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PowerFAIDS:

Building a Road to Financial Aid Efficiency

Lauri Nichols

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PowerFAIDS: Building a Road to Financial Aid Efficiency

To most students, the Financial Aid office is a small room in the basement of Holmes Hall where they are occasionally sent to sign over a paper or two. It has something to do with money, and every so often, these students get something in the mail that tells them just how much it's going to cost them to continue their education here at Illinois Wesleyan. They know that papers are filled out, usually by their parents, and then in a couple of months, a figure jumps out of nowhere and becomes "Your Financial Aid Package."

The Gravel Road Left Behind: The "Old" Way

But where exactly does this figure come from? Who figures out who is eligible for financial aid and who isn't? In past years, a software package called Micro-Faids was used to calculate contribution figures. These figures that were computed in Micro-Faids were then manually entered into the university's mainframe, and an AS 400 was used to create the packaging and to disburse the funds. If there were any changes to be made, they were manually made in Micro-Faids and then entered again into the AS 400. This was inefficient, as well as error prone. The obvious decision by the Financial Aid administration was to improve their current system.

Obviously, the College Scholarship Service felt the same way about their software technology, since they announced their upcoming new software package, PowerFAIDS. At the start of this project in early November, Illinois Wesleyan University was about one of one hundred schools in the U.S. that had a copy of the software. Although IWU was not one of the true beta sites, the actual release of the software was in early February, so Wesleyan had a chance to get a head start working with the database. Although it was advantageous to start working with it soon, it also created the opportunity to find some of the many bugs within the program.

Road Construction: The New Product

The November 1995 release of PowerFAIDS was lauded by the College Scholarship as “the beginning of a new era in financial aid software.” It is based on advanced technology combining client-server architecture, relational data base structure, and “the latest fourth-generation development tools.” The package is a compilation of information gathered from over twenty years of experience and its company pledges to serve all financial aid functions in a single software package.

Since a manual was not released along with the software, the administrators chose to incorporate the use of PowerFAIDS gradually. Therefore, the Financial Aid office continued using its current form of packaging while only slowly adding in the use of features of PowerFAIDS as they became available. The full changeover to PowerFAIDS in the Financial Aid office was planned over a five-year transitional period.

Surveying the Land: Basic Project Goals

In the beginning of this period, the basic goals of the project included three of the modules within PowerFAIDS to be up and functional for the office. Without the use of a manual, this was completed by trial and error, problem solving skills, and using information brought in by working with other software programs. The first module completed was that of Need Analysis. After a student has all of the necessary information entered into the database, this module computes the amount of need for that student's family. That is, the figure is an estimate of how much money the family cannot contribute toward the years' college fees. This was completed swiftly, and by the end of November, one could correctly and efficiently use PowerFAIDS to compute the need analysis for any student already in the database.

The other two modules slated as early goals were very closely linked, Document Tracking and Letter Writing. In the Letter Writing module, PowerFAIDS has the ability to send out letters on a regular basis to students and/or parents that tell the recipient what documents the Financial Aid Office has received and which documents are still needed. Having this capability is quite advantageous to Financial Aid, for the pre-PowerFAIDS method of doing this was not nearly as efficient. Earlier, all document tracking was done manually. That is, whenever there was a low period or lull in the office, a worker would pick up a pile of papers and start going through the files and physically checking off when a document was received. In fact, there wasn't a letter writing option. Instead, a generic list of documents was printed on a paper and a worker would check off what was still needed, and that list was sent to the Financial Aid recipient. Presently, documents can be entered into the database as they come into the office. Additionally, there is an option for a case where a document has been received, but is missing a

signature. Then, the letter module can be set up to send out a letter every certain number of days as established by the university, automatically listing which documents have or have not come in. Unfortunately, there is presently a bug in the system, not allowing for correct verification codes, which has put this part of the project on hold.

On Ramp to the Interstate: The Department of Education

After the basic goals were completed, it was necessary to figure out how to correctly migrate the federal data between the United States Department of Education and Illinois Wesleyan University's Financial Aid department. This, too, was a new step that Wesleyan was integrating into its system. Earlier, the financial aid software package was a three system plan: Micro-Faids for data entry, a product called FEEDS to electronically receive government data, and the AS 400 for packaging needs. Now, after drawing down federal information from the U.S. Department of Education, PowerFAIDS has the capability to retrieve this data and update the information in the database. Before, the Department of Education did not link to Micro-Faids and this extra step called for more manual entry. Establishing this link, the Financial Aid department reduced its three-system to a two-system environment and subsequently increased efficiency.

