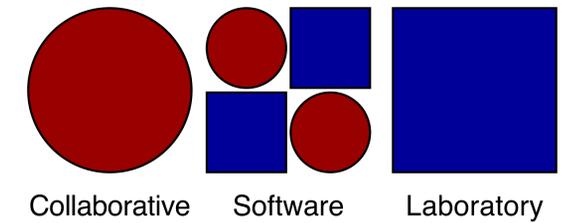


Improving Personal Home Pages to Support Learning as Becoming and Belonging



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Abstract

Recently, **communities of practice** has emerged as a new framework for rethinking learning. It moves us beyond learning as doing and sense making and into learning as **becoming** and **belonging**. In order to study issues of becoming and belonging, we must focus on the role of identity in the community of practice. If we are interested in tools that reify that identity, then personal home pages, particularly for the academic community of practice, are a natural place to look. However, we are not convinced that traditional home pages are meeting these learning needs in an adequate way. Based on our previous research and experiences, we theorize three technological ways that these home pages can be improved. Most importantly, we feel conventional home pages fail to offer ways for other members of the community to participate—they fail to be collaborative. To better understand how current home pages meet the needs of the community of practice members and how these needs can better be served, we conducted a survey to assess the state of current home pages, in a potentially informative community of practice.

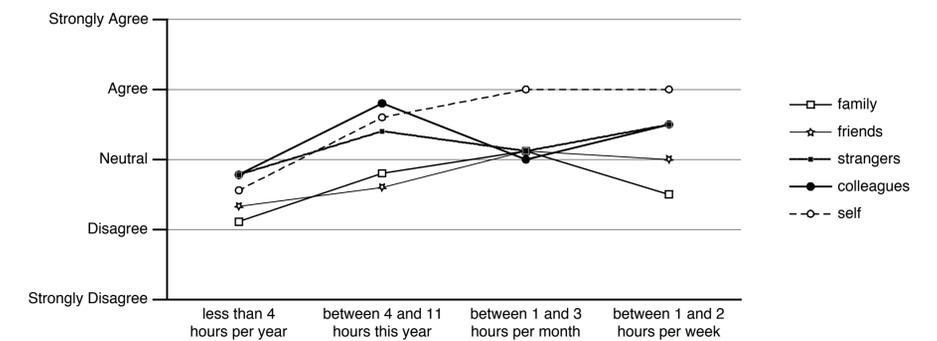
The Study

To investigate the current state of personal home pages supporting a community of practice and establish a trajectory for how current home pages can be improved to meet those ends, we conducted a survey. As an audience, we chose first year Ph.D. students in the College of Computing at Georgia Tech. We chose them partly out of convenience (i.e. we have easy access to them), but also because they are an interesting / appropriate group to study, both for theoretical and practical reasons.

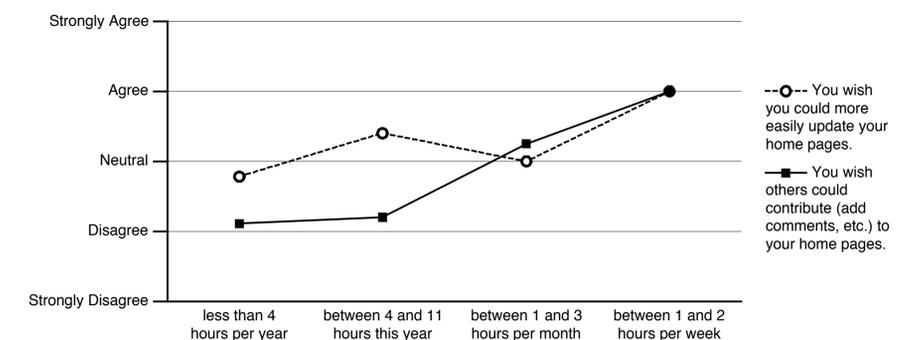
On a theoretical basis, they are an interesting group to study as they are faced with strong issues of learning as becoming and learning as belonging. They are beginning to define their identity in a well established (history, rituals, publication conventions, etc.) community of practice. Almost all of them are new to the academic community of practice (both the computer science research community and the College of Computing community), but over the next few years they aim to become central to both. So, they are on a trajectory from the periphery to the core of the community of practice. In the College of Computing, they are well supported in this endeavor. All first year students are required to take an introductory class on graduate studies. In that class, they learn about the different areas of computing and how to pursue research in those areas. The main part of the class revolves around several small (~20 hours of work) projects that the students do with potential advisors.

On the practical basis, College of Computing students are well equipped to letting home pages be an important tool for their joining the community of practice. By most measures, they would all be considered experts in dealing with web technologies. They are not afraid to use technology. They have easy access to those technologies and use them on an almost daily basis. As part of the introductory course, they have to create a personal home page and at least post write-ups of their projects to it. So, they have enough experience creating websites that that should not prove to be a major barrier to entry. So, the technological learning-curve should not be a major barrier for them adopting home pages as an integral part of their participation in the academic community of practice.

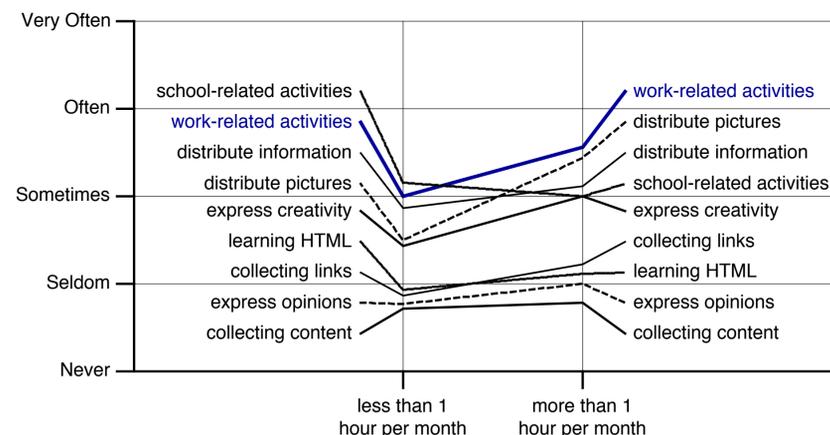
We surveyed 24 first-year Ph.D. students in the College of Computing at the end of their first year. At this point in their program, these students are still on similar trajectories from the periphery to the core. So, there is good reason to think that this is a fairly uniform group that is largely distinguished (for our study) by how much they use home pages. For analyzing their responses, we averaged responses for four different subgroups, depending on how much time they reported spending on their home pages. We are primarily interested in two subjects. First, how is the current state of their personal home pages affected by use. Second, how can that state be improved—how can barriers to adoption be improved and what is necessary for home pages to be more useful.



Your home pages are useful to you...



How can we improve on current home pages?



How frequently do users do different activities with their home pages?

Future Work

This study demonstrates that there is research potential for studying learning as becoming and belonging in the context of personal home pages in academia. We have shown that current home pages do, to a reasonable extent, serve as reifications of identity for one community of practice. We have also shown how we might improve current technology to make those issues more salient.

Based on this work, we created AniAniWeb (a system for creating collaborative personal home pages) to address these technological shortcomings. We believe that the possibilities for learning as becoming and belonging will emerge for a larger group of users with AniAniWeb than standard home pages. So, we will also have the opportunity to see why users do not adopt home pages for social rather than technological reasons. In addition, the importance of audience awareness and collaboration to learning as becoming and belonging will be easier to address through this platform.