Des Plaines Valley Region IT Committee Final Report - 2020-2021

Note: The DVR IT Committee met twice during the 2020-2021 school year. Both of these meetings were virtual. The first meeting was on October 21, 2020 and the second meeting was on April 21, 2021.

Conference Discussions and Outcomes

Over the course of the year, committee members attended the School College Alliance Workshop, CyberCon, Connections and the NICE Conference (Cybersecurity). From a technical perspective, the main themes taken away and discussed were:

- Demand for Cybersecurity professionals even at the entry level are still very much in demand
- Educators in the state are still determining what "computer literacy" really means as it pertains to HB 2170 and some new requirements in the coming years

The NICE Conference, which is the only high school cybersecurity conference in the nation, continues to be one of the most beneficial technical conferences for those that teach cybersecurity. This year again, employers attended the conference to help high school teachers steer students with interest/skills into this high need area. Leyden has attended the last two years; but more member schools will attend in the future.

Based on professional development and learning, the members of this committee are continually looking for ways to get IT students employable - with skills - sooner. The professional development attended continues to stress the need for skills over degrees. This was a main point of conversation this school year.

Current Technology Trends

The committee agreed that in order to provide the most relevant technical education, we must stay relevant to the current marketplace. This requires teachers to be continual learners and our member schools administration to be responsive to the marketplace needs. Outside advisory teams are implemented at Leyden; other member schools see the value of this and will continue to investigate. Continual following of marketplace needs is a must for every IT department to ensure we are staying relevant.

There were numerous discussions about cybersecurity, which is now being taught at two member schools. Students are interested and the number of sections is climbing. High school curriculum wavers greatly - from PLTW to independent curriculum created by cybersecurity professionals. Discussion on "how" to teach the subject in a hands on environment (in sandbox environment) was discussed to ensure students are garnering the entry level skills needed.

Coding and Programming continue to be discussed as all schools are looking for alternative ways to engage students. A member school is using Carnegie Mellon online curriculum, while others are using Java and code.org to teach the fundamentals. New and innovative ways to teach programming such as development for virtual environments are being developed as well. Either way, students are likely to be more engaged (and learn more) when the programming content is relevant.

Triton Dual Credit Update

Members discussed dual credit opportunities at Triton at each meeting. Triton continues to work on new/innovative ways to offer more dual credit opportunities. Some in the works involve a certificate for A+ and MOS that will hopefully allow students to gain certification/experience and immediately look for employment. The existing dual credit for various certifications (such as CompTIA A+, CompTIA Net+ and Microsoft Office) still exist - and students are taking advantage of them.

One of the next steps will be to work on a cybersecurity dual credit opportunity with those schools that are teaching curriculum in that area.

Technical Reading/Updates

Through the year, members discussed some of the current technology trends based on reading and discussions with outside advisory boards. All schools understand and realize that they need to be continual learners to ensure they are providing the most relevant content. Subjects discussed:

- Skills are becoming increasingly important over a formal IT degree
- One year certificates need to be prioritized to get students employable at a quicker pace
- Some colleges have started offering a IT Acceleration program and provides internships along with studies
- Soft skills and the ability to understand business from an IT perspective are increasingly important
- The ability to problem solve is one of the most desired traits for an entry level IT candidate

Members discussed the struggle to find professional development in emerging areas where we can keep curriculum relevant for students.

Other Considerations and Conversations

• Members shared various strategies to teach in an online/hybrid environment at the first meeting. These strategies were beneficial to all and were piloted at various schools.

- Leyden is partnering with Google on the Google IT Certification program. The pilot will be done at the end of this school year and they will roll with a full time offering next year. This partnership not only includes the curriculum and test vouchers but also possible job placement on completion. Triton will also look into this as a dual credit opportunity.
- eSports is coming to some member schools. While this is a fun way for students to be involved, there is obviously a tie in to Video Game Design and Programming. Schools discussed how those integration efforts will work.
- Some member schools are using PowerApps by Microsoft which introduces students to databases and database applications.
- The group continues to discuss grants and grant opportunities many of which go unclaimed due to lack of participation.

Respectfully Submitted,

Tony Pecucci Business/IT Committee Chairperson