus and a campus resource so that CU Boulder can realize its potential as a global voice in information, communication, and media technology.

The original ideas for forming the College of Information Task Force and, subsequently, the ICT Exploratory Committee were visionary actions in response to rapid changes in information, communication, and media, changes largely driven by ever-expanding networked and digital technologies. As a research institution, CU Boulder should be committed to helping society meet

the demands of this revolution, which has perhaps already eclipsed even Gutenberg's print revolution. Indeed, and to a somewhat intimidating degree, our future, our children's futures, and their children's futures will depend significantly upon the ability of higher education to meet these complex challenges in information, communication, media, and technology with skillful, imaginative, and ethical strategies in research, creative work, and teaching.

Creating this combined and integrated School/College and Institute structure will be a difficult and challenging process, one that will require administrative leadership and the work of many faculty committees to come. But if we remain committed to doing what is best for the institution and society as a whole, we can succeed without question. Through altruism, collegiality, imagination, and careful planning, this university is more than capable of making this vision a defining reality. As Homer said, "by mutual confidence and mutual aid—great deeds are done, and great discoveries made."

## **VI. APPENDICES**

- A. Details of the creation, charge, and process of the ICT Exploratory Committee
- B. ICT Exploratory Committee work plan
- C. Chart of environmental scan process, including individuals and groups interviewed

## Appendix A

### Details of the Creation, Charge, and Process of the ICT Exploratory Committee

The work of the ICT Exploratory Committee follows upon an interesting and somewhat unusual history. The first ideas of creating a new school or college, one to be centered around scholarly and creative elements in information, communication, and technology, developed out of a conversation in September 2009 among Chancellor Philip DiStefano, Interim Provost Stein Shure, and a group of interested faculty and administrators. In response to ideas presented within that conversation, a task force was created with a charge from the Interim Provost to explore and present ideas concerning the potential benefits and opportunities associated with the possible creation of a new “School of Information” at CU Boulder. A large and diverse task force was created to carry out this charge, and, after months of careful deliberation and discourse, that task force delivered its final report to the Provost on April 14, 2010. This report may be accessed on line at <http://www.colorado.edu/news/downloads/082410/COI-TF-Report.pdf>.

The report of the College of Information Task Force recommended creating a new college at CU Boulder that would be interdisciplinary in nature and primarily dedicated to completing research and creative work within the complex social and technological domains often described as the “networked information age.” Future pedagogy within this new college was to be guided primarily by an engagement with the intellectual construct of “computational thinking.”

The new College of Information was to be structured, at least initially, around faculty groups who would study certain problems or issues relating to the networked information age. The College of Information Task Force report identifies these intellectual and creative groupings as “faculties.” Degrees and certificates to be offered by the new College were to span the entire range of the curriculum, from undergraduate to graduate offerings.

For various reasons, the College of Information Task Force report was not accepted by the Interim Provost or the Chancellor. Instead, a second task force was impaneled by the new Interim Provost (Professor Russell Moore, now Provost) in early September 2010. This group, the Information, Communication and Technology Exploratory Committee (known as the ICT Exploratory Committee), was given the following charge by Provost Moore:

*The ICT Exploratory Committee shall meet regularly during the fall semester of 2010 for the purposes of:*

- *providing a high level analysis of existing ICT assets (i.e., faculty, funding, facilities, etc.) on the Boulder campus;*
- *determining how those assets might be organized to create a contemporary ICT Program that will serve our students in the future, and that will place an emphasis on ICT research and scholarship. Different organizational structures should be considered, taking into account the budget realities that we currently face.*

- *presenting the interim Provost with different ICT Program organizational options, and strategies to achieve those that take into account “high” and “low” budget scenarios. These should be “high level” recommendations that can serve to identify subsequent paths forward for the creation of an appropriate Boulder campus ICT program. The committee does not need to resolve every organization or administrative issue, but should instead focus on the intellectual and educational content of the proposed program(s).*

