

# The Score

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The monthly review of the **O**berlin **P**roject for **U**nified **S**ystems for the staff and faculty of Oberlin College

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## calendar of events

- 3/30-4/2** Student Records functional training
- 4/6-7** Student Records A/P training
- 4/8-9** Finance Preproduction Support training

## feature

### Putting the “US” in OPUS: Working with a Unified System

Over the past year, it's been hard to get away from OPUS. The hustle and bustle of the project has swept through Human Resources, and is in the process of sweeping through both the Controller's and Purchasing offices and all the offices on campus associated with Student Records. Part of what makes the conversion to BANNER a challenge is that these offices aren't just dealing with their “own” data or their “own” procedures. It's important to remember that the “US” in OPUS stands for a “unified system”—an integrated database that will be the primary locale for the information used by most offices around campus.

But what exactly is this “integrated system”? It sounds suspiciously like techie-talk, something that only the cave-dwellers in the Computing Center need to worry about. The truth is exactly the opposite: that integrated system is what makes BANNER useful to you and worth having on your computer.

#### an integrated what?

At its most basic, an integrated system (the database at the core of a “unified system”) is one in which

any piece of common or shared data is stored in one location, and anyone who uses the system (and has security clearance, of course) can access that data. For example, in BANNER, a student's name, address, birthdate, social security number, and other biographical information will be entered into the system ONCE. After that, anyone on campus who uses BANNER and who has system permission will be able to access that information. No more entering the same information time after time in office after office. That information will be continuously updated, of course, as the student progresses through Oberlin, but the era of entering and storing basic information in multiple locations in multiple systems will be over.

According to Monica Wachter, OPUS Project Manager, there are other benefits to BANNER's integrated system besides the elimination of redundant data entry. “We'll also get the benefit of system-wide accuracy,” Wachter notes, “since changes made to records will be seen instantly throughout the system. In addition, we'll also see greater efficiency in processing transactions in the unified system.”

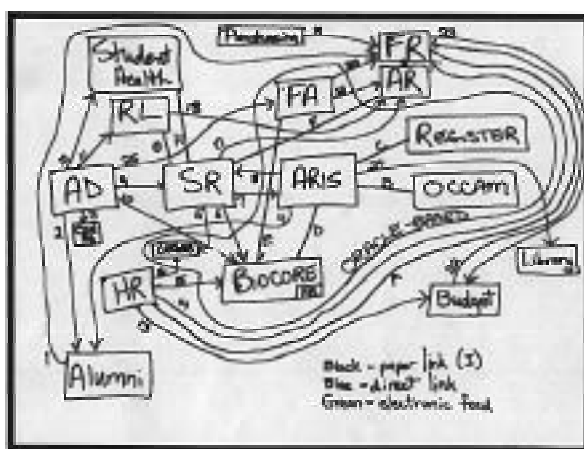
#### the price of integration

Those benefits do have a price, however. Because our administrative and academic offices have worked so long with their own, separate systems, the concept of an integrated system represents a major shift in the way we think about data at Oberlin. Most offices are used to having their own systems with their own information, and the way they used that information was specific to that office.

Now, all that will change. Since everyone will be, in essence, sharing a good deal of common data, we all need to start thinking in

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*At right: the infamous “spaghetti graphic”: an artistic representation of Oberlin's administrative computing systems prior to BANNER and the unified system.*



## ...feature

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terms of “Oberlin’s information” and not just “the information in MY office.” This isn’t to say that everyone will need (or be able to) see everything in the system; obviously, the data that Human Resources needs to see, for example, is different from the data that, say, the Registrar’s office works with. But part of the conversion process—perhaps the most challenging part—is figuring out where those needs overlap.

Wachter is well aware of that challenge, and knows that the unified system will take some getting used to: “Each department or office converting to BANNER must take responsibility for informing themselves about what other departments or functional areas use ‘their’ data,” Wachter says.

### **maintaining data standards**

One of the systems in place for handling those spots where data overlaps is the review and approval of the Data Standards committee. The committee is made up of OPUS project team leaders and project team members from administrative offices around campus, and its purpose is to review and approve the data standards for the entire OPUS project. That means standardizing the entry and appearance of data across all four BANNER modules (HR, Finance, Student, and Financial Aid) as well as data in the auxiliary systems like FAMIS, the facilities management system.