Another advantage of PowerFAIDS is its ability to migrate data. Occasionally, figures on the federal forms and Wesleyan's own financial aid forms have contradicting information. In some cases, it is common practice to assume that the Federal data is more accurate. Thus, when information is drawn down from the Department of Education, if figures on this Federal form differ from what is in a student's records currently, the current information can be overridden by the Federal Data and vice-versa. Last year, all of these comparisons were done individually and

by hand, as workers picked and chose what data to compare. Once again, PowerFAIDS has increased efficiency while keeping these added abilities at easy adaptability.

Bumps Ahead: Problems Encountered

Many unforeseen problems were faced throughout the duration of this project. The main one, the fact that there was no manual for the software package. CSS informed the office in early December that they were hoping for a January release of the manual. In January, that date was moved to February, and so on. Although this is the most practical solution for the software company, that is, the manual should include aspects of the software program that are currently being added or remedied, it proves to be a little frustrating on those trying to learn the inside of a new system.

One major problem that PowerFAIDS was aware of was the missing screen of Federal Methodology data. There are two types of methodologies, Federal and Institution. The federal methodology (FM) include the formulas and information required by the government and the institutional are those required by the school. The missing screen was not an error of the CSS, but instead, of the government. Because the federal formulas for need analysis were not completed at the time expected, the FM data screen was not available at the first release. Thus, federal need analysis could not be computed. Instead, the program used an estimated value, that obviously could not be used for definite packaging.

Fortunately, along with the installation guide that was sent with the original release of PowerFAIDS, an e-mail and a toll-free number were provided as a source of information. As small problems and puzzles came to mind, CSS was contacted and a response was received within one or two days. In these early months, the project seemed to be moving along swiftly

with no major bugs. In fact, at a conference in February, Wesleyan provided much assistance to other confused PowerFAIDS users.

Unfortunately, at this same conference, the first big release of PowerFAIDS was issued. This almost quadrupled the number of PowerFAIDS users, many of whom had no previous experience, with Micro-Faids or PowerFAIDS. As more schools began to set up this packaging program, more and more confused and frustrated users and inquiring minds wanted answers. Getting through to the College Board using e-mail or voice mail was to no avail. The number of questions skyrocketed and the technical support for the system, although doing its best, could not handle the high volume of mail as quickly as subscribers would have liked. A PowerFAIDS forum was set up, figuring that schools were having similar problems, and that one of these other schools may have found a solution.

Soon after this big release, a fax from CSS was received with a list of the most commonly asked questions, methods to get around these problems, and a schedule of when these bugs would be remedied. Just a few weeks after this first release, another upgrade was sent, along with a notice stating that there were at least two more upgrades slated for the coming months. This is a common routine among new software packages, but for schools hoping to jump right in, it can prove frustrating. Luckily, Wesleyan is using a multi-year transition period, and in case of emergency, can still resort back to past programs. Some schools didn't plan so far ahead.

A major setback here at Wesleyan occurred after installing the first upgrade. After backing up the system as was routine, and following the installation guidelines, the database could not be accessed any longer. According to the College Board, it was discovered that there was a special backup, within the PowerFAIDS software, that was supposed to be used instead of

the universal tape backup that was employed. At stake were the records of over two hundred students. This also occurred simultaneously with the date the Financial Aid Office set to start packaging these students. Luckily, after sending the backup to PowerFAIDS tech support, they were able to restore the database with no data loss. Since then, long hours have been spent in Financial Aid, attempting to catch up with the working schedule.

After upgrading a third time, technical difficulties once again plagued the project. According to Wesleyan's network administrator, the technical support staff at CSS Software Services needs to be increased and improved. In faxes sent from CSS, it was learned that new support staff were being hired, but the company has been dealing with a long queue of questions from irritated users, some which have proven to "be extremely complex to solve and have required multiple days of interaction with users." In early March, it was noted that CSS was dealing with over forty installation and network issues at one time, and at one point in April, a recorded message on their toll-free number mentioned there were over two hundred questions being investigated at the moment that needed quick responses.

Although there have been many problems causing many hours of frustration, this is routine for the beginning release of a new software package. No one can expect the first release of any major product to be perfect. Thus, these issues cannot be looked at as disadvantages of implementing the new system. In the long run, the added efficiency and user friendliness of this package will more than make up for the early bugs found in the beginning. However, it should be noted that it took only one week after the "big" release of PowerFAIDS for the notice stating that technical services were already working on three additional upgrades. This seems unbelievable. In addition, as more little bugs are investigated and the realization hits that it is

indeed a large bug, disks are sent periodically with inserts such as "Notice to all PowerFAIDS users: It is greatly encouraged to install the enclosed file(s) immediately."

At this point in the project, we have only yet begun. Like mentioned before, the implementation of PowerFAIDS has been given a five-year transition period. It is quite possible to have this up and running much earlier than that, assuming the College Board continues their incredible pace at working to improve the software into the state-of-the-art model they promised institutions in 1995.

