**Database Final Report**

***What I feel could be improved about this course and the database related assignments***

One issue I had–which probably is completely out of your control–revolves with the grading point system. I took another library class (LI849XI), which had a different point system. One thing I struggled in this class, or more both classes, is trying to figure out if I was doing more work than I needed to or not enough. I feel like if there was more of a uniformed grading scale/system in place, it can help students who are enrolled in more than one class at a time. Again, this doesn’t deal with the course and probably also out of your control as well; however, I thought it would be worthwhile mention.

An aspect about this course that can be improved is downloadable readings, such as something in a PDF format. Throughout the course, I copied the readings from Canvas into a Word document. Occasionally, I came across issues with diagrams, like those dealing with databases, not copying over. I was using Word on a Mac, so there is a possibility something was occurring on my end.

What I think would greatly enhance this course is to have example databases. Such as what students in previous classes created in Access. Most of my experiences with databases before this class has been with Excel and proprietary databases. Being unfamiliar with Access, and OpenOffice and other equivalences, it was somewhat of a challenge for me to try to figure out if I was doing everything correctly. The instructions that were provided for Access were helpful, to an extent. When I was creating my database in Access, I would come across errors. I found the best solution to resolve them was to look the error up in Google or YouTube. In my opinion, having an Access database example that had data, forms, tables, reports, and such where I could experiment with would have allowed me to become more familiar with Access. Being able to experiment with an Access database might have allowed me to resolve the issues I had quicker and possibly create a more robust database.

***What I found most useful about this course and the database related assignments***

One of the things I found useful in this course was the ability to create a database in Access. As mentioned earlier, I have some experiences with Excel and proprietary databases. Besides most of these being complex, I had no role in creating them. The most I do with these databases is input data. Creating an Access database gave me an opportunity that I probably would not have had.

The models, diagrams, and other information mapping and showing the theories behind the databases were informative. Although I have had some familiarity with Excel, databases, and even had some basic database sources, I never got the theories and the models. The diagrams and theories helped me understand the “behind the scenes” aspects of databases. I have found at work when I interact with the databases, I think more now about how they work. And sometimes, I think about if there is any away to change something to make the database more efficient.

***How I feel I will use (or not use) my database skills in my future***

Considering that my current work situation involves databases, I know that I will be working with databases for the foreseeable future. Unfortunately, I do not know how much skills will translate. At this moment, all the databases and the parts of databases (e.g., tables, reports, forms) have been created. That said, if a supervisor wants a new report, they will contact my office. We will sit down with that individual and then determine what needs to be created to pull the information they want in a readable format. At that time, what I have learned in this class will probably become very useful.

One area where I can see these new database skills having an immediate impact is with my square/folk dance projects. For several months now, I have been compiling a list of folk-dance instructors who have taught in Kansas in the last 50 years. A long-term goal of mine is to expand this database to incorporate all 50 states. At that point, a database like this could be very beneficial to CALLERLAB, ROUNDALAB, CONTRALAB, and other folk-dance organizations as the program can be used to organize all the folk-dance instructors, clubs, associations, and other like information. Although I don’t see the database skills I’ve learned being that beneficial regarding my work at this point, I see these skills being very valuable with the folk-dance projects I am working on.

***I feel my own database I created is .... [your description here]***

A work in progress. The class allowed me to get familiar with Access. I know how to make basic tables, forms, reports, and relationships. Inserting Kansas folk dance information into the tables gave me the opportunity to see how the database could manipulate the data. I have a better idea how fields and records work in the tables. I know how to create and modify the forms to allow the input, edit, and deletion of data. Practicing with the report function allowed me how to synthesize and digest the data into readable reports that the average individual could understand. However, I think the database needs a lot more work to be done before it can be useable.

Part of the challenge is I must determine the best way to organize and structure the tables. For example, the different levels of square and round dancing. The levels used in square dancing are Basic, Mainstream, Plus, Advanced, and Challenge. The levels in round dancing are Phase I, Phase II, Phase III, Phase IV, Phase V, and Phase VI. Round dancing, unlike the other folk dances, has different styles. Two Step, Waltz, Cha, Rumba, Foxtrot, and many more. Now, these are fields on the instructor’s table. I question if it would be better to remove these fields and create tables for this data and then connect the tables via some sort of relationship. Overall, I think my database is pointed in the right direction; however, I think I would do some major reorganizing of the fields and tables before I would add more information.

***Three lessons learned for me in this class are ....***

When creating a database have an idea what the finished product should be. For example, have an idea what report(s) one would like to have. I think, this will help significantly in designing the database, especially the creation of tables. If I had a better idea what I would like the finalized product, such as a report, to be, I think I would have done a better job with the tables. To an extent, I was treating the tables as a finalized product. If I treated the report as the finalized product, I think I would have added more tables and created more relationships between the tables.

A lot of models, diagrams, figures, and the like are involved. Creating databases is just more than throwing data into a program. One needs to know how the data relates to one another and how the data will be organized. Models and diagrams can allow one to see how data between different tables are related. I think studying the models, diagrams, and the like more thoroughly would have helped me. I think if I spent more time looking at how the boxes were connected and related to one another in the models, I think it would have made it easier for me to create relationships in the database. Furthermore, I think it would have also allowed me to create more tables and create more relationships in the database that I made.

The internet is a wonderful tool. What I found especially helpful when working on my database was watching videos others had created. When following instructions for creating databases in Access, I could not figure out some steps. Looking up videos, such on YouTube, helped me a lot as I could see exactly how each step is supposed to be done. I discovered that I learned how to do things more quickly in Access by watching videos than by reading instructions. Creating databases is not always simple. Looking up directions, especially on YouTube, can help significantly. Other individuals probably have had similar issues, and someone most likely has uploaded a video onto the internet about how to work through it. Looking up these videos and watching them can help one quickly build parts of the database and/or reduce the amount of time trying to resolve issues.

***If I were to give three best practices for database development to someone else I would say ..***

Keep abreast with the different database options that exist, such as the offerings from Microsoft, OpenOffice, and more. If one is working on a database that rural library communities could adopt, OpenOffice may be a better option as it is a free. OpenOffice or another free database software may be more than suffice for a small rural library. For a bigger organization that has interest in creating a large and complex database, Access or another proprietary may be the better selection. Being aware of the different database options will allow one to determine which software will be the best option for one’s organization(s) and projects.

Practice, practice, practice. The way one will get more familiar with database creation software is by using them. Practicing with a mock database will allow one to become familiar with all the tools and options available. This is also a great opportunity to practice resolving errors that may arise. One can practice the layout and designs of the tables, reports, and forms. Using a mock database can allow one to work on forming relationships between tables. Besides making it quicker and easier to create a database, practicing can help resolving issues with minimal data loss and can allow one to make a more robust and complicated system.

Patience. From my experience in class and at work, patience is important. Sometimes at work, someone stops by the office and would like a new report to be created from the proprietary databases we use. We sit down with these individuals and try to figure out what exactly they want. As these individuals do not have experience with the database or do not know what the database is capable of, sometimes it takes time and trial and error to figure out exactly what they need. When I was creating the database for the class in Access, it took time and trial and error as well to figure out how to set up the tables, relationships, and more. Creating databases is not always a simple task. Databases can be quite complex. Furthermore, those requesting databases or reports may not necessarily know what they want exactly. Having patience can make the process go more smoothly.