Des Plaines Valley Region
IT Committee
Mid-Year Report - 2021-2022

Conference or Webinar Attendance Sharing - Past and Future?

- [**NICE K12 Cybersecurity Conference**](#) - Leyden will be sending two representatives to this virtual conference. This conference is one of the only available to those who teach cybersecurity K - 12. Leyden learned about cyber.org and US Cyber Range at this conference, which is now what is being used for Leyden Cybersecurity.   Leyden will share some thoughts about this conference in the Spring.
- [**CSTA**](#) - Ridgewood mentioned that this conference is getting bigger and bigger and is a great opportunity for computer science teachers to collaborate. The 2022 conference will be in July in Chicago so it is a good local opportunity for DVR teachers to attend. The focus will be on scaling computer science for high school students. Members will make every effort to attend as it is a local conference.
- **Harper College - Technology Sector** - Triton attended this conference which focused on what employers of IT are looking for. Much of the emphasis is on Cloud Services and Cybersecurity. This is good for our DVR partners to know as we continue to look at curriculum and attempt to give our students the best chance to succeed.

Triton Updates

- Triton has moved to a new class to cover the **CompTIA IT Fundamentals** test (CIS 102). The curriculum is largely based on the test objectives. This test is a logical next step to the CompTIA A+ certification. At the end of the class, there is an option to sit for the exam.
- Triton has also streamlined their **Cisco** sequence with the object of getting students **CCNA certified**. This was helpful for partner high schools as they look further at their Networking curriculum.

Coding/Programming/Video Game Design Updates/Ongoings

- [Carnegie Mellon Python](#) (Leyden/Ridgewood) - Ridgewood started using this curriculum as a guide when school was remote/hybrid. Leyden started using the curriculum this Fall. Because the curriculum is more graphics based, students get a better understanding of coding/programming without the terminal based interface. Most students and teachers agreed that getting students through four (4) units of this curriculum gives them a better understanding of coding fundamentals (conditional statements, loops and net handling). Ridgewood mentioned that they use **Project STEM** and Elmwood Park stated they use **Tinker,** which offers free Python training with 14 lessons.

- **Video Game Design Considerations (Leyden)** - [Game Guru](#)/[Horizon Worlds](#) - Leyden has been using **Fusion** to teach game design for the last 5-6 years. While they will continue to use Fusion, they will move on to Game Guru and Horizon Worlds to provide more graphical results and representation for students (links above). Both Leyden and Ridgewood continue to use Unity for advanced students with mixed results. Ridgewood also uses **[Pygame](#)** and **[Pi Zero](#)** which are all on the Raspberry Pi, both are free and available. **[Earsketch](#)** was also mentioned as an option for students who like to create music. All schools will provide an update on their curriculum in the Spring.

Cybersecurity Updates/Ongoings

- [Cyber.org](#) & [US Cyber Range](#) (Leyden) - Leyden has moved on to teach cybersecurity content through **cyber.org and US Cyber Range.** This combination allows students to get real hands-on experience using Linux Kali and Microsoft Windows in a "sandbox" environment. Students get to work through content and labs where they execute the hack and also play the victim through the Windows environment.
- Ridgewood is teaching cybersecurity through **PLTW** which has provided students with various scenarios that address system security and network security