

Questions and Statements relative to the Information Technology Pathway

(Note: Questions/statements are in no particular order)

Can you tell me about some of the Industry partners and a summary of the key inputs from the industry partners . What were some of the potential industry partners asking for?

- Industry partners included leaders and team members from the following: Microsoft, Lunavi, Visionary Broadband, State of WY ETS, Echostar, Meridian Federal Trust Credit Union, Union Wireless, Centurylink, Blue Federal Credit Union, Magpul, and several more.
- The overwhelming feedback from industry was identification of emerging technology training needs, certifications, and a demonstrable skillset from applicants. This really echoed my experience in industry and guided the decisions on what to offer and prioritize. In my personal opinion, the most exciting request we had was in the way we approach Data Analytics. In most institutions, Data Analytics is driven as a science and math focused degree, focusing on the why's and how's of data collection. Instead, based on industry input, we have decided to focus on the application of that data to achieve actionable outcomes. Business intelligence is a rapidly growing subset of data analysis, that we will be leading the charge on instructing.

Who is the current coordinator?; and what are their current roles and responsibilities? (in the light of the recommendation for the role to become a director position)

- I am the current coordinator, with role responsibilities including faculty leadership and development, programmatic review and development, oversight of the concurrent courses for our program, instructional load, and programmatic planning. Outside of those responsibilities, I also sit on Faculty Senate, execute a significant amount of project management within the program, assist other departments with proposals and initiatives (such as esports) and work to constantly develop efficiencies and capabilities. In the coordinator role, I am considered Faculty-B, with a 10-month contract.
- While the change from coordinator to director seems self-serving, the alteration is at its core intended to provide additional time to execute projects, seek alternative funding sources, and further develop industry partnerships. Since beginning the role in Jan 2019, I have made it my mission to set LCCC on the map in IT education, culminating in the significant changes we have seen thus far and the Pathway we are discussing tonight. The truth of the matter is, I need more time on contract to push us forward at the pace I expect of myself. Shifting to Director moves the position to Faculty-D, and more importantly, a 12-month contract.
- Beyond all of that, a review of the position as I have been executing it these last two years, using the coordinator/director matrix, indicates that the position should be at the director level regardless of the development of the Pathway.

There's a statement about programs not currently being offered - are there any other community colleges or UW or private companies offering some of the same capabilities since what you said is the majority is not being offered by any higher education provider in Wyoming..

- The University of WY does not currently offer any of these programs, and the other community colleges are limited in their offerings. In the last two years, we have undergone a massive push to filter out courses and programs that do not really fit with the modern IT expectation, while the other colleges hang on to them. Casper College has a similar Network Administration CD program, and some Cybersecurity offerings. The remaining offerings are as follows:
 - Telecommunications – Not currently offered by any WY community college. Was being explored in the same field as us summer 2020, but the budget cuts from the state resulted in abandonment of their efforts. We will be the only source of this program in WY.
 - Datacenter Specialist – Several other WY community colleges offer CompTIA A+ courses, but lack the rigor and depth that ours has. Our close relationships with industry partners have resulted in a program that a relative novice can undertake, and be equipped for an entry-level position in just one semester.
 - Virtualization and Cloud Admin – No other school or known private entity in WY or the surrounding area are offering this program.
 - Data Analytics – UW offers a Data Science program, at the BS, MS, and PhD levels. Their programs focus on data collection process and theory. Ours will focus on how to apply the data collected from other resources (such as Google, facebook, etc.) and leverage it into actionable intelligence.
 - Applied Programming – UW's Computer Science program focuses on the mathematics and science involved with high-level software development. Our own COSC AS transfer degree feeds into those same principles. Our proposed Applied Programming courses will focus on web and mobile application development, which are the industry leaders of positions by volume. In reality, this is similar to a portion of the offerings from Array. However, unlike Array, our programs are designed to support the person starting from 0, in a format that they can work into their personal lives, and at a cost only community colleges can offer. Array has an amazing program, and I want to stress that our goal is not to compete, but to co-exist and serve different market groups.
 - Database Administration – Database Admin is offered currently through CWCC, Casper, and WWCC. However, an inspection of their programs demonstrated stagnancy, and too much focus on singular on-premises solutions. We will be leveraging our program into several database structures, with a significant interest in cloud-hosted database administration.
 - None of the proposed BAS programs are offered in WY, through higher learning institutions nor known private entities.

For the comparator programs, how long have some of those been in existence?; and what are some of the lessons you garnered from the research on what worked and what didn't work?

- In all honesty, gathering information regarding these challenges was quite difficult. Strangely enough, when you inform a potential competitor that you are developing a similar program, they tend to become a bit uncooperative. However, through our industry

partnerships, I was able to glean data from a program lead at Maricopa CC's primary technology school at Estrella Mountain.