*In conducting their work, the ICT Exploratory Committee should engage*

- *existing ICT constituents on the Boulder campus, including (but not limited to) the faculties and students of the SJMC, ATLAS, Computer Science, and digital arts and humanities;*
- *other interested units and their administrations (Deans, Chairs) for the purposes of identifying the opportunities, challenges, and impacts that might be created by different ICT Program models;*
- *local and regional ICT professionals;*
- *representatives from other high profile regional and national ICT programs.*
- *The ICT Exploratory Committee shall submit their preliminary findings to the Provost by the end of the 2010 calendar year. These findings will be shared with representatives of the BFA, the Deans and Vice Chancellors, and the Chancellor’s Cabinet, and their reactions will be provided to the Committee for the purposes of preparing a final report that will be tendered no later than February 01, 2011. The Provost will then make a recommendation to the Chancellor on how to proceed.*

Eight faculty members from across the university were invited to serve on this committee:

Merrill Lessley, Department of Theatre and Dance (chair of the committee)  
 Anne Costain, Department of Political Science and Women and Gender Studies Program  
 Katherine Eggert, Department of English  
 Michele Jackson, Department of Communication  
 Stephen Lawrence, Leeds School of Business  
 Michael Lightner, Department of Electrical, Computer, and Energy Engineering  
 Uriel Nauenberg, Department of Physics  
 Michael Zimmerman, Department of Philosophy

Deliberations began in mid-September and were completed by late December 2010. It is important to note that much of the committee’s work represents an extension of the excellent work that had already been completed by the previous College of Information Task Force. But in the end, the ICT Exploratory Committee report differs in some significant ways because of the expanded charge delivered by Provost Moore. The ICT Exploratory Committee charge makes it clear, for example,

that any new entity the committee proposed should be dedicated first and foremost to the fostering of accomplished interdisciplinary research and creative work within the domains of information, communication, and related technologies. Curricula and pedagogy, of course, would follow in response to this overarching requirement for interdisciplinary invention and discovery.

After receiving its charge from Provost Moore, the ICT Exploratory Committee proceeded to define a process that would fulfill that charge. A copy of the committee's original work plan is included as Appendix B of this document. The first order of work in relation to the charge was to implement and complete an "environmental scan" of ICT constituents and related assets that already exist on campus. The committee determined that to complete its final report in a timely manner would require that the environmental scan be completed by late October 2010. However, due to a higher than anticipated response level on and off the campus, the scan went well into November. Much was learned from this inquiry, and the committee is thankful for their eager and thoughtful input.

In committee deliberations, the campus constituency array was referred to as a collection of "stakeholders" comprising faculty, staff, and current programs that might possess potential research, creative-work, and teaching connections to the future of the ICT project, and who would be directly affected by the outcome of the committee's work. The list of stakeholders includes not only specific programs, such as departments, colleges, schools, and institutes, but also related individuals, such as specific deans, chairs, faculty, and students. The committee visited with and interviewed a large number of deans, directors, and faculty. Additionally, the committee held two public forums for interested individuals from on campus and within the community. Several campus-wide emails were also sent to faculty, staff, and students, encouraging input and comments. Many individuals responded, and, consequently, additional interviews were scheduled when appropriate. In an effort to connect with as many interested people as possible, the committee solicited email input through [Input@colorado.edu](mailto:Input@colorado.edu). All members of the ICT Exploratory Committee regularly reviewed emails sent to this account.

The committee also considered and interviewed local, state, and national entities of interest. This part of the process also included review of peer programs that the committee believed could help provide working examples for its deliberations and planning, such as similar programs found at Berkeley, UC Irvine, MIT, and Cornell. Committee members also held conversations with representatives from programs at several peer institutions. Of course, and thankfully so, much of this data collection activity was eased by the existence of the original College of Information Task Force report, which covered comparable territory. In fact, all of those connections made by the College of Information Task Force, as well as important commentary, were included in its final report and accessible to the ICT Exploratory Committee.

A list of entities and individuals who were interviewed and communicated with in the committee's environmental scan is included as Appendix C.

