**Project Name:** Academic Student and Employment System (ASES), UC San Diego

**Submitter**
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**Project Team**
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**Summary**
UC San Diego’s Academic Student Employment System (ASES) is a web-based application that has simplified, streamlined and standardized the selection, assignment and hiring process for TA, Reader, Tutor, Undergraduate Instructional Apprentice (UGIA) and Associate-In positions. The system was designed to be flexible enough to meet the differing academic student employee (ASE) needs of academic department, interdisciplinary major and college writing programs across all academic VC areas, as well as the unique requirements of Summer Session. ASES can accommodate large departments that employ hundreds of TAs per year as easily as small programs that hire only one or two. ASES replaced individual departmental processes which typically employed paper, e-mail and spreadsheets. The system is integrated with many other campus systems and data sources, providing hiring departments and supervisors with valuable student applicant information that is critical to the hiring decision-making process for ASEs. In turn, ASES includes a central store of ASE course assignments, data which was previously recorded and kept only at the department level. ASES also provides for seamless integration with an online evaluations system, used by students and instructors to evaluate TAs.

**Project Description**

**Background**
Prior to the launch of ASES in August 2011, academic departments and programs at UC San Diego maintained distinct internal processes for hiring academic student employees (ASEs). The typical process involved multiple steps: e-mails to student applicants asking for position and course preferences; student responses back by e-mail; student preferences stored in spreadsheets; spreadsheets emailed to instructors for input on which students they wished to hire; instructor responses back by email, etc. Student Affairs staff members had to manually track, manage and follow up on e-mails from students and instructors. Other departments utilized tools such as Survey Monkey to get student preferences. While better than e-mail, these tools were still cumbersome and time-consuming, as data still needed to be downloaded and transferred to spreadsheets before it could be shared with instructors and staff.

Once hiring decisions were made, departments manually generated appointment offer letters to students, using templates developed in-house. There was no check to ensure wording of these letters
remained consistent with campus policy or the latest bargaining unit agreement. When ASE data was needed for institutional reporting, analysis or as response to a union RFI, it had to be collected manually from each department/program (again, via e-mail request) and collated into a unified report.

The Office of the Executive Vice Chancellor recognized that an online system could automate many aspects of the ASE hiring process, saving departments and programs many hours of administrative staff time per year. A centralized system could also standardize processes to ensure compliance with campus policies and bargaining unit agreements, and simplify data gathering and reporting. After consulting with over 20 departments and programs and analyzing their existing processes, ASES was designed as a powerful, flexible and easy-to-use system, able to meet the ASE hiring needs of units campus-wide.

**Detail**

The Academic Student Employment System (ASES) is a web-based application that facilitates the assignment and hiring process for students applying for TA, Reader, Tutor, Undergraduate Instructional Apprentice (UGIA) and Associate-In positions. To begin this process, department staff create postings ("campaigns") in ASES for positions they wish to fill. Campaigns include relevant information about the position(s) available, as well as optional, customizable questionnaires. Students can browse campaign listings and apply for positions online via the system. Departments and programs that pre-fill ASE positions can skip this step and use ASES just to assign the students and send them offer letters.

ASES gathers additional information on applicants by pulling data from the UCSD Data Warehouse and other data sources, providing a single repository for relevant data to help facilitate the decision-making process. This data includes the applicant’s academic record and any prior appointment history. Previously decision-makers had to go outside the system to retrieve this data. For departments and programs that include instructor input as part of the decision-making process, ASES allows instructors to rank applicants who have expressed a preference in being assigned to their courses.

Once a final hiring decision is made, a staff member assigns the student to one or more classes and makes an offer through the system. The student is sent an automatic e-mail notification, which includes instructions and a link back to the system, where he/she can accept or decline the offer. For paid assignments, the system also generates a standardized PDF appointment letter, which the student is required to open before he/she can accept the offer. Appointment letters may be modified to some extent to reflect specific training or other requirements of the hiring department, but all TA appointment letters include language conforming to the requirements as specified in the ASE bargaining unit contract. Prior to the launch of ASES, there was no way to ensure that appointment letters followed the wording used in templates issued by the Office of Graduate Studies, nor was there any way to enforce compliance with language specified by bargaining unit agreements.

