	PROGRAM COMMITTEE NAME:	Computer Information Systems Business Leadership Council – for COSC

CHAIRPERSON:	Karen Boatman

MEETING DATE:	06/09/2023	MEETING TIME:	3:00 pm	MEETING PLACE:	Byrd Business Building, Room 215
RECORDER:	Kathy Davenport			PREVIOUS MEETING:	04/14/2023

COMMITTEE MEMBERS

	NAME	TITLE	EMPLOYER INFO	PHONE	EMAIL
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AGENDA ITEM	ACTION / DISCUSSION/ INFORMATION	
Old Business:	N/A	
Continuing Business:	NA	
New Business:	KSA Analysis	
Curriculum Decisions:	NA	

Other:	NA	
KEY DISCUSSION POINTS	**DISCUSSION**	
Continuing Business		
New Business:	The meeting was called to order at 03:05PM. Chris George started the meeting. There were no new attendees, so no introductions. Chris went straight to the KSA list with the results of the voting. He explained that any on the list that were rated at 2.8 or higher were things that the BLC voted as necessary. He stated that any of those that the program is already teaching didn't need to be discussed. He explained that anything 2.7 or lower would be discussed for a better understanding why they were voted lower and if those items needed to have less of a focus in the course, or even not taught at all. He went right into the list to begin discussion.	

"Analyze Business Problems" – 2.7 – He stated that he understands that a lot of these skills can be very vague, so that could easily affect the voting. Star stated that he rated it very low at a 1. He stated that he wouldn't expect an entry level person to need to make these decisions. He stated that they should have a general understanding, but he wouldn't expect them to go out and find these problems. Delane asked for those that voted this as a 3, why did they vote it that way? Zack Newbill stated that he felt it was important for them to at least know the basics and if the students know a couple of scenarios that will help them with any business rule that comes in the future. Julien Jacquez agreed he thinks it's pretty necessary because a lot of business problems are pretty similar, and if they can recognize a similar situation, it will help them to already have an idea of how to fix it.

"Analyze information technology problems" – 2.7 – Zack stated that a lot of this will depend on the company that they go to work for. He stated that in a smaller business, a programmer might need to know this. In a larger company, they probably have a dedicated team to work on it. Star and Julien both stated that they saw this more as a help desk type problem, and they wouldn't have an entry level person on the help desk just quite yet. Star stated that he didn't think this was an entry level, but more something that is learned over time.

"Analyze website usage metrics" – 2.7 – Star stated that he didn't think that was necessary for a developer, that it would more be used by a business analyst than a developer.

"Prepare data for analysis" – 2.7 – Star stated that wouldn't expect an entry level person to really know this or have any experience in it yet. He stated that he approached pretty much the whole list from that mind set, and this one is not something he would expect an entry level person to really know how to do yet.

"Prepare flowcharts" – 2.3 – Star stated that he would expect something like that would come more from a manager than from an entry level person. Delane McUne explained that where the instructors were coming from on this is that the flowchart was an integrated concept of logic. Star stated that looking at it that way, he would change his vote to a higher rating. Timothy Vo explained that students need to at least understand how a flow chart works, even if they don't necessarily create it.

"Provide information technology support" – 2.5 – David White stated that for him, that itself is a learning curve. If someone were to come to him asking a question like that, he would do what he could to find out the answer and learn

something new. Madison said that she wanted to echo what David said. She stated that going through school, she never thought she'd have to do as much IT as she actually does. She stated that she was surprised how often she needed to know simple things like how to turn it on, etc. Star stated that a lot of people get their start at the IT desk because you can kind of learn a lot as you go.

"Design video game features or details" – 2.5 – Zack stated that unless you're wanting to go specifically into game design, it probably won't do a whole lot for you. Chris asked if there was any cross-discipline opportunity for that? Star stated it is such specific skill set that it might not really cross over. He stated that there is such a big difference even between the two game design programs that it really needs to be more specific.