As the chair of the Data Standards committee, Director of Institutional Research Ross Peacock is very much aware of the need for standardization within the integrated database. “A primary feature of an integrated system is that various college functions will share data tables rather than having data translated from one function into the ‘language’ of another function,” Peacock notes, adding that it is “critically important that each shared data element be commonly understood across offices.”

But what is there to “commonly understand” about data? one might ask. Data is data is data, right? Well, wrong. Six months’ worth of Data Standards meetings have turned up some interesting

issues about the way we use information at Oberlin and how we want it to look in BANNER.

Take addresses, for example. Entering an address into the system appears straightforward: name, street, city, state, ZIP, done. Lots of offices around campus, however, have different ways of entering addresses in their own systems. Do you put the apartment or suite number on the line above the street address or the line below? Are words like “Street,” “Road,” and “Avenue” abbreviated or spelled out completely? Do you put a comma after the city name or not? How do you handle a Rural Road address or a PO box? In BANNER, an address must be entered the exact same way using the exact same standards every single time. No exceptions.

It may sound dictatorial, but following those standards to the letter is what makes a unified system work. If one office uses one set of standards to enter addresses (or any information) in BANNER, it means that the office next door won’t be able to find the address because they’ll be using a different set of standards to search for it in the system.

### **working across boundaries**

And it’s not just maintaining data entry standards that will be important. The Data Standards committee is also working towards standardizing how different offices identify different pieces of information. This means breaking down the boundaries between offices and sharing our information processes in order to make those processes universal and comprehensive.

For example, during the Human Resources implementation, the HR team needed to enter a group of codes into BANNER that corresponded to ethnicity. This would allow the office to track the College’s employee diversity in BANNER; an important capability since the College is required by federal law to keep such records. The codes used by the old HR system were fairly clear: five numbers 1 through 5, each representing a specific ethnicity (Caucasian, African American, etc.) It seemed a fairly straightforward task to simply use

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## opus notes

### **New student timecards, payroll procedures**

As a result of the Human Resources and Payroll Offices’ conversion to BANNER, the procedure for student payroll has undergone a substantial change. Students who work in offices on campus are now required to fill out preprinted timecards rather than the old timesheets, and there are standardized procedures for completing the timecards.

Marcia Miller, Accounting Manager, notes that after an initial “new-process-shock,” the procedures seem to be running smoothly in most offices. “Things are calming down,” she reports. “We got a good number of calls when the first timecards went out, but it seems that supervisors and students are getting used to them now.” Miller notes that some offices

have more complicated student payroll procedures than others, and encourages supervisors with specific procedural issues to call the Controller’s Office. ■

### **Oberlin staff to attend SCT conference**

Approximately 10 Oberlin College staff members will attend an SCT-BANNER conference in San Diego in March. The conference will feature speakers and seminars on topics relating to the use of the BANNER software and issues pertinent to institutions in the process of converting to the software. According to Project Manager Monica Wachter, attending the conference “will allow staff who are in the midst of their migration work to get some perspective on the software,

and network with colleagues from other institutions who may have valuable information to share about their own conversions.” ■

### **HR/Payroll team honored at luncheon**

The members of the Human Resources/Payroll team who contributed to the conversion to BANNER in December were honored at a luncheon on February 17. The luncheon, attended by President Nancy Dye along with several members of the College’s senior staff, featured a presentation by Director of Computing John Bucher of each individual’s contribution to the migration and congratulatory plaques for the seven team members. ■

## The Cave-Dwellers Surface: OPUS hangs out with the Analyst/Programmers

*So you thought that BANNER was going to do away with the need for the Analyst/Programmers in the Computing Center? Think again.*

One myth that has sprung up around the BANNER implementation is the idea that since the software is produced off-campus, there will no longer be a need for in-house computer programming. After all, the myth goes, if the software's already written, and has everything we need prepackaged and ready to go, why keep the techies around?

Ah, the delusion of myth. The truth is that the coming of BANNER means we need the Analyst/Programmers more than ever. Certainly, their role is changing: these days, the A/P's are finding themselves doing less program design and production and more research, testing, installation, and support. But with the implementation of BANNER and the auxiliary software that makes up OPUS, that research and support (along with the more traditional programming) will be the backbone of Oberlin's entire administrative computing system.

