

Strategic Enrollment Management – Information Technology Committee Report – 6/1/15

Committee Members

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Charge

Effectively leveraging information technology is critical to successful enrollment management, and successful enrollment management is critical to University achieving its mission and vision and central to the financial health of the University. Technological improvements have been made in enrollment management functions for many years. However, once the University implemented PeopleSoft as its student database IT issues have been approached in a tactical manner. Additional software has been purchased by various departments to meet their individual needs or departments have worked with IT to develop in-house solutions. A long-term, integrated, strategic approach for dealing with IT solutions in enrollment management is needed.

In order to look to the future Information Technology needs of enrollment management, including departments that support student success at UD, we will form a Strategic Enrollment Information Management committee. The committee will look at current software tools being utilized to support students to determine where gaps exist and where improvements can be made

to enhance coordination between various units/systems. The committee will also examine best practices and look out to see what additional software systems would be beneficial to the University to purchase and implement (this should include an estimate of return on investment and strategic prioritization). You will meet throughout the academic year and will make initial recommendations NLT June 1, 2015.

The committee's report will be a supporting document to the University Strategic Enrollment Plan that will be developed over the same time period. As such, you can count on the report informing me and other senior leaders. I do not see the committee dissolving after one year, although we may alter membership based on staff availability or if we find we have gaps in our membership. After the initial report, the committee will ensure we have a living strategy that continues to inform our EM and IT priorities.

Executive Summary

Overview of Committee Work

The committee met twice monthly from October through May. From the beginning, committee members were engaged in the process. They shared experiences, discussed problems and ideas and were excited about the possibility of a more strategic approach to utilizing technology to support student success/enrollment management. Besides being actively engaged during meetings, in between meetings members frequently corresponded through email and worked on committee projects. The group functioned as a strong team, with individual members making significant contributions to the project.

The committee focused specifically on systems and tools that are directly related to recruiting, retaining, and graduating students. As this is the first step in this process, the committee aimed to identify what is in place and assess how it is currently working.

First, the committee compiled an inventory of systems used to work with students. The inventory request was sent out to directors in Student Life and Assistant Deans in all colleges and programs. Those leaders were asked to share the inventory request widely with all staff and faculty who work directly with students.

Second, in order to learn about staff uses of technology, the committee surveyed staff across campus who work in recruitment and retention of students (i.e., any student support). The staff survey was developed through Qualtrics and sent out to faculty and staff through the Office of the University Registrar. The survey questions asked respondents to list what is currently working well, identify what they do manually, describe a cumbersome process, explain whether or not they have access to the information they need, and identify improvements that could help them to work more effectively.

In addition, a separate group was established to work in tandem with the SEM-IT committee. The UDSIS Working Group was convened with one member from each of the three DEM data-owning departments (Admissions, Registrar's Office, and Student Financial Services) with a broad purview to examine the University's investment in Oracle/PeopleSoft. The group met monthly beginning in December. The group's function is embodied in several of the recommendations below, and its continuation should be reconsidered based on how the recommendations are implemented.

Observations

The systems inventory revealed that more than 170 unique systems are being utilized across campus. However, it should be noted that this number represents only a fraction of the systems that might actually be in use, as the inventory does not represent all units. While the inventory is not comprehensive, it does indicate a need for a campus-wide inventory to be maintained. Additionally, a plan and process for procurement would be prudent. This would allow for sharing of resources (licenses, training, best practices, etc.) across campus.

The survey yielded 89 responses and a great deal of rich information about how people are utilizing technology to support students. The most frequently mentioned tool was UDSIS. Based on the responses, UDSIS is working well with respect to Degree Audits, What-If Reports, and appointment scheduling. However, respondents indicated that they would be more effective if they could easily access the desired information without having to navigate through multiple systems (for example: UDSIS, Advisor Notes, Sakai, Canvas). Respondents indicate that better integration of tools is needed. Some respondents indicated that more utilization of the optional features available through PeopleSoft could improve integration. Responses indicate that training and communication are needed, even with regard to the tools currently in place.