The Road Ahead: Ideas for Improvement

Working down in Financial Aid for the last seven months, it has become apparent that there are many improvements that could be made in order to push the department to be more efficient and self-sustaining. One problem that occurred for the duration of the project was the large block of time that is needed to export the electronic data from the Department of Education and link it to PowerFAIDS. This takes the better part of a day (and more in some cases), and if workers need to use a machine, there is one less machine to choose from. In order for the computer system in the office to be more efficient, it would be at great benefit to add another station site to the network. Moreover, since most of the documents come straight to the front desk in the office, it only seems natural to have a client station there, easing the burden of moving files from this place to that and decreasing the possibility of delayed packaging.

Also, it would be greatly advantageous to investigate the possibility of hiring a support staff solely for the purpose of the Financial Aid office (or all of Holmes Hall?). With all of the upgrades and problems faced as a result of these upgrades, the technical support has spent considerable time working with the department, as well as with the College Board, attempting to

solve the difficulties encountered while maintaining a system that is still usable for the office. It has proved to be a significant time burden for one person with responsibilities campus-wide. With the Financial Aid department continuing to advance their technology, an extra able-bodied person with specific technical skills would be favorable.

Paving the Way: Future Projects

Looking specifically towards the PowerFAIDS aspect of the department, future projects also seem promising. Keeping in mind that any transition must be a gradual one, it would be interesting to look at prospects of implementing even more of the options available in the PowerFAIDS product. Figures from need analysis reports calculated in PowerFAIDS are manually entered into the AS 400. If a bridge program was created so that this calculated information can be linked to the mainframe and electronically sent, efficiency would be better maximized. Also, the possibility of error in entry would be reduced, if not eliminated entirely.

Also, while continuing to maintain the packaging power currently in use by the AS 400, it would be useful to see if similar formulas could be created within PowerFAIDS in order to maintain a dual system for packaging. Since the AS 400 is linked with the business office, and that is where the billing information is handled, another program might be able to be written that could then send the packaging information to the Business office to complete the circle. Perhaps future research projects could involve Jean Johnson and the AS 400 about possibilities with these translation programs, as well as researching other universities to see how their Financial Aid and Business offices interconnect.

Over the past few years, the Financial Aid department has made great strides in advancing its technological side. Only four years ago, all the budget information was done by

hand, using sampling theory and statistical analysis. Then, a major movement (at the time) occurred when the office received Quattro Pro for their computer, a 486 with four megs of RAM. The next year, IWU found hope with a new software product called Micro-Faids, so that now, data entry and need analysis could be done with computers as was the budget information. With the implementation of Micro-Faids, the office was upgraded to a four station network, with two of these stations being Pentiums. Micro-Faids also called for an increase in RAM and the addition of a file server. Currently, PowerFAIDS, although capable of running on an eight meg station, is incredibly slow and sixteen megs is much more efficient.

Although the aging of computer technology can be likened to that of the canine world, and a system bought yesterday is already six months old tomorrow, the Financial Aid department has found a new beginning. In just three short years, the Financial Aid department has completely renovated their way of doing things, and no longer are paper and pencil the only commodity. The process of constructing a roadway to efficiency is a gradual one. The Financial Aid department is well on its way to step out onto smooth asphalt in the coming years.

POWERAIDS



Student Manual



**Illinois Wesleyan
University
Financial Aid Department**

PowerFAIDS

Logging in

- ☒ At the C: prompt, type **win**
- ☒ Double click on the **PowerFaids** icon
- ☒ Double click on the **Student** icon
- ☒ Click **continue**
- ☒ Type in your user name and password
- ☒ A screen with Year and Version 96-97 will appear.
- ☒ Click **OK**

You are now logged into PowerFaids.

Adding New Students (Basic Data)

- ☒ Click **Student** from the top menu bar
- ☒ Click **New Student**
- ☒ In the New Student File, enter
 - ☒ Social Security Number
 - ☒ First Name
 - ☒ Last Name
 - ☒ Address
 - ☒ Title

As you enter the different data items, you will need to tab, or use the mouse, to reposition the cursor

- ☒ Click **Apply**
- ☒ Click in box next to **Fall/Spring Semesters** in the POE Screen
- ☒ Click **OK**

*After a pause, an empty New Student screen will appear. Enter as many students as necessary as described previously. Click **Cancel** when the next empty new*

student screen appears. You have now entered all the basic information for these new students.

Creating a Selection Set for Data Entry

When you add the financial information and other data for students, you will want to query up only those students which you recently entered. (Scrolling through all of the entered students would be inefficient.) To do this, you need to create a selection set.

