Thoughts on moving toward a sustainable, successful model of web development

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Summary

We are at a crossroads in how Carleton addresses the web as a communications medium. The College has moved ahead in major ways in recent years, but fundamental problems exist that impair its ability to address online challenges. In this document, we hope to detail the nature of the problem, present a sound, proven model for working on the web, and examine how we can learn from our experience to build a more effective institutionwide approach to communications on the internet.

The web presents a challenge to Carleton's traditional structure because it is simultaneously a communications medium and a technological tool. This dual nature has led to these major stumbling blocks: first, a lack of consensus over the question of whether communications goals and concerns should guide the technology decisions that affect Carleton's web site, and second, the difficulty of close collaboration and shared vision across organizational divides in a medium that requires that sort of deep cooperation.

It is instructive to examine what has allowed the Web Communications and Development office to be successful despite the lack of technological support that these issues have created. The major factors in our success have been our small size, our combination of technical and communications expertise, and our clear communications focus. We believe that these three elements will be key to any successful web team that achieves the College's goals, while keeping our people and offices working well sustainably.

In order to evaluate potential solutions, we have identified three criteria that seem crucial to ensuring that our work on the web is successful. These three criteria are: 1) The communications arm of college plays a leading role in the technical decisions that impact our web site. 2) Resources be made available to the group charged with online communications that will allow it to meet the challenges ahead. 3) Retention of the essential qualities that have led to the success of this office: it is small and nonbureaucratic, interdisciplinary, and communications-focused.

In our analysis of potential solutions against these criteria, two stand out as holding the best chance of working. They share a common characteristic: primary oversight and priority-setting from new committee, made up of TERM members and the heads of College Relations, ITS, and the web group office(s). In the first scenario, an office independent of both ITS and College Relations that reports to the Treasurer is created. In the second scenario, a group within ITS is created at the Associate director level, which is explicitly bound to Web Communications by the charters of the two offices, and which is placed physically alongside its partner group.
A recent history of the web at Carleton

Several years ago, Carleton had a large backlog of web projects, and pages varied widely in terms of how they looked, how up-to-date they were, how well they worked, and how they were maintained. As a result, the College found it difficult to maintain the site while moving forward with new projects. Part of the reason for this was that the designers (then in Publications) and the technologists (in ITS) did not work hand-in-hand on the web.

Most of the times the College's communications goals indicated that something technical needed to be accomplished, it was either actively resisted or left as a low priority. Either ITS was unwilling or unable to provide the resources to help achieve these goals, or our group felt locked out of the key technology decisions that, in the end, would determine the College's success or failure from a communications standpoint. As this situation continued, we determined that the only way to move forward was to use the few tools to which we had been able to gain access to support the College's communications objectives.

Over the past three years, we have seen the results of that effort come to fruition. Initial projects like the Voice, the Alumni Gateway, and the Wellness Center pages were followed by larger successes such as the Athletics site and the News site. Building off of these achievements, the group decided to offer its site management tool, Reason, to the entire campus. There are now 96 sites hosted by Reason, and client feedback is very positive. Carleton's website is now much more up-to-date, easy to use, and readily maintained, and we stand in a good position compared to similar schools of our size.
A model for working on the web

So, Web Communications and Development has a model has appears to work well. But what makes it so effective? It isn't vast resources; until June of this year, the office consisted of two full-time staff, an intern, and a handful of student workers. Instead, is has to do with the nature of the group:

*We are a small, interdisciplinary team whose technology decisions are determined by the College's communications goals.*

Let's unpack that sentence to explain how size, interdisciplinary teamwork, and communication goal-driven technology choices are the key elements of our success:

1. **Small Size**
   
   **A unified team:** A small group does not need bureaucractic divisions between its members, and therefore its members can work directly with each other without "lobbing things over the fence" between separate offices of the college. There is also one clear authority within the group, so confusion is easily cleared up.  
   
   **No roadblocks:** In a small group, consensus decisions are easily reached. We're usually able to determine a course of action and allocate appropriate resources within half an hour of sitting down -- as long as the resources are available within our office. In addition, it's easy to assemble team members for impromptu decisions.  
   
   **Small size discourages over-management:** Because the team is so small, we know each other very well, and trust each other to make good decisions. Each member of the office is expected to understand the office's goals well enough that the boss needs to manage neither every detail of their work nor every minute of their time.  
   
   **Small size makes under-management easier to avoid:** The head of the team is "plugged in" to what everyone on the team is doing simply because we can talk to each other as needed.  
   
   **Knowing our limitations:** We're small. We know that we cannot change the world in one fell swoop; in order to reach the College's long-term goals we must make incremental, realistic changes that we can do now, making sure to move constantly and carefully in the right direction.

2. **Multidisciplinary**
   
   **Shoulder to shoulder:** In our office, communications experts work right alongside technical experts. Every web project is a combination technical problem and communications effort, and needs concerted, close teamwork by writers, designers, programmers, information architects, usability experts, and database specialists.  
   
   **Back and forth:** We are constantly going back and forth between each others' desks, discussing the implications of our decisions from all angles. We've never had a big meeting where we discover that the techies have made decisions that fail from a communications standpoint, or vice versa.  
   
   **The whole is greater than the sum of its parts:** Each member of the team is constantly coming up with ways to improve our web site. Together, we bounce a wide array of ideas off of each other, and we often come up with elegant solutions that members of no one discipline would have discovered.

3. **Communications-driven**
   
   **Technology is not an end unto itself:** Instead, it is a tool we can use, through the web, to better communicate -- both internally and externally.  
   
   **The web is not an "expert system":** Most of the time, the web is used by non-technical people to find non-technical information presented in a non-technical way. In other words, technology
decisions should further the College-wide goals of ease of use, organizational identity, intuitive organization, trustworthiness, friendliness, and timeliness. Our group has usability as its driving force.

**Technology decisions are too important to be left entirely to the technologists**: Every technological decision bears with it tremendous consequences for how our web site will work and what communications possibilities will be supported. A web site driven only by technological concerns is likely to fail from a communications standpoint; in fact, the college has several examples of technology decisions that have kept the College from being able to realize communications goals.

**Structure matters**: Why did we put communications goals in the driver's seat? Because we are part of the communications arm of the college. If we had been positioned elsewhere we doubt that we would have had that sort of focus. It wouldn't have been anybody's fault -- it's just not reasonable to expect parts of the College that are not focused on communications concerns to keep them at the forefront of their decision making process.
Criteria for building a new web team

So, the central question seems to be: how can the college continue and magnify the sort of success that we have modeled in order to move forward on our upcoming projects, yet keep our people and offices working well sustainably? We have identified three main requirements that we believe will be key to achieving those goals:

1. The communications arm of college has significant control over technical decisionmaking that affects online communications.
2. Resources are made available to implement communications-driven projects
3. The web group has the essential qualities that have led to the success of this office:
   a. It's small and relatively "flat" in structure
   b. It's interdisciplinary
   c. It's communications-focused
Evaluation of scenarios

Now, let's look at a variety of possible structural changes, and evaluate how well they fulfill those requirements:

I. **ITS absorbs the Web Communications office** into an ITS-only web group.
   **Pros:** Interdisciplinary team if designers move over
   **Cons:** Technological, not communications concerns, are the focus of ITS; No assurance that communications aims will gain appropriate resources; Programmers isolated from non-technical people: writers, designers, etc.; Group not "in the loop" on communications issues; Web team exposed to complexity, size, and of ITS; how would the addition of a writer fit into this scheme?

II. **ITS reorganizes internally** to form a web-focused group inside their office that encompasses people now scattered around ITS; College Relations group remains as is
   **Pros:** Web Communications retains successful model; new group may adapt aspects of model; More accountability within ITS to communications group; perhaps more resources applied to web, so web communications may benefit
   **Cons:** Potential for difficulties to continue, just with landscape changed somewhat; If ITS and CR groups don't see eye to eye, what is the solution?; not a tested model

III. **Web Communications gets full authority** over technical decisions that affect its services
   **Pros:** Communications arm drives tech decisions, obviously; Web group retains winning structure
   **Cons:** Resources unavailable; Synergies with ITS are lost; Future difficulties seem likely if Web Communications group not "in the loop" on larger technical issues; not much different from current situation

IV. **Web Communications also gets an admin position**, in addition to authority
   **Pros:** Communications arm drives tech decisions, Web group essentially the same;This is a proven model: see SERC, Library, Math/CS, Physics, Admissions, Development Services
   **Cons:** Likely duplication of effort between Web Communications and ITS; Synergies with ITS are lost; Integration may prove more difficult with fragmented technical approaches; Future difficulties seem likely if Web Communications group not "in the loop" on larger technical issues

V. **An autonomous web group is formed** under External Relations
   **Pros:** Communications remains focus; resources available; an interdisciplinary team
   **Cons:** Likely duplication of effort between Web Communications and ITS; Synergies with ITS are lost; Integration may prove more difficult with fragmented technical approaches; Future difficulties seem likely if Web Communications group not "in the loop" on larger technical issues; Unproven model; many questions about responsibility for servers, etc.

VI. **An autonomous web group is formed** under the Dean of the College
   **Pros:** resources available; an interdisciplinary team
   **Cons:** Loss of external communications focus; Unproven model; many questions about responsibility for servers, etc.; May compete directly with ITS for resources; Not in "in the loop" on communications issues

VII. **ITS reorganizes internally as in II, with key aspects:** 1) Web Communications and Web Technologies are officed alongside each other, 2) they are contractually bound to serve each other in their charters, and 3) there is a priority-setting committee that provides oversight and assistance in coordination, if needed, to both groups
   **Pros:** Officing together keeps everyone "in the loop."; proper focus of each side is maintained due to reporting structure; officing together was a positive feature, in an ad-hoc manner, when
Brian and Richard worked next to each other; communications side of college retains a say in technical decisions; resources contractually available, and priority-setting group can assist in process; interdisciplinary team; flexible

**Cons:** Fairly new model; Same potential pitfalls as II, but this scenario seems more likely to avoid those pitfalls due to explicit nature of the relationship between the two groups and their roles within College Relations and ITS

VIII. **An autonomous web group is formed under a third party**, which is on neither side of the communications/technology divide. There is a priority-setting committee, as in VII, that guides the team's technical and communications priorities. This third party could be the Treasurer, for instance.

**Pros:** Equidistance from two sides may help group be more impartial in resolving conflicts; interdisciplinary team; communications still one of the driving forces; resources available internally to group

**Cons:** In most other scenarios the group(s) remain well-connected to one of the offices; in this one they are equally far from each, so special effort would have to go into retaining ties with the communications and technical sides of college.

Based on this analysis, the two scenarios that seem most likely to succeed are VII (ITS Reorganizes internally, with key aspects) and VIII (An autonomous web group is formed under a third party). Both of these scenarios still have drawbacks, but on the whole they seem to the the solutions that would serve the college's communications needs best into the future.