Recommendations

1. Develop a strategic plan for SEM-IT based on needs of campus and best practices
2. Develop an integrated process for procurement of technology
1. Evaluate and exploit existing functionality (e.g., UDSIS, COGNOS, etc.)
1. Identify and implement integrated analytics for student interventions and success
1. Engage IT intentionally, proactively, and strategically
1. Provide opportunities for staff and faculty training on a regular basis
1. Regularly evaluate SEM-IT status

Full Report

Philosophy and Approach

In approaching our work, SEM-IT committee members believed it was most important to focus on the technological systems and tools that relate directly to recruiting, retaining, and graduating students. While academic course delivery platforms, programs used in undergraduate research, statistical software, and other tools are a part of the student experience, we excluded these types of technologies in order to narrow our scope.

As a first step, the group determined that the most logical starting point would be to create an inventory of software and technology used by various units across campus. We then issued a survey that delved into how people are using the technologies, what they do manually, what works well for them now, and what recommendations they have for improvement. After reviewing the data from both the inventory and the survey, we summarized our observations and made recommendations based on the survey and inventory responses.

For the inventory, the committee members reached out to faculty and staff in departments who work in student support roles. We simply asked them to provide us with a brief list of any technologies and software programs that are used in their department in their work with students. We intentionally kept this survey broad, as we wanted to begin with a broad stroke, then narrow the list down based on the charge of the committee. Assistant Deans were asked to request this information from academic departments. Directors in Student Life and other student support services units were asked to gather this information from other student areas on campus, such as Career Services and Student Health Services.

Next, the committee drafted a Qualtrics survey, consisting of five questions, that asked respondents to provide information about their use of technology in supporting and retaining students – what was working well, what manual processes were being used, what processes were cumbersome, if staff had difficulty accessing all the information they needed about a student, and what technological needs they still had. Surveys were sent to faculty and staff who had advising and scheduling roles in UDSIS. Also included were staff in the PCS ACCESS Center, the Career Services Center, and the Office of Student Conduct. Faculty and staff who did not have advising, admissions, or student service roles were excluded from this survey. A total of 89 respondents returned the survey. Responses were analyzed using content analysis, grouping like responses by general category. Where respondents provided multiple answers to a single question, all answers were noted and counted in the total.

Inventory and Survey Results

The inventory resulted in a list of 170 unique systems being utilized across campus. The committee compiled and categorized responses in a spreadsheet. Three major categories emerged: infrastructure, application/functionality, and access/extraction. Infrastructure is simplistic; it includes systems and tools that are generic in application, or are oriented for a specific task, and have minimal interaction with the records systems on campus. Examples are tools like Microsoft Outlook and Google Docs. In the application/functionality category are tools such as Campus Solutions (UDSIS), and web applications or tools residing within UDSIS, or supplementing the records system. Finally, tools that look to UDSIS for information or deliver information to UDSIS constitute the final category of access/extraction. Our current registration

tool, WebReg, and the University's business intelligence tool, COGNOS, are examples of the access/extraction category.

As this inventory is not inclusive of all campus units, we understand that the number of unique systems utilized across campus is likely much greater than the 170 identified in this inventory. However, this initial inventory allowed the committee to observe that multiple systems are being used for the same (or very similar) tasks. Additionally, there are many web customizations and web applications, which involve data or processes that UDSIS has the capability to handle, but the University is not currently utilizing those options.

The Qualtrics survey reveals a great deal about the daily work of staff and faculty who are involved with the recruitment and retention of our students. A detailed summary of the results for each question follows.

Question 1: Briefly describe one or two processes utilizing technology that works well in your area.

