Policy Committee of the College of Natural Sciences and Mathematics

To: Prof. Dan Wells, Dean, College of Natural Sciences and Mathematics

From: NSM Policy Committee

Subject: Report and recommendations on the NSM/Information Technology Survey

Date: 170ct19

NSM prepared and conducted a survey of NSM faculty, staff, and students regarding a range of Information Technology topics in order to assess the level of faculty awareness and satisfaction with them. The survey was prepared by collecting questions from Fred McGhee, Dan Wells, and members of the Policy Committee. The committee made recommendations about organization and categories of questions. The committee met on Sep. 10, 2019 to discuss the survey results, with some members providing written observations and recommendations. The survey had 22 questions plus two identification questions (home department, and faculty/staff/student). About half of the questions were general in nature while the rest were specific and focused on departmental IT or specific types of services, like the MyNSM Store and its various apps, CASA, instructional support for classroom teaching, course design and optimization, multimedia and 3D printing/scanning, and wireless networking. There were four free-form response questions that focused on how NSM IT could provide better support for research, teaching, learning, and administration; improve how NSM IT communicates about its services; what should NSM IT prioritize; and a general request for additional comments and concerns. The full survey results can be found here.

Respondent statistics

The faculty, staff, and students comprise 61%, 26%, and 13% of the respondents while they represent 31%, 8%, and 1.7%, respectively, of the pool of potential respondents. That is, 31% of the faculty responded to the poll, etc. The overall response rate was 8% (faculty + staff (including postdocs) + grad students), which is very low! Essentially, the students ignored it as did most of the staff. Response rates to surveys, especially among science faculty, are traditionally low – ca. 5-29% whereas among liberal arts faculty they often reach 60% or higher. The faculty response rate to this survey is very good, 31%, possibly indicating the importance of this set of services to them.

(Respondent pool: Faculty-339, Staff-553, Grad students-1244 = 2136 total)

Observations

There was significant praise for respective departmental IT staff while there were fewer comments about NSM-level IT staff and offerings. This is likely because department faculty, staff, and students are directed to seek support from their departmental staff first. Faculty largely seek support from NSM IT for more specialized projects such as lecture recording and instructional technology integration, 3D scanning and printing, video production, poster printing, etc.

In general, a substantial majority (73%) of respondents were Very satisfied or Satisfied with their departmental IT support with the remainder equally split among Neither satisfied nor dissatisfied, Very dissatisfied, or felt that they were Not Applicable (perhaps the students). This split among responses approximately held for the first nine questions. Starting on question ten, the response rate dropped by 13%. Perhaps the survey was too long. For all questions that related to college level IT, at least half of

the responses were either N/A or "Was not aware of this service". Further, the other half of the responses are fairly evenly split among Very satisfied, Satisfied, and Neither satisfied nor dissatisfied. Clearly, there appears to be a significant issue relating to a lack of awareness of available technology, services, and support at the college level.

Almost half of the respondents (45%) were either unaware of or felt that the 3D scanning and printing services, video production, video conferencing, and poster printing was not applicable for them. Half of the respondents were unaware of the NSM Store or felt it was not applicable for their activities.

Included in the survey was a question (#17) about CASA (https://www.uh.edu/casa/). CASA currently administers approximately 200,000 proctored computer-based exams per year. In addition, CASA provides educational software development that is used across campus for testing, advising, and many other things. CASA also provides tutoring for low level core math courses in a portion of the Garrison facility. CASA is headed by Jeff Morgan, Professor of Math, former Chair of Math, and currently Associate Provost for Education Innovation and Technology. The Math department does have a role in managing operations of CASA, though, and it is jointly funded by Math and the Provost's Office. The survey results for CASA were more negative. There were 26% Very satisfied or Satisfied with 15% neutral and nearly 50% unaware of CASA or felt that it was not applicable to them. There were a number of pointed comments. These results and comments will be made available to CASA leadership with a recommendation to investigate and find ways to address concerns.

It was gratifying to see that the respondents took the time to provide comments to the questions, and particularly the free response questions #19-22. For each of those questions, ca. 33-50% of the respondents provides comments, some of them extensive.

Recommendations

After reviewing the survey results and comments, the committee developed the following recommendations. It is possible that NSM IT is already doing some of these things, but they may not be effective.

- NSM IT suffers from the same issues relating to communication as does any organization. This is
 compounded by the peculiarities of their faculty customers who are loathe to read mass email
 messages that describe services they do not imagine using but then later claim lack of
 communication about such services. Several strategies are proposed to attempt to address this.
 - o Invite NSM IT to provide monthly articles for the NSM Faculty Newsletter
 - o NSM IT should meet with all new faculty in various ways.
 - They should be invited to speak to new faculty at the NSM New Faculty Orientation in August every year.
 - They should seek out each new faculty member one by one and schedule a meeting to find out what are their anticipated needs and to inform them of the available support.
 - They should seek to be invited to departmental faculty meetings to speak about highly pertinent topics.
 - They should be invited to give a BRIEF presentation at college level faculty meetings. It might even be more effective if a faculty member gave the presentation.
 - Produce informational 1-2 page brochures/flyers describing the available resources and have them strategically located in departmental mailrooms and similar

- locations. A highly abbreviated/condensed brochure (preferably tri-fold) could be handed out at NSM faculty meetings and linked in the NSM Faculty Newsletter.
- NSM IT could provide more content for the televisions that are mounted throughout the college that highlights important resources, information, resources, etc.
- Implement a faculty advisory board that meets once a year to advise NSM IT on practices that are
 more likely to be effective for faculty. Conduct a survey before making significant acquisitions or
 major changes in services or operations. It is easy to convince oneself that a particular new cool
 technology/capability will be widely appreciated and used only to be disappointed to find out that it
 was not what the stakeholders needed or wanted. Resources should be directed to the maximum
 possible impact.
- Improve the web sites for user friendliness not according to assessments by NSM IT staff but by users.
- Improve the functioning of the room reservation tool. It is tricky to see the usage on a future date when attempting to make a reservation.
- NSM IT should perform a SWOT oriented self-study as a follow-up to this survey. It may be
 illuminating to see how they view themselves and the value of their offerings and approaches. This
 should be reviewed by the Policy Committee.