### changing times, changing roles

"To be honest, I wish I knew what my job is really going to look like when we arrive in the promised land of BANNER," says Katie Styer. Katie has worked in the Computing Center since 1989, and is the primary support person for the current Student Records systems: ARIS, Admissions, Financial Aid, Health Services, and Residential Life amongst them. Now, with the BANNER Student Records module in full training swing, Katie is leaving what she calls "legacy land" behind and entering the brave new world of BANNER.

And there's plenty of work to be done in that brave new world. "Before we go live, a lot of my time will be spent figuring out what data needs to move to BANNER and how we're going to get it there," Katie says, adding that she's "spending a lot of time trying to figure out how to best get BANNER to work for us."

Colleague David Foes agrees. "Especially in the beginning, we have to spend a good deal of time figuring out how to get BANNER to do what Oberlin wants it to do," Dave says. Historically, Dave provided support for the legacy HR and Finance systems, and now is the lead analyst/programmer for the BANNER Finance module. He notes that one of the differences between vendor software and software developed in-house is the amount of time it takes to understand the technical ins and outs of the program: "It's often more difficult to understand someone else's programming than your own," Dave says, "and also more difficult to understand a vendor's programming than that of a coworker using the same standards as you."

### before...and after

As Katie and Dave make clear, there's plenty of techie-type work to be done prior to going live on a BANNER module: mapping data, writing computer scripts to move and convert the information, testing the system, and simply learning how to navigate the new software. But once the BANNER module goes live, what's an analyst/programmer to do?

Plenty, as analyst/programmer Millie Modic knows all too well. As the lead A/P for the HR BANNER module that went live in December 1997, Millie knows exactly what comes after going live: lots of work. Currently, Millie is right in the middle of a long list of post-conversion tasks: writing programs for reports that utilize the new system; doing data clean-up and data verification; making sure that the BANNER forms and procedures are functioning correctly. "Going live doesn't mean the end of the work," Millie says, "it just means different kinds of work. We're not working on getting the data into BANNER anymore, we're working on getting it out of BANNER so that the HR and payroll people can use it for getting their jobs done."

Particularly helpful in that regard has been Darrick Strange, the Analyst/Programmer who functions as the Computing Center's Database Administrator (DBA). As the DBA, Darrick is in charge of monitoring the eight databases that house all of Oberlin's administrative computing information. Darrick is also in charge of keeping specific watch over the BANNER system: adding users to the system, creating roles and classes to restrict access to secure areas, modifying forms to satisfy Oberlin's administrative requirements, and applying BANNER software upgrades.

Darrick admits that moving into DBA mode from Analyst/Programmer mode was "both challenging and rewarding...in the beginning I felt like a fish out of water, since my comfort zone was programming." Even more discomfiting was the fact that Darrick had to simultaneously learn the BANNER software's technical side and the UNIX operating system. "Fortunately for me, the job has been less intimidating because of some very knowledgeable colleagues," Darrick says.

Darrick enjoys the variety of tasks associated with managing the database side of things, except for the fact that most maintenance tasks have to be performed at times when users won't be disrupted. "That translates into working a lot of nights and weekends," says Darrick, "which, I reluctantly concede, is a part of the job."

### behind the scenes

At this point, not all the A/P's are on the front lines of BANNER, but that doesn't mean that they're not working on OPUS. Cathe Radabaugh, for example, is the A/P in charge of desktop reporting and analysis tools. When Cathe originally came on board in 1996, she worked on implementing small desktop applications for individual departments that would handle reporting needs that the office's administrative system couldn't.

With the move to BANNER, however, that job has changed. Now, she's working on researching and testing the desktop tools that will interface successfully with BANNER, as well as figuring out the desktop configurations for BANNER users. She's also helping develop the interfaces between BANNER and the other new software being implemented in offices around campus, like the FAMIS software for facilities management and the TicketMaker package for the College's Central Ticket Services.

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## ...feature

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the old codes in the new system.