Sixty-eight individuals surveyed responded to this question, many who identified multiple processes that were working well in their departments (n= 36). General categories identified included UD Systems (93), Outside Systems (29), Department-specific Systems (2), Websites (6), and Other (3). Of the UD Systems that worked well, twenty-five respondents indicated that UDSIS, in general, worked well, while additional respondents noted that functions within UDSIS worked well including degree audits (12), UDSIS appointment scheduling (2), and What-if reports (2). Of the respondents, 13 indicated Advisor Notes was helpful while additional respondents noted functions within Advisor Notes that were helpful, including the Excused Absence form (4) and Senior Checkout (2). A variety of other UD systems were noted, with no

single system identified by more than 6 individuals. Of the outside systems noted as working well, Microsoft products were identified most, including MS Office suite (5) and MS Outlook (6). Google Apps was identified by 6 individuals.

Question 2: Are there any processes you do manually “on paper?” Briefly describe them.

Seventy individuals responded to this question, though thirteen individuals noted there were no processes in their units that were done manually. Of the remaining fifty-seven respondents, ninety-one processes were identified, 53% of which (n=48) were related to advising. The top four processes noted include curriculum check sheets (9), Senior Checkout/graduation plans (8), Transfer Credit Evaluations (8), and student files (6). Six processes related to forms to be completed (graduate candidacy forms, immigration forms, scholarship applications), and nine processes related to course management (course scheduling planning, wait lists, course registration). Some processes noted didn't appear to relate to attracting/retaining/serving students, including human resource functions, financial functions/reports, or other administrative functions that may not be able to be automated (taking meeting minutes, student classroom assignments, etc.).

Question 3: Describe your most cumbersome process related to attracting, retaining, and serving students.

Sixty-seven individuals responded to this question. Interestingly, the highest number of processes noted related to UDSIS, though no single process was noted more than twice (course

search and registration pages should work together better; course substitution form takes too long to process [routing]; assigning advisors to double majors/minors is difficult). Many of the issues appear to be ones that could be fixed by providing additional training of faculty and staff. Some processes identified relate to services available (or not available) to certain populations of students (Associate in Arts, transfer students).

Question 4: Do you have any difficulties accessing all the information you need on a student? If so, please explain.

Sixty-six individuals responded to this question, twenty-nine who indicated there were no problems with accessing the information they needed. Fourteen individuals who said they had difficulty obtaining needed information all cited issues of access – where different access in UDSIS, Advisor Notes, Sakai, Canvas, etc. would remedy their concern. Seven respondents noted that it was cumbersome for student data to be stored in multiple places. Two individuals noted concerns that might be remedied if UDSIS (or another student information system) had additional features, specifically the ability to input data on prospective students and the ability for advisors to input notes on specific courses within the system (for advising purposes). One individual noted a concern about an issue that UDSIS is capable of addressing (one would have to request a report to be formatted in a certain way), while two individuals noted concerns about reports (timing, consistency in format, and access to run themselves). Three respondents stated that their concerns about accessing information related to their newness at the institution or other issues that could be remedied by training. Nine individuals had concerns that best could be put into a category labeled “Other” as they didn’t fall into any other category and, in many cases,

were not related to the question, to serving/advising/retaining students, or were unclear in what the concern actually was.

Question 5: What do you need that you don't currently have in an information technologies/data sense?

Sixty-one individuals responded to this question, thirteen who indicated there was nothing they needed. Fifteen individuals identified improvements to existing systems, including a better connection/integration of Advisor Notes and UDSIS (3), the ability to search the Transfer Matrix by course (2), improved communication/information sharing/best practices (2), and fully functioning Degree Audits (2). Eleven individuals noted the need for a way to track students/information for one reason or another (course outcomes, student contacts, student progress after intervention, etc.). Eight respondents indicated the need for additional training or support, whether that was different permissions (in UDSIS, presumably), additional technology training, or direct phone numbers of staff to reach someone quickly. Eight individuals noted additional software needs with four respondents indicating the need for a better way to manage student information from the applicant stage through graduation.

Observations and Analysis

The results of the inventory and survey yield a great deal of rich information, but a few very important observations can be made. First, UDSIS is a critical tool across the University. Its functionality is not currently being exploited and it is not integrated fully with other systems utilized by staff and faculty (e.g., Advisor Notes, Sakai, Canvas). Exploiting UDSIS and

improving integration with other campus systems would significantly improve the ability for faculty and staff to work more efficiently and support students more effectively.

Next, it is clear that a strategic information technology and training management plan to support Enrollment Management is needed. This is evident in the sheer number of systems utilized; the overlap of functionality and data between systems; duplication of effort using different systems; in the reports from staff that do not have the access, tools, and training they need to work effectively; and in gaps in communication across campus about technology needs and priorities. Conversely, some individuals/departments prefer not to use the University's technology tools. Many users operate in "islands;" they are the only people in their units responsible for certain tasks and using specific software. However, others across the University are responsible for those same tasks – providing opportunities for sharing of information and training for similar tasks would likely improve user proficiency and result in improved service to students.

It also appears that the units that are responsible for the maintenance and optimization of UDSIS and COGNOS are understaffed. They are unable to meet the needs of different campus user groups, as they can only take on high-priority projects. In turn, staff members who are not affiliated with high-priority projects are left to find work-arounds and employ time-consuming manual processes.

Recommendations

The following recommendations are based on the results of the inventory and survey. While we have not prioritized them, we have provided guidelines based on short-term and long-term implementation.

Within the next year, we recommend the following:

1. Develop a comprehensive, proactive plan

1. Conduct focus groups

1. Explore issues raised in the survey for more in-depth info; consider sub-groups like administrative assistants, student life, graduate studies, and advisors.

1. Explore student needs related to UDSIS & course management

1. Explore faculty needs related to student data & course management

1. Explore needs for analytics for student interventions & success

1. Identify best practices through peer institutions

1. Create procurement policies & a centralized inventory list to include the function of each program

1. Evaluate user access to main systems and revise accordingly

1. Identify priorities, including collaboration with Central IT for dedicated ongoing support for those projects

1. Provide proactive, planned training and communication opportunities for specific work groups (e.g., advising, course scheduling, recruitment, etc.). This must include a plan for training all users on all major systems.

1. Exploit functionality in UDSIS, COGNOS, and supplementary software

1. Scheduling optimization: scheduler software, utilizing the “cart” feature in UDSIS, etc.

1. Additional UDSIS and web forms integration with Advisor Notes

1. Catalog/curriculum software to integrate with audits

1. Workflow – work centers, dashboards, activity guides, related content

1. Data management – common attribute framework

1. Institutional Research dashboards

Following initial efforts:

2. Offer training and support regularly

- 1. Video trainings/ConnectingU
- 1. General training/on-boarding
- 1. Tools for sharing – peer training
- 1. CITAs sharing of info

1. Identify ways to build upon and enhance current efforts

- 1. Consider University-wide student communications system and plan

2. Additional assessment

- 1. Reconvene focus groups
- 1. Evaluate central inventory and reduce duplication

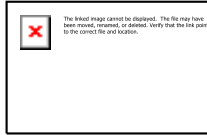
Concluding Thoughts

In short, the committee’s findings reveal that there is a strong foundation for SEM-IT, but also a critical need for integration and optimization. Users across campus expect cutting edge technological solutions to meet the enrollment management challenges of higher education today. We recommend a strategic, data-driven plan that allows for sharing, training, and communication to empower users to make the most of resources we have. Support the users who are supporting students. A committee like this should continue facilitating integrated planning for software acquisition and deployment of “student experience” systems, as well as resource planning for support of data projects and systems.

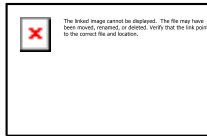
The following items are included for reference in the appendices section: Systems Inventory, Unique Systems List, Survey Results and UDSIS System Map.

Appendices

1. Systems Inventory –



2. Unique Systems List -



1. Survey results –



1. UDSIS System map –

