# Des Plaines Valley Region IT Committee Final Report - 2019-2020

## **Conference Discussions and Outcomes**

Over the course of the year, committee members attended the School College Alliance Workshop, Careers Conference, IDEA and the NICE Conference (Cybersecurity). Members were scheduled to go to more conferences this year, but they were canceled due to COVID-19. From a technical perspective, the main themes taken away and discussed were:

- Apprenticeships versus Internships
- Tech student pathways post-graduation
- Career endorsements on high school transcripts
- Reading and Writing within CTE classrooms
- Student panels Student needs and outcomes from CTE
- Cybersecurity Programs

The NICE Conference, which is the only high school cybersecurity conference in the nation, was a great experience by all accounts. The focus was on starting a cybersecurity program at the high school level - with excellent presenters and workshops. Employers also attend this conference to help high school teachers steer students with interest/skills into this high need area. Members will continue to attend this conference in future years.

All member schools agreed that more has to be done to guide technical students into immediate pathways - whether that be immediate employment and college entrance. Both pathways are viable, depending on the career area of choice. Members will continue to investigate this and look for online conferences to possibly attend over the summer.

## **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.

Leyden has renamed their Computer Networking class to Cybersecurity/Networking. John Cloud (Leyden) ran through his curriculum with the committee and discussed early results on his pilot activities. This is a current need area (per the above) so it will continue to be discussed. Discussion will continue in this area at future meetings to ensure we are doing the best for all students.

## **Triton Dual Credit Update**

Members discussed dual credit opportunities at Triton. Leyden discussed the success had with industry certifications that garner dual credit at Triton (CompTIA A+, Net + and some MOS Certifications), while Elmwood Park and Ridgewood discussed Computer Science and MobileMakers opportunities. All committee members want to continue to provide as many dual credit opportunities as possible; however, the instructor qualifications can be a very big obstacle in pursuit of those options. An idea was discussed to have a DVR Educational Cohort for Computer Science teachers so they could attain what is needed to provide opportunities for students. Members will continue to discuss ideas that will move potential CS students further along at Triton upon arrival. Discussion on this will continue at future meetings and ideas will be shared.

Leyden has had some students go beyond the typical certifications, with a select few getting certified in Linux + and even CYSA + certified. Discussions were held with Michael Henson to see if students can get Triton credit for those additional certifications. Leyden will work with Tim Nystrom on this; but likely, the student will need to speak with the Triton counselor to see what additional credit will be given. We will continue to look at this in future meetings.

## **Technical Reading/Updates**

Through the year, members discussed some of the current technology trends based on reading and discussions with outside advisory boards. Discussion was held on the importance of new trends and how to attain instructors/provide instructors with the ability to teach classes. Subjects discussed:

- Ambient Computing
- Major companies (i.e. Google, Apple) eliminating 4-year college requirement for tech positions
- Constant need of cybersecurity professionals
- Emerging areas in Al and Data Analytics
- Emerging jobs in Augmented Reality and Virtual Reality
- Focus on Object Oriented Programming
- Game Design focus on Unity software

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

## Other Considerations and Conversations

- Digital Gaming is taught at most member schools. Members discussed moving to Unity in many classes and the appropriate way to introduce the software.
- HTML and CSS are taught at all member schools.
- Coding sequence is a continual discussion. This will make sense for all members as students attend Triton. The current discussion is to start with Python as students can be successful in that area. Currently, Triton starts with C++ which has caused some issues.
- Robotics is an area that can be taught by Science (at some schools) and Tech Education at others. Discussion was held to further think how robotics may be implemented into tech classes.
- Continual discusson bringing females into technical education. Leyden tried a
   "Technology and Tea" event in 2019 that did not run due to lack of participation. Triton
   tried a TechSavvy event that was canceled due to COVID-19. Discussion and ideas will
   continue to be held.

Respectfully Submitted,

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Business/IT Committee Chairperson