Reporting capabilities are both enhanced and expanded in ASES. Staff and management may run reports to see who has applied for positions, which students are assigned to their department courses and where their students have been assigned (even if working in other departments or programs). Managers can also run a financial report which projects quarterly ASE costs for the department or program, broken down by ASE type and course assignment. All reports can easily be downloaded as Excel spreadsheets at the click of a button. Prior to ASES, there was no single repository for TA assignments at UCSD. When UCSD’s Office of Institutional Research (IR) had to compile Teaching Assistant data for reports for the Office of the President, each department and program provided the data separately. This often resulted in many follow-up e-mails and calls by IR to get the data, which had to be compiled and entered manually into spreadsheets to create a final report.
ASES also makes it simple for academic departments and programs to participate in the online evaluation system, which allows students and instructor to evaluate ASEs and students to evaluate graduate courses. Launched in spring 2012, the system replaced departmental paper, Scantron, Survey Monkey and other survey tools with a straight-forward, standardized system. Online evaluations require virtually no departmental staff time to administer as ASE assignments are fed directly from ASES and email notifications to students and instructors are automatically generated. The evaluation data then comes full circle, as TA ratings are fed back into ASES to provide instructors with valuable teaching performance information to assist with future hiring decisions.

As ASES has become the standard for campus-wide hiring of ASEs, it continues to expand and accommodate users’ needs. Future enhancements include allowing departments and programs to create templates for Descriptions of Duties, which they can provide with their appointment letters; and routing of exceptions to the appropriate decision-making authorities. There is also potential for ASES to be utilized as a campus conveyance tool for transmitting ASE employment information for integration into UCPath.

Technologies and Processes Used
The following are key technologies and processes upon which ASES is built:
- ASP.NET (C#)
- SQL Server database
- Internal roles-based system to allow campus-wide user-specific permissions-based views and actions
- UCSD data warehouse and other campus data sources through direct data connections/web services
- Campus Single Sign-On authentication

Project Timeline

Institutional Value
Operational Efficiency
What used to take countless hours of time processing paper forms, sending and gathering e-mails, and compiling spreadsheets can now be done quickly and easily with a few mouse clicks. Based on our calculations of staff processing time saved, the campus recouped its development costs for ASES within the first year of implementation.

Approximately 1400 hours of staff time was needed for consultation, development, testing and training of ASES. Salary and benefits associated with this effort total less than $100,000; there were no additional software or hardware costs incurred to implement the system. Taking into consideration just the time associated with the selection, assignment and hiring process for ASEs, conservative estimates of annual savings at full implementation are ~8,000 hours of staff time, equivalent to ~$250,000. This figure does not include savings from potential reductions in the number of ASE grievances filed.
(reducing both staff time and settlement costs), reduced effort required for data reporting, nor efficiencies gained by eliminating the staff time required to administer evaluations.

Additionally, because ASES standardizes the ASE hiring processes across units, and feeds into a standardized evaluation system, staff need only be trained once on proper utilization. Moving between jobs and/or departments no longer requires learning a new process or how to use a different system.

**Compliance Improvement / Risk Reduction**

ASES was developed in collaboration with UCSD’s Office of Graduate Studies, Academic Senate and Labor Relations office, and its built-in business logic helps maintain compliance with campus/university policies and bargaining unit contracts. While departments retain some flexibility in certain aspects of the hiring process, ASES standardized much of the language in student communications and appointment letters. This helps protect departments and programs from potential student grievances arising from ambiguous or improperly-worded emails and letters. And any changes to required language in communications or appointment letters are now implemented centrally to ensure consistency and immediate compliance.