Upon review by the Data Standards committee, however, it turned out to be less straightforward. The Student Records team pointed out that they, too, would need to use those codes once they go live to track student diversity (also required by federal law). And while the old Student system also used the 1 through 5 coding method, the ethnicities assigned to those codes were the exact opposite of what the HR system used: a 1 in the HR system meant "Caucasian," for example, but a 1 in the Student system meant "African-American." Problem.

After some discussion between the HR and Student Records teams, a compromise was worked out that satisfied both groups. The committee decided that the codes used in BANNER to denote ethnicity would correspond to the codes used by the federal government (called IPEDS codes). This way, the codes in BANNER would not only be consistent between modules, but would also be in the appropriate form for governmental reporting needs. Problem solved.

## data ownership

The other side of making sure that data is consistent within the unified system is making sure that it officially "lives" in one office only. This may sound contradictory, but according to Ross Peacock, a critical element of "data integrity" is making sure that one office is responsible for updating specific pieces of data. "The role of the Data Standards

team is not only to ensure data integrity in the implementation phase, but also to help determine which office should have authority and responsibility for maintenance," Peacock says, noting that if too many offices are allowed to update a piece of data, the integrity of the data is jeopardized. Making changes to specific pieces of data in one place means the data stays consistent and procedures for updating the data stay streamlined.

Granted, the question of data ownership requires a lot of discussion, understanding, and compromise between administrative offices. It also requires some flexibility. An example: since the HR office is live on BANNER right now, and needs to use a set of codes that denote academic degrees (like BA, PhD, etc.) for producing staff and faculty profiles in the course catalog, HR currently "owns" the data table that contains those codes. After some discussion in the Data Standards committee, however, it was decided that once Student Records goes live, the Registrar's Office will take over the part of that table that deals with student degrees granted by Oberlin College.

That agreement represents the kind of discussion and compromise that needs to happen for the integrity and proper maintenance of the data we all need to do our jobs. And such discussions will be taking place all over the College: "Every campus office needs to work towards effective communication and cooperation," says Monica Wachter. "And that means creating some common-sense procedures to handle the spots where the need for data overlaps." ■

## ...opus profiles

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All this is taking place while Cathe is still involved in the continuing support of small database applications at the departmental level. "A lot is changing, and changing pretty quickly," Cathe notes. "The game will be to keep all of those pieces working together as the operating systems, database, and desktop tools come out with new releases."

Also working behind the scenes is Dave Waldron, the newest addition to the A/P staff. Dave, who arrived in July 1997, was brought on board specifically to assist with the BANNER conversion and to provide some of the knowledge base the A/P team needed to keep the migration moving forward. Dave is the designated "UNIX guy": he provides general support for the UNIX operating system, and also supports and modifies the BANNER programs that are written in UNIX-related languages.

But Dave certainly isn't escaping involvement in specific BANNER modules: he's the backup for Katie on the BANNER Student module, and the backup for Dave Foes on the BANNER Finance module. In addition, Dave is the lead Analyst/Programmer on the BANNER Web products—

Web for Employees, Web for Students, and Web for Faculty & Advisors. These products are the pieces of BANNER that will eventually get loaded onto the World Wide Web for use by College faculty, staff, and students, and Waldron is particularly enthusiastic about these pieces because they represent a very user-friendly way of interacting with the BANNER system.

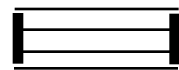
Monica Wachter, who directs and assigns tasks to the Analyst/Programmers, is keeping a close eye on the changes that have happened and the changes still to come. "The major duties of the analyst/programmers have always been split between software development and software support," Wachter says, "but the balance of this split will change from something like 50/50 to approximately 90/10 with each of the analysts spending the bulk of his/her time in software support."

But Wachter points out that while tasks may change, the skills needed to complete those tasks remain the same: "the analysis skills necessary for design specifications of new programs are the same analysis skills that are needed for successful implementation of a sizable software package."

In many ways, the A/P team gets the brunt of the implementation fallout since they

have to understand the software from both sides: the user's interaction with the software and their own technical interaction with the system. And the team is also very aware of how much the Oberlin user community demands of its administrative systems. "No vendor software is going to be designed specifically for Oberlin," says Dave Foes, "and Oberlin users tend to push the limits of their systems." ■

### The Score



*The Score* is published monthly by the Houck Computing Center and the Oberlin Project for Unified Systems.

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