"Develop databases including tables, relationships, and queries" – 3.7 – Chris stated that he wanted to discuss this one because it shows a high rating, but later on when the specific databases were rated, they were all rated low. He asked the group why this was. Zack stated that certain, specific databases may not be the way to go, but having a knowledge of how they work and how to use them is important. He stated that Access is not necessary at all, but SQL would be a good one to know. Star and Zack agree that learning SQL and then moving to a non-SQL is much easier. They both stated that if you start with something that has structure and you have to learn the basics, then moving to something else less restrictive is much easier. Madison stated that having a broad overview of how the databases work and knowing when to use it is more important than knowing specific database tools. She stated that the concept is what is important. Star agreed with Madison that it is important to know when to use certain databases.

"Develop testing routines or procedures" – 4.0 – Chris stated that they really just wanted to get some clarification from the BLC about what that meant to them and why it was rated so high. Zack and Madison both stressed test your code! Zack stated that you also need to know how to document your test to prove your code.

"Train others in computer or software use" – 2.7 – Zack and Madison both stated that an entry level probably wouldn't need to know this. Zack stated that an entry level person wouldn't necessarily be training others on how to use it. Having a general knowledge of simple things like Microsoft Office is good, but teaching others software is something that would likely come later with more training.

"Studying emerging industry or technology trends" – 2.7 – Zack stated that it is important to know where the technology is moving, but as quickly as technology changes, things could be irrelevant next week. He stated that it is more important to have a working knowledge of the basics. Madison agreed that while it can be important for the students to stay up on what is up-and-coming, it's not as important that teachers teach it.

"Communications and Media" – 2.2 – Zack stated that it is important to know how to use the different communication tools, but most developers likely won't be communicating with the customers directly. Star stated that again, it's not entry level necessarily. He stated that higher level developers might need to communicate what they are doing, but most of the time, entry level won't need it. Zack stated that a lot of companies will have entry level people helping on projects like that, and they could be included in the presentations, so knowing how to communicate what you did within the project is important. Julien stated that he didn't think there needed to be a whole class on it, but maybe something within a class that the students work on a project and have to present it to the class.

"Customer and personal service" – 2.7 – Star stated not at the entry level.

In the Skills portion, Chris noted that all of the skills listed were marked as high, so the BLC found all of the skills to be

important. There was one marked 2.8, and Star asked what it was. Chris noted that the ony 2.8 was in customer service.

Chris moved to the Tools section. Many of the tools were ranked low, as previously discussed. Chris asked about Android and Swift. He asked for discussion about mobile applications. Star stated that he was looking at the tools more for things that could carry over more. He stated that C# is one that is used in a lot of different platforms. He stated that if you can understand C#, you can understand Java and others. He stated that it's hard with things like Android because if you understand the basics, you can teach yourself how to build on a certain platform. Zack stated that so many companies are going to cross platform apps, and if you only know Android, it can hinder what you're able to do. Madison agreed that knowing the basics is most important because if you don't know why a code is doing what it's doing, it can be that much harder to figure out.

Chris stated that there are so many tools, but there is only so much time to teach it all, so they have to make sure that they are teaching what the industry wants them to know.

Chris asked about CSS and HTML and why they were rated low. David White stated that they are important as a web designer but not as a developer. Karen Boatman spoke up to stress that in this process, we have to look at the program as a whole, not just one aspect of it, and since Web Development is one of the parts of the program, it is something to take into consideration. She stated that is why there is such a diverse group of people in the BLC meeting because we have to look at all areas of the program. Star stated that yes, it is important because things like CSS can be used in other areas, but he can understand why it would be more important in web design. Zack stated that understanding the basics of CSS is important because so many people don't realize that in CSS, you are overriding each thing you do, so you have to understand that to use it effectively.

Chris stated that Microsoft Office got a 2.7. Star stated that Word and Excel he uses every day, but he has never used Access. Karen and Delane explained that as a transfer course, they have to teach a little bit of Word, Excel, Power Point, and Access to stay compliant. Star stated that he could maybe see Access in a larger company, but he's never had a need for it. Delane stated that they have had student pushback about why can't we just use Google instead of Word, and she asked what the BLC thought about that. Star stated that Excel has so much more that can get done with it. Zack stated that if they move into an organization that uses it, but they don't know how to, it can be hard. He stated that it goes back to SQL – learn the hard one first and understand it, then go use the easier one if you want to.