**Success Factors**

**Voluntary Wide-Spread Adoption**

ASES has been endorsed by UCSD’s Office of Graduate Studies, Academic Senate, Labor Relations and Summer Session offices. Seeing its value, departments and programs moved to ASES without a mandate from the campus or any Vice Chancellor. In some cases, this involved retiring departmental online systems that had been in use for some time, including those in Biological Sciences and the Jacobs School of Engineering. To date ASES has been has been voluntarily adopted by over 90% of the academic departments and programs across UC San Diego, spanning the Academic Affairs, Marine Sciences and Health Sciences VC areas. The Academic Senate now accepts applications for UGIAs only through ASES, as does the Office of Graduate Studies for Associates-In.

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¹ Partial Year – launched spring 2012 ² Estimated for 2013-14 ³ Projected for 2014-15 – full implementation

**Strengthening Campus Collaboration**

To develop ASES, the project manager met with staff from over 20 academic departments and programs from a variety of disciplines, as well as staff in central offices that had a stake in the process. This early involvement from potential users was vital to analyzing the array of existing TA hiring processes and to get input on the kind of system they wished to see developed. Data stewards across the campus were consulted in order to gain support for granting the system access to the campus stores that included the
real-time data ASES needed to retrieve. Over time, as additional departments and programs adopted ASES, and additional position types (such as UGIA and Associate-In) were accommodated through it, additional data sources needed to be tapped. The early and open consultation process, and the system’s own positive reputation, helped make acquiring this additional data even easier.

Customer Satisfaction (as evidenced by survey feedback)
Below are survey comments from ASES users which illustrate their happiness with the tool as well as some specific examples of gains in operational efficiency.

“ASES has been an incredible campus system to use... Formerly, we had to track TA assignments in our own shadow system, create individualized Appointment letters and our own recruitment process. Now, much of this is handled through the system. In addition, we formerly had our own Graduate Course Evaluation process which has been almost entirely subsumed by the system. We also needed to send TA evaluations individually to grads, and that too has been subsumed by the system. It is markedly more efficient, and the ease of access has been spectacular.”

“ASES allows me to easily set up TA applications every quarter. What used to take me several hours, now only takes me 2 minutes (thanks to the copy campaign feature). It saves reams of paper since I can view everything I need to online. It makes the whole contract process so much easier and faster.”

“I can’t even begin to count the ways that ASES has improved the efficiency of TA assignments in our department (and across campus)... We now have one staff person who is responsible for both Graduate Support and TA Coordination, and I am certain this staffing consolidation would not have been possible without the immense time savings and efficiency that ASES provides. Beyond the immeasurable time savings, it also improves accuracy, record keeping, and union compliance. ASES also improves our ability to provide more excellent service to our faculty, with the built in functionality for them to submit their TA preferences.”

“ASES has enabled our unit to streamline an FTE workload fully devoted to the process of selecting and placing TAs into ~75% time, thereby freeing an additional ~25% time which has been applied to more direct student interaction and advising.”

“Multiple people within our department work on hiring TAs for our classes -- this system allows us to easily collaborate and see each other’s progress and work without resorting to email chains or separate logs. Also, we receive a higher TA eval response rate now that the survey is sent through ASES -- it gives the survey more of an air of legitimacy. Overall, it’s an all-in-one, extremely useful time-saving system.”

“Our unit collaborated extensively during the analysis and design phase of ASES. Stephen exhibited superior professionalism in his efforts to understand the workflow and policy associated with the implementation of ASES. We also commend his commitment to delivering a high-quality end product. Stephen continues to avail himself to suggestions and enhancements when it is feasible to do so.”

“With ASES also handling TA evaluations, it too has saved us a number of hours and hundreds of trees in processing evaluations.”

Reference: ASES Home page -https://academicaffairs.ucsd.edu/Modules/ASES