An especially important part of the environmental scan was to search throughout the campus community for faculty who might be identified as being interested in participating in a new ICT initiative. This process involved not only a preliminary identification of potential faculty

participants, but also a look at these individuals' relevant research and creative work as demonstrated by their publications, professional presentations, exhibits, and other forms of communication.

At the same time as initiating its environmental scan, and after evaluating its charge and having conversations with the Provost and the Associate Vice Chancellor for Academic Affairs, the ICT Exploratory Committee also worked to establish a primary guiding principle for generating all future recommendations. In that process, the committee decided that whatever shape this new entity might assume, it was to be primarily dedicated to research and creative work that would explore and define the intersections of information, communication, media, and related technologies, and how such intersections could act as formative agents for life, art, science, technology, and society. Correspondingly, since CU Boulder is a top-tier public research university, all new pedagogical and curricular elements to be created within this entity would flow logically from the interdisciplinary research and creative work accomplished by participating faculty, students, and staff.

Beyond this primary guiding principle or overarching mission statement, the ICT Committee realized that the creation of a new entity would present many other educational and outreach opportunities. Some of the most important of these opportunities include: establishing CU Boulder as a global ICT leader in interdisciplinary research, creative work, and teaching; leading the campus to new levels of national and international distinction; and developing significant relationships between CU Boulder and business and industry, both in Colorado and beyond.

On September 1, 2010, in a campus development clearly related to deliberations about to be undertaken by the soon-to-be-established ICT Exploratory Committee, the Chancellor impaneled a program discontinuance committee to investigate whether the School of Journalism and Mass Communication (SJMC) should be discontinued for either budgetary or strategic realignment reasons. Since the charge from Provost Moore to the ICT Exploratory Committee included specific instructions relating to the SJMC program, it was correspondingly incumbent upon the ICT Exploratory Committee to consider any recommendations that the Program Discontinuance Committee might make concerning the SJMC. On November 1, 2010, the Program Discontinuance Committee submitted its report to Provost Moore recommending discontinuance of the SJMC. On November 17, 2010, the discontinuance report, forwarded to the ICT Exploratory Committee, was reviewed and considered within the context of its own planning efforts and any future actions of potential strategic programmatic realignment(s).

In early November, after completing most of the environmental scan, the ICT Exploratory Committee began to focus on what it had learned from its interviewing and information-gathering process. Committee members began to develop preliminary ideas about what various models of a new interdisciplinary information, communication, media, and technology entity might look like. These discussions were extensive and revealing, reflecting both the challenges and the opportunities at hand. Funding issues were considered, as well as the potential logistical advantages and disadvantages of different infrastructure models such as institutes, centers, departments, schools, and colleges. Ultimately, all conversations were guided by the Provost's charge to the committee and the mission/vision implications of that charge.

In mid-December 2010, the ICT Exploratory Committee reached a consensus on the possible shapes, missions, and structures a new ICT entity at CU Boulder should possess. A draft of the report was submitted to the Provost in early January 2011. After subsequent revisions, a final version was submitted on January 20, 2011.



## **Appendix B**

### **Working Plan for ICT Exploratory Committee**

**September 2010**

Here is my rough draft of a working plan for our ICT Exploratory Committee. I am in hopes that we can refine this outline at our upcoming meeting on Friday (September 18 at 12:00). If you have any suggestions that might be incorporated before we meet, please let me know.

As you might recall, the Provost's charge to the committee contains three major planning phases: we must first complete a scan of campus resources and capabilities and then follow this fact finding mission with the formation of a document that will forward specific high level recommendations regarding the possible creation of a new ICT structure (or structures) to the Provost and Chancellor. After the Provost, Chancellor, and others, have considered and responded to our preliminary document, we will follow up by forwarding our revised final report.