- ☒ Click **Control** from the top menu bar
- ☒ Click **New Selection Set**
- ☒ Under Selection Set Name, type a name. (If today is Jan 16, name it Jan16)
- ☒ Leave Pfads module as is
- ☒ Leave Sort Label blank
- ☒ Click space under **Dictionary item**
- ☒ Click arrow and choose **DT-CREATE** (This means Date Created)
- ☒ Under Operator, Leave **IS**, and change EQUAL to **GT** (Greater Than)
- ☒ Leave Target as Constant
- ☒ Double Click the bar under **Expression**
- ☒ Choose a date that will give you a good number of files to work with (Four days ago, perhaps?)
- ☒ Leave Connector as **END**.
- ☒ Your selection set entry should now look like this (with your own date):
DT-CREATE IS GT (Constant) 1/18/96 END
- ☒ Double click in the upper left corner of the selection set window to close.
- ☒ Click **yes** to Apply Changes

Adding More Student Data

- ☒ Click **Student** from the top toolbar
- ☒ Click **Sel Set** from the side toolbar
By clicking the arrow along the side, you can scroll through the available selection sets.
- ☒ Click on your Selection Set (ie Jan16)
- ☒ Click **OK** Your set of students should now be on the screen
- ☒ Locate each student you would like to work with and double click on their name
A general information screen will appear.
- ☒ Click **GoTo** from the top menu bar
- ☒ Click **IM Data**
- ☒ **Refer to the attached sheets to fill in the correct data fields**

Hand Calculations for the FNAR

After you have printed out the FNAR, do the following calculations, remembering these three rules of thumb when calculating the IM family contribution:

1. **IM Family Contribution** must be \geq **FM Contribution**.
Add appropriate amount to **IM Student Contribution** to assure this is the case.
2. **IM Family Contribution** must be \geq 2250. Add appropriate amount to **Parent Contribution** to assure this is the case.
3. IF **AGI** is between \$20,000 and \$40,000 and no adjustments were made for 1 and 2 above, then add

continued on next page ->

\$100 to **Parent Contribution** if two or more are in college.

- ## Adding the same Local Data to many student files.

- ☑ Click on **Student** from the top menu bar
- ☑ Click **Batch Posting**
- ☑ Under Population Selection, click **Specific Student**
- ☑ Leave “Pick a selection set” empty

- ## Adding the Same Document Status to Many Students

- ☑ Click **Student** from top menu bar
- ☑ Click **Batch Document Posting**
- ☑ Under Population Selection, click **Specific Students**
- ☑ Leave “Pick a Selection Set” empty
- ☑ Under “Pick a Document:”
 - ☑ Click under Document Name
 - ☑ Use arrow keys (not mouse) to scroll down and look at choices
 - ☑ Click on needed document

- ☑ Enter Date Received
 - ☑ Click space under Status, click appropriate status
 - ☑ Move mouse and click on the empty line under SSN
 - ☑ Enter the Social Security Numbers of those people whose document has been received. Hit enter after each SSN. If the cursor does not appear on the next line, move and click the mouse on the beginning of the new line.
 - ☑ Click **OK** when done entering SSNs
- **To enter document tracking for an individual student, from the student list, double click on the specific student. From top menu bar, click **GoTo**. Click **Document Tracking**. Click under status and change as needed.*

Loading CSS Information

This loads the information that we receive on diskette from the College Scholarship Service into the PowerFAIDS database.

- ☑ Double Click on **Autoload** from the Main PowerFAIDS screen and log in.
- ☑ Click **CSS Load**. Click **Load Parms** if you have been instructed to change any of the listed options.
- ☑ Click **Profile Data Load**
- ☑ Put CSS disk in drive. Change drive to **a:**
- ☑ Double Click on **profile.dat**
- ☑ Click **Load**. Wait...when done, View Load Results will show. Click either **OK** or **Print**, depending on what is needed.
- ☑ Click **Pfaids Load**
- ☑ Click **Load**. The loading process will take a long time, when finished, you are done.

Loading ISIR Information

After the ISIRs have been drawn down from the Dept. of Education, this will link them to the PowerFAIDS database.

- ☑ Double click **AutoLoad** and log in.
- ☑ Click **ISIR Load**. Click **Load Parms** if any options need to be changed.
- ☑ Click **ISIR Data Load**.
- ☑ Change drive to **c:**
- ☑ Click on **Feeds97**
- ☑ Double Click **isirs.dat**
- ☑ Click **Load** and wait for results
- ☑ Click **PFAIDS Load**
- ☑ Click **Load**

After a considerable amount of time, a list will now show the results of your load.

Migrating Data

After ISIR information is loaded, we can use some of that information to override current information in the database. If this is needed, you must do the following things to correctly migrate the data.

- ☑ In the Student module, click **student** from the top toolbar
- ☑ Query up the students you want to migrate data for
- ☑ Click on one student's name
- ☑ Click **GoTo** from the top menu bar
- ☑ Click **IM Data**
- ☑ Click **Actions**
- ☑ Click **Migrate**

The data has now been changed.

Background Information

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Notes: