

Boise State University

**ScholarWorks**

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MDS/BAS 495 Undergraduate Capstone  
Projects

Student Research

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## **Internal College of Engineering Expense Distribution Report Instructions**

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### **Innovative Approach**

Over the past 5 years Boise State has been converting their financial systems and their research systems into one system. The research system change was first, and we only recently launched a partial payroll system move from PeopleSoft to Human Capital Management (HCM). Before I moved from the Office of Sponsored Programs to the College of Engineering, COEN had created a homegrown system to help their Research Administrators forecast and budget their workbooks. The internal system used Access, which is no longer supported by the university, but was able to stay afloat because there was one person who could keep it going. Once the previous expert left, this task fell upon me, and I too have been able to keep this system going because of my previous experience in working with this database decades ago.

My capstone proposal is to take the outdated financial system instructions, create a current internal job aid with Q&A for the College of Engineering Dean's office. This job aid will also be submitted to the President of the Boise State University, along with other job aids to prevent correction action issues in possible future audits. Keeping this internal process current is critical for the College of Engineering as it affects the management of our finances from student employees to the Dean of the college, and everyone in-between. The direct impact of our internal payroll database became prevalent recently because of the release of HCM.

Over the last three months I have been working with my team, my supervisor, and my departments to utilize ideas, even opposing ones, to solve our financial problems affected by the university's release of HCM. Of course, as many of you know, once you set out to complete a task, it doesn't prevent the world from turning, and it seems as if we have had more problems occurring than solutions are being implemented. Some of these problems are in our control, but

most are out of our control, therefore we have become reactionary which is a bad place to be. “The best way to reach all people is to go to a personal story”, this is my story. (McDermon, 2021)

I am the sole person responsible for our internal payroll reports and this database at this time, but because I am no expert in systems or reports for that matter, I feel it is critical to get this process documented. Since the release of HCM tensions have arisen, which are placed on top of the fact that we have little instructional documents to date. To eliminate confusion, we are working towards having one location to find instructional documents and my goal is to transpose my knowledge of these processes onto paper which will benefit current and future team members to build future solutions to help us all learn equally.

The launch of this payroll system and my capstone opened contemporary and cutting-edge research opportunities by opening the doors for discussions with students, department administrators, managers, and my team. Equally beneficial was previous documented departmental processes, TedTalk videos, textbooks, scholarly articles, and YouTube.

### **Emotional Intelligence**

The research I am performing indicates self-awareness because it is helping me to acknowledge the benefits of my problem-solving traits, conscience of my behavior, and tune my feelings as I complete this course. During a TEDxTalks video I became more fully aware of a weakness/strength of mine where I use mirror neurons which “mirror the emotional state of other people”. (Eurich, 2017) If someone is smiling, I will smile but if someone is frowning, I will inherently frown; so basically, I have no poker face when it comes to my emotions. This is a

behavior I thought only I had, because most of my coworkers are able or have learned to be able to control this facial instinct.

My familiarity with myself as a student and coworker has changed many times since the creation of my proposal. I often wondered if someone else would be better at solving this task. “Creative thinking in business begins with having empathy for your customers (whether they’re internal or external), and you can’t get that sitting behind a desk. (Kelley & Kelley, 2012) Questioning my choices, playing devil's advocate with my decisions, seemed to create unintentional insecurities that seemed to be undermining my emotional intelligence and hard work.

My approach does consider my audience's emotional intelligence because of my personal relationships with the people who will be using this instructional document. My instructions will be well rounded to department administrators, department managers, my supervisor, and my peers but my presentation will change depending on the audience. “The right format for your job aid depends largely on the task at hand.” (Kienapple, 2021) This instructional document will be target specific to the research administrators in the Dean’s office of the College of Engineering but knowing how we are expanding and working collaboratively with other colleges it is fair to say that it could be shared in the future.

This research is valuable to others because it comes at a critical time where no one is a mentor in this new system, we are literally the blind leading the blind. Everyone is learning at the same time, and my research is putting it in terms that can be understood better among people who are financially managing research accounts. Something that seems obvious across the university is that research administrators struggle with time management. “Whether rooted in

problems with the team, the stakeholders, or the number of hours allotted to complete the project itself, timing issues have the power to derail a project and make a lasting negative impact.”

(DiFranza, 2019) This document is liquid, allowing changes to be entered in real time, and believe me I have updated it so many times that I feared that I would never feel it was complete enough to the best of my knowledge. When I say it is valuable, I mean we have and are still using this internal payroll system to help navigate and correct payroll errors that have been going on for months now; you cannot reconcile something against nothing.

### **Creative Thinking**

The mental framework I used was using the instructional structure to make sure that my resolution had a flow to it. It is a delicate job aid that implements a process that has many ways it can fail or generate errors. It impacts many users ranging from student employees to the Dean's office and is our college's way of balancing and forecasting all types of accounts from grants and to locals, to appropriated. This instructional document shows users how to proceed if all goes well but there needs to be critical thinking for things that don't process correctly. Our internal database is not supported by COEN IT, the helpdesk, or the college systems people therefore it must be user friendly to non-tech savvy people.

My approach was unique as I took corrective criticism with the intent to improve how it communicates my instructions to the recipients. I wanted to create a higher-level document, assuming people would have the basic understanding of systems, but that was turned down immediately. My team didn't care how many pages it was, from their experience in other university documents they needed it to list steps down to the simplest terms. It was then that I

felt that the F&A would be more of a higher-level problem-solving section as there is no way I can predict all the possible ways errors could generate. The Q&A is meant for someone who can problem solve, someone who is not afraid to research the internet, and is more intended for the main person who will be processing this for years to come. As the university alters and improves the new HCM system, the instructional document must be easy to update. My hope is eventually the new system will eliminate the need for our college to have shadow systems.

### **Your Innovative Solution**

An innovative process to my capstone was the way I approached ideas for a resolution. “Innovation is, at its core, about solving problems — and there are as many ways to innovate as there are different types of problems to solve.” (Satell, 2017) Instead of responding to provide answers, I would force myself to stand down and just listen. I would deny my initial reaction to troubleshoot out loud or to fill the air with resolutions, but instead to process other people’s words by focusing on listening and not thinking. You may ask yourself, why is this innovative? I am naturally that person who speaks up in board meetings, who engages with processes with intent to find resolutions by throwing ideas out there. The awkward silence when a presenter asks a question has always forced me, or pulled out of me, to say something almost every time. I have never been a spectator, so by taking a back burner approach, so to speak, has helped me tap into a part of me that no one knew existed. I realized sudden changes in behavior caused concern when there was none. I have since explained to my colleagues that I want to try and think about my responses before I jump right into the conversation.

My team and my college are all stakeholders in my capstone and because I am presenting

something that they are already familiar with, something they almost certainly have an opinion on, taking an innovative step back allowed them to think and respond; while I listened and processed which helped me grow professionally as a leader.

This whole overview was about approaches and my experience last week in changing the way I use obstacles to assist in my growth. By using my team's collaboration in dealing with 'real time' issues affecting my capstone I was able to improve my communication by doing something different. They don't know our internal payroll system like I do, as a matter of fact they don't know it at all, but they do know what it can do for them which is why it is so important for me to clarify my challenge and align it with the needs of others.

### **Results**

The internal job aid I created showed my stakeholders a detailed step by step process of how I format, import, and export our expense distribution report. It allowed them to see old processes and has brought the conversation forward on how we will proceed in future fiscal year processes.

An obvious impact was their understanding of how much of an administrative burden this report has become and how what we have been doing for years truly got a whole lot harder with the new HCM system release. We have had university driven deadlines where we had to reconcile accounts, and this report was COEN's saving grace in making HRs require system corrections more manageable for us. I believe I achieved team satisfaction and an article I read this semester said it best when reference team members: "They're the ones who were deep in the

trenches, and they'll be the ones by your side on the next project adventure too. They also have deeper insights that even the top stakeholders may not have.” (Eskander, 2018)

I am confident that their new understanding will take us to a place, once we are no longer understaffed, where we can start making system and process improvements which will allow the College of Engineering's research administrators to have a more realistic workload. This was an outdated critical process which can now be added to our business manager website.

### **Conclusion**

My method of choice for my Capstone is a research paper. In my profession I almost always do PowerPoint presentations, academically I wanted to step out of my personal comfort zone and try something different. As a research administrator/manager I get to read proposals, I get to keep approved proposals in compliance financially, but I have yet to experience a research type path.

I always thought what researchers do and what I do are completely different, but I have learned over the last several weeks that research is always just that, research. It felt different because my research is based on my path and knowledge, and the professor's research in higher education is in a field that is more PhD specific (aka they are very smart).

Towards the end of my capstone, I learned that every time I thought I had my capstone almost ready, a wave of changes went into effect, and I had to start all over again. To be completely transparent, my choice of capstone was not the smartest decision as I knew that new system glitches would hinder my progress every step of the way. I am a perfectionist when it comes to accounting and processes, but this recent rollout forced me to push past my instincts

and accept that the best I can do can be my version of perfection. “That said, goals aren’t set in stone. Like everything in life, it’s good to approach them with flexibility and open-mindedness.” (Moraca, 2021)

When I started this venture, I was pretty much the benefactor of this process; although I did know that it could benefit someone down the road if I left my position. It wasn’t long before I discovered the amount of people who could benefit from this instructional process may begin with myself but has now branched beyond my office and will end up in Dr. Tromps office.

I am not sure if I acquired these skills, or if it is better described as I am still acquiring these skills but patience, time management, work-life balance, and self-discovery are all skills this capstone has revealed. Knowing me, balancing on “what we know, and what we haven’t still, or yet thought about”, I will not completely understand all my acquired skills until well after I graduate, as with most of you I am a product of my education and experiences. (Corazza, 2014) This blog puts how I feel at the end of this project into words, “Some benefits, in particular, may be awarded even after the project has been delivered”, which is where I feel this process has ended; and where I have already began to consider altercations. (Twproject, 2021)

## References

- Corazza, G. (2014, March 11). Creative thinking - how to get out of the box ... - youtube.  
Creative thinking - how to get out of the box and generate ideas. Retrieved December 5, 2021, from <https://www.youtube.com/watch?v=bEusrD8g-dM>.
- DiFranza, A. (2019, June 27). 5 Time Management Strategies for Project Managers.  
Northeastern University Graduate Programs. Retrieved December 5, 2021, from <https://www.northeastern.edu/graduate/blog/time-management-project-management/>.
- Eskander, D. (2021, August 30). How to measure success of a project. Project. Retrieved December 5, 2021, from <https://project-management.com/6-ways-of-measuring-project-success/>.
- Eurich, T. (2017, January 19). Increase your self-awareness with one simple fix - youtube.  
Increase your self-awareness with one simple fix. Retrieved December 5, 2021, from <https://www.youtube.com/watch?v=tGdsOXZpyWE>.
- Kelley, T., & Kelley, D. (2012, December). Reclaim your creative confidence. Harvard Business Review. Retrieved December 5, 2021, from <https://hbr.org/2012/12/reclaim-your-creative-confidence&sa=D&source=editors&ust=1627497057686000&usg=AOvVaw3OdY90F4XRpSJxh98lm50X>.

Kienapple, B. (2021, January 12). How to create job aids that improve employee performance.

Venngage. Retrieved December 5, 2021, from <https://venngage.com/blog/job-aid/>.

McDermon, D. (n.d.). How to tell A story. The New York Times. Retrieved December 5, 2021,

from <https://www.nytimes.com/guides/smarterliving/how-to-tell-a-good-story>.

Moraca, M. (2021, May 26). How to keep yourself motivated when you're not feeling it. Tiny

Buddha. Retrieved December 5, 2021, from <https://tinybuddha.com/blog/how-to-keep-yourself-motivated-when-youre-not-feeling-it/>.

Satell, G. (2017, June 21). The 4 types of innovation and the problems they solve. Harvard

Business Review. Retrieved December 6, 2021, from <https://hbr.org/2017/06/the-4-types-of-innovation-and-the-problems-they-solve>.

Twproject. (n.d.). Project benefits: What are they and how to manage them - twproject: Project

Management Software,Resource Management, time tracking, planning, Gantt, Kanban.

Twproject. Retrieved December 5, 2021, from

<https://twproject.com/blog/project-benefits-manage/>.