Thus, the first portion of our work should be a kind of "environmental scan" of those ICT constituents and related resources that already exist on campus. I refer to this constituency array as a collection of "stake holders" which consists of faculty, staff, and programs that possess obvious research and teaching connection to the outcome of our work and the future of the ICT project. As stakeholders, these individuals and entities will be directly affected by the outcome of our work. This list can, and should, include not only specific programs (such as departments, colleges, schools, and institutes), but also related individuals (such as specific deans, chairs, and so forth) Furthermore, we also need to consider local, state, and national entities. This part of our process should include our interaction with a set of similar national peer programs that we admire (such those found at Berkley, MIT, and Cornell). Naturally, to be effective in this endeavor, we must visit directly with as many of these programs and individuals as possible, soliciting informative conversations and written input. I propose that we begin this portion of our deliberations as soon as possible, probably by late September, and conclude the scan by the end of October. This will, of course, be a demanding task. Here is my preliminary list of ICT stakeholders:

**PART I, Environmental Scan (late September to early November)**

**Campus:**

**Academic Teaching/Research Programs**

(NOTE: These four programs should be visited directly by our committee.)

SJMC

ATLAS

Communications

Computer Science

(NOTE: Perhaps we could host open meetings for these programs, with more than one area being invited at a time).

Film Studies

Art and Art History

Engineering

Various institutes and centers (to be determined)

Business

Library

Law

**Individual Director/Leadership, i.e.**

Dean of Journalism

Dean of Engineering

Dean of Business

Dean of Library

Dean of Arts and Sciences

Director of ATLAS

**Other Campus Entities**

Open meeting for interested students

Open meeting for interested faculty and staff

**Off Campus:**

Specific regional and national programs at other major universities

Local press (Denver Post, Boulder Camera, Longmont Times, etc)

Local business/industry (to be determined)

Local and regional ICT professionals (to be identified)

**PART II**, Develop preliminary high-level analysis and written recommendations (from early November to late December)

Starting in early November, we need to meet on a regular basis and discuss what we have learned from our environmental scan. We will need to develop several models for a new ICT program that feature different organizational options which take into account “high” and “low” budget scenarios. Despite budget considerations, however, each of these scenarios must be constructed around an ICT mission statement that we have identified, a statement that reflects the compelling ITC needs and capabilities of our campus. And, as the charge details, we should focus our efforts on creating *‘high level’ recommendations that can serve to identify subsequent paths forward for the creation of an appropriate Boulder ICT program. The committee does not need to resolve every organization or administrative issue, but should instead focus on the intellectual and educational content of the proposed program(s).* Finally, each of the differing ICT scenarios that we develop should place an emphasis upon ICT research and scholarship (and, I think, creative work).

**PART III. Final Report (complete by early February)**

At the end of December or in early January, our preliminary findings will be shared with the Provost, Chancellor, Vice Chancellors, Deans Council, and representatives from the BFA. After we have received feedback from those constituencies, we will generate the final set of recommendations.

## Appendix C

### Individuals, Departments, Deans, Community Members

From September 10, 2010, when (then Interim) Provost Moore charged the ICT Exploratory Committee, until December 30, 2010 when the final committee meeting was held, many meetings occurred both with the entire committee as well as individual committee members. The following is a list of those meetings by month.

Date	Individual(s) or Group	ICT Committee Individual or Group
9.10.10	Provost Russell Moore, AVC Jeffrey Cox	ICT Committee
9.14.10	Dean's Council	Merrill Lessley, Uriel Nauenberg
9.19.10	Dean Paul Voakes, SJMC	Group of ICT Committee members
9.20.10	Interim Dean Manuel Laguna, Leeds School of Business	Group of ICT Committee members
9.21.10	Dean Robert Davis, Engineering	Group of ICT Committee members
9.22.10	John Bennett, Dir, ATLAS	Group of ICT Committee members
9.23.10	Dean James Williams, Library	Group of ICT Committee members
9.24.10	Dean Todd Gleeson, Arts and Sciences	ICT Committee
9.27.10	Dean Anne Heinz, Continuing Education and Professional Studies	Group of ICT Committee members
9.29.10	Dean Lorrie Shepard, Education	Group of ICT Committee members
9.30.10	SJMC faculty member	Merrill Lessley, Committee Chair
10.1.10	Former CU administrator	Merrill Lessley
10.10.10	Stewart Hoover, SJMC, Center for Media, Religion, and Culture	Merrill Lessley
10.10.10	Len Ackland, SJMC, Center for Environmental Journalism	Merrill Lessley
10.4.10	Michael Theodore, Music, ATLAS Fellow	Merrill Lessley
10.4.10	SJMC faculty member	Merrill Lessley