- Their telecommunications program has been in existence for at least five years, with consistent enrollments. The biggest challenge they had/have was building and maintaining a lab environment through industry partnerships. From discussions, they try to manage everything through budgetary processes, and do not pursue federal funding.
- Their virtualization and cloud offerings are small and lacking modern relevancy, focusing on open-source technologies and older systems. Finding qualified and willing instructors has been their biggest hurdle.
- Their Datacenter program was also developed in partnership with Microsoft, using our model. Due to the volume of enrollment they have, they are able to run a closed program.
- They do not have a Data Analytics program as we are proposing.
- Their Applied Programming is focused on the Computer Science path as opposed to the mobile and web application development. They are undergoing a review and potential addition/revision at this time.
- Their Database Admin program has already made the shift that we are looking to make. They have seen high graduate placement rates, but have stated that the rigor does result in a more pressured program (we are facing a similar challenge).

The Pathway requires reactivating some programs are on hiatus - can you give some information the difficulty/process to reactivate?; and what are some of the issues involved in that reactivation?

- This is actually quite straight-forward, and is in the process of being addressed. We will only be bringing one course out of hiatus at this time, CMAP 1815 Database Applications. A review of the course across the Wyoming Community College network revealed that many colleges still offer it as a Microsoft Access class, which is outdated and potentially irrelevant. We will put the course on the books as such, working within the bounds of the MCORs while we develop a more robust new course that better fits our needs. No programs will be coming out of hiatus. They will be completely overhauled and fit the model of new programs.

The staged approach looks like it has been well thought out especially since it provides many opportunities to change if something is not working out. That is a strong feature of this plan.

- Thanks! We also feel that this allows us breathing room and expansion time if the growth or recovery bucks trends.

Referring to the Pathway Design Diagram, I like the exit points idea for careers. What is the thinking for re-insertion points if a person exits to go to work and then comes back, how might that work out in the Pathway?

- The design of the Pathway, where the student is potentially employable after the first year, is such to promote additional development through the credit diplomas. After year 1, a student will choose 2-semesters of credit diplomas to pursue, and will be ready to graduate after their completion. This has a few impacts:
 1. Students who leave for the workforce and return can focus on just credit diplomas for their graduation requirements. If credit diplomas change in the interim, this is not an issue, as students can simply select one of the newer credit diplomas to fulfill the requirements.
 2. Students who choose to drop to part-time student status can still complete their degrees, albeit spread over 3 or 4 semesters.
 3. Students who join the path in the middle of the year (Spring enrollees) can still fully complete in 4 semesters, unless they wish to pursue a degree offered in a fixed sequence, such as Applied Programming. However, they are able to complete it in 5 semesters, and the extra semester is not wasted as they can fill the semester with a different employable skill / credit diploma.
 4. Graduates who leave for the workforce and decide to return for another skillset can do so easily, broadening their marketability by completing another credit diploma.
 - a. The BAS is designed in the same fashion, for both consistency and student success.

Looking at the unique start up cost and facility needs - the \$4500 to bring it up to a more modern looking place seems low, so please elaborate on what that really means.

- There are two expenses listed in the initial startup costs. A \$2500 expense to update the NERD Center, and a \$2000 expense to update the basic look of the class spaces and BT 2nd floor common areas. These two expenses are not intended to resolve all issues, or update all of the systems in the department. There are separate proposals that have been or will be put forth for federal funding to attempt to cover these costs. Requests for federal funding grants will be leveraged in every method available to mitigate the start-up costs for the pathway. The faculty of the Pathway feel that we can continue to leverage recycled assets and resources to the best of our ability, and will look to expand capabilities as alternative funding sources are identified and realized.
 - \$2500 NERD Center updates: In the Fall of 2021, we anticipate bringing the NERD Center online. Similar in functionality to the “Fishbowl” community IT Service, NERDs will focus on assisting non-profits and some small businesses in the community. We have already initiated a partnership with ServeWY to provide student volunteers with stipend opportunities, and are going to tying the new center to new professional development club. The costs associated here are to update monitors, tools, and test systems in the space.
 - \$2000 Marketing update for the BT-2nd floor: Working with the LCCC Foundation and Marketing team, we have identified a plan to replace aging and irrelevant art and materials in the space with technology images and program marketing. This update will serve as a partnership pilot to identify the viability of such low-cost updates in other

programs in the future. Artwork will be replaced with custom imagery from the program, printed on foam-core from the LCCC print shop (similar to the installation in the VPAA office). This allows us to update imagery at low-costs and without relying on external resources. Additionally, we will be installing (2) 55-65" 4k displays, connected to microcomputers that allow us to show custom videos, advertise program and course offerings, and even current display industry job postings in the market.

Overall, this proposal excites me. I think there's some things we have to be concerned about (e.g., adequate promotion to get students) but nothing that would stop us from proceeding along the way. I would recommend that you be prepared to emphasize to the commission how this Pathway is unique and important; and about the thinking on a potential additional BAS program