Time Allocation Workload Knowledge Study (TAWKS)

Proposal

John Ziker, Anthropology; Matthew Genuchi, Psychology; Seth Ashley, Communication

Discussions about faculty workload among faculty tend to be subjective, emotional, and generally lacking data. We think we know what we spend our time doing, and we are impelled to track the products of our efforts, but we do not have any quantitative data on how we actually spend our time as faculty. We need a new approach.

This proposal for a behavioral observational study of faculty workload at BSU is poised to fill the gap between policy, faculty impressions of workload, and faculty productivity. The study will generate information that will allow individual faculty to better reflect on allocation of time at work. The proposal also is complementary with university strategic projects, undergraduate and graduate student training objectives in quantitative methods and analysis, and has the potential for wider application and funding by extramural funding agencies interested in the science and sustainable development of organizations.

This proposal uses empirical methods in Anthropology, namely techniques for behavioral observation. Ziker was trained in these techniques during graduate school and again this summer at a Short Course in Research Methods sponsored by NSF at Duke University Marine lab. Colleagues in Anthropology (Drs. Demps and Nolin) are also trained in these methods. Such methods are also used in ethology (animal behavior), primatology, and educational psychology. The scan sampling method, historically employed by anthropologists to estimate how much time people spend on a variety of activities in non-Western societies and how variable time allocation effects reproductive outcomes, can be turned inward to examine the workload of BSU Faculty.

In Phase 1, a technique called the “24-hour recall diary,” will be implemented in order to develop quantitative time allocation data on the typical day, and to develop the activity types and sub-categories for a more comprehensive study (See Timeline). In Phase 2, the scan sampling method will generate thousands of self-report observations on specific activities. Ideally, Phase 2 will be implemented on a mobile platform with an application designed to provide a study prompt and a convenient icon-based hierarchical method of recording activity. A stratified, random sample of faculty across departments and colleges at BSU will be asked to self-record observations of activities at randomly selected times on random days for a given study period. Both phases will provide a wealth of empirical observations of time allocation over a relatively short period of time. The advantage of using a mobile platform is that faculty can conveniently report work they do at home or with the office door closed.
The data collected will provide an empirical check on our assumptions and impressions of what we as faculty typically do enabling an objective reflection on our own activities. As part of Phase 2, or in a future study, the scan sampling could be combined with a question about research conversants in order to generate a social network data on research activity.

It is highly likely that faculty at BSU will be interested in participation in this study, as it comes in the midst of discussions about workload and improving efficiency at the university. This is a grassroots effort to generate relevant data for individual faculty members. It will be in individuals’ self interest to record as reliably as possible their activities, since only through accurate reporting will they gain insight into how they spend time. Individual identities will be kept entirely confidential. Only summary reports will be published or shared with the administration. Individuals participating in the study will receive individualized reports on their time allocation over the study period.

While time-tracking applications already exist they are not entirely suitable for our purpose, as they are not icon-based or hierarchical, and are not set up send out random queries of activity. Participants in a full study could be provided a mobile tool to use in the study, if they are not already a member of the university’s eMobile learning initiative and do not already own an adequate mobile tool, as an incentive for participating in the study and pledge to providing reliable data.

We greatly appreciate Faculty Senate looking at this proposal and we respectfully request Senate endorsement before requesting funds.

For those of you, who are interested in the potential of this kind study to bridge the gap between perceptions of activity and the kind of data we can generate, listen to this recent story on NPR:

Budget and timeline for TAWKS

Phase 1:
- Student interviewer training (both Methodological and required Human Subjects training); development of a consent statement, sampling strategy, and recruitment strategy
- 24-hour diary study: develops objective data on the typical day and list of behaviors across units needed for the Phase 2 study
- Implementation: February, 2013
- Analysis: March 2013
- Cost:
  - 10 students x 40 hours x $10/hour = $4000
  - Fringe (4%) = $160
  - Sum: $4160

Phase 2:
- Development of mobile application for the observational study, using categories from Phase 1, March 2013
- Implementation of the mobile observational study: April 2013
- Analysis: May 2013
- Cost
  - In discussions with Dale Pike exploring potential for in-house development, otherwise ~$15,000.

Phase 3
- Application to external funding sources (September 2013)
- Provisioning of mobile devices to additional faculty for a wider study to be conducted in 2014
BSU Time Allocation Study Mobile Application (Phase 2) Sketch

Note: Categories would not be finalized until after Phase 1 analysis

Page 1 Welcome to TAWKS
Are you working?
Yes  No
> page 2  > Thank you.

Page 2
Are you:
Checking email > page 3
Talking > page 3
Teaching > page 4
Writing
Reading
Thinking

Page 3
From/with:
A Student
Department colleague
University colleague/Administrator
Professional colleague

Page 4
Preparing a lecture
Giving a lecture
Grading papers

Entering grades