10.6.10	SJMC faculty meeting	Group of ICT Committee members
10.11.10	SJMC assistant professors	Merrill Lessley
10.18.10	Open Forum: faculty, staff, students	Group of ICT Committee members
10.19.10	Two SJMC faculty members	Merrill Lessley
10.19.10	Small group of SJMC faculty members	Merrill Lessley
10.20.10	Open Forum: alumni and public	Group of ICT Committee members
10.22.10	Carl Koval, RASEI	ICT Committee
10.24.10	Debra Richardson, Dean, School of Information and Computer Sciences, UC Irvine	Group of ICT Committee members
10.25.10	Computer Science faculty meeting	Group of ICT Committee members
10.26.10	Film Studies faculty meeting	Group of ICT Committee members
10.27.10	Communication faculty meeting	Group of ICT Committee members
10.28.10	Faculty member, Institute of Cognitive Science (phone interview)	Merrill Lessley
10.30.10	Stewart Hoover, SJMC	Merrill Lessley
11.1.10	Jim White/Alan Townsend, INSTAAR	Group of ICT Committee members
11.1.10	Film Studies faculty member	Merrill Lessley, Uriel Nauenberg
11.2.10	SJMC Alum, Prof TV Producer	Merrill Lessley
11.2.10	Libraries faculty member	Merrill Lessley, Anne Costain
11.4.10	Diane Sieber, Herbst Humanities	Merrill Lessley, Michele Jackson
11.4.10	Art & Art History faculty meeting	Group of ICT Committee members
11.4.10	Johanna Drucker, UCLA; former Dir of Media Studies & of the Speculative Computing Lab, UVirginia	Katherine Eggert
11.5.10	Bobby Schnabel, former Dir, ATLAS	Merrill Lessley
11.5.10	Provost Moore, AVC Cox	ICT Committee

11.8.10	Elizabeth Osder, the Osder Group	Merrill Lessley
11.9.10	Libraries faculty member	Merrill Lessley
11.11.10	Alan Mickelson, ECE faculty member	Merrill Lessley
11.12.10	John Frazee, VP, CBS News	ICT Committee
11.14.10	Elizabeth Churchill, Senior Research Scientist, Yahoo!	Michele Jackson
11.14.10	Julia Young, co-founder/VP, Facilitate.com	Michele Jackson
11.15.10	Computer Science faculty member	Merrill Lessley, Michele Jackson
11.16.10	Mark Amerika, Art and Art History	Merrill Lessley, Uriel Nauenberg
11.16.10	Scott Poole, Prof & Dir, Institute for Computing in Humanities, Arts and Social Science, Univ of Illinois – Urbana-Champaign	Michele Jackson
11.16.10	Paul Leonardi, co-founder, Social Interaction and Organizing at Northwestern (SION) Group, Northwestern University	Michele Jackson
11.29.10	State Dept Japanese Journalist Group	Merrill Lessley, Jeffrey Cox
12.2.10	Michael Theodore; Michelle Ellsworth, Theatre and Dance, ATLAS Faculty	Merrill Lessley
12.3.10	Dean Gleeson, Assoc Dean Keith Maskus, Arts & Sciences	ICT Committee
12.6.10	Dan Pacheco, CEO, BookBrewer Inc., SJMC alum	Merrill Lessley
12.11.10	Linda Shoemaker, SJMC Board	Merrill Lessley
12.29.10	Dean David Getches, School of Law and Silicon Flatirons Project	Merrill Lessley, Uriel Nauenberg