Chris asked about Node.js that got a 2.3. Star stated that Node.js is basically an extension of Java Script. He stated that if they can learn Java, they can basically learn Node, too. Zack agreed with that, so Chris moved on. He stated that Oracle Java was also rated a 2.3, and asked about it. Madison stated that new applications are still being created in Java, and she just created something in Java.8, so it is still relevant.

Delane McUne asked the BLC about Programming Fundamentals. She stated that all the programs used to have a lot more of than they do now, but due to feedback from others, they have moved away from it in some areas. She asked if that is something that is needed. Star responded that yes, it is needed. He stated that he didn't learn any coding at all, but it did change the way he thought about development and processing. He stated that he learned so much about how to figure out why things weren't working, regardless of the language used. Zack stated that he didn't think they necessarily needed all of that, especially in something like Web Developing. Star disagreed and stated that again, he is thinking of it from an Entry Level Position standpoint. He stated that if they come in not having taken the class, it might not necessarily matter, but if they have that basic understanding, they are so much more of an asset to him and his

business. He stated that the truth is that if as a developer you run into something hard and just give up, you probably shouldn't be in that field in the first place. He said there will always be hard things in development, especially at the beginning when you don't understand much, but if you just give up, you probably shouldn't have been there at all.

Chris moved the conversation on to the next skill, PHP. Delane stated that Star had mentioned his brother was in Web Design and couldn't get a job because all he knew was PHP and it's not used anymore, so Delane wanted to know if that was something we needed to be teaching or not. She stated that they had moved the advanced web development class to Python, but they aren't sure if the students are getting out of it what they need to. David White spoke up about PHP stating that he just came over from another community college where PHP was being used very heavily. He stated that there is a bit of debate about it, but it's kind of like a fax machine – will it ever really go away? He said there should be at least some basic level knowledge of it because it is still so widely used in places. There was a lot of discussion about API's and advanced development can use those more than PHP. Zack stated that perhaps an idea is to have the students create a project where they have to create a site that produces X Y and Z, and they can do that in whatever language they want to, but it has to work. Delane stated that they could then have the students present it at the end and explain why they did what they did to make sure that the students understand the concepts.

Chris moved to Python, voted at 2.7. Star stated that it's an important language to learn, but it should really never be used. Star stated that this is where it gets hard for development, because they really care more about the concepts and not so much about whether or not they understand Python. Madison stated that Python can be a really powerful scripting language, but she agrees that the basics are what is needed the most, and then later you can build off the basics. She stated that she feels like it's more important to know when and where to use these tools than to emphasize the tool itself. Star agreed that it was more about knowing when to use the tools because each one can have a specific use.

The last category Chris brought up were things that were mentioned by the BLC, starting with PowerShell. Star and Zack both agreed that no matter what you're doing, you should know PowerShell. Star stated that it's cross-platform and that makes it most important.

Microservices and containerization were the last on the list. Madison stated that she uses both, and uses Docker every single day. Zack asked about Cloud services for this. Delane stressed that there is no Cloud services taught on the programming side. Zack stated that he thinks that there should be at least some discussion about Cloud because he thinks that more businesses are going to that. Madison stated there should be some discussion about architecture, as well, because so many people are thinking they can just throw something into a container and put it on the cloud and it works. She stated that the architecture is important with containers. Star asked Madison if she ever had to write any CICD stuff. Madison stated that in her present company, they have a dev ops team that does it all for them, but her previous company didn't have that. She said they didn't have containerization and didn't use cloud, so she had to do some of that herself, but now with the dev ops team, she doesn't do that anymore. She said it's really more about the company you work for and what they offer.

Chris commented that it was now 5:00 and asked if there were any remaining questions. Karen stated that from here, they will take the comments and notes from this meeting and go back to the list of the KSAs. She said that they will break down where each of the KSAs is being taught and will go over where changes might need to be made.

Other:	The meeting was adjourned at 5:00PM.

Recorder Signature: *Kathy Davenport*	Date: 06/14/2023	Next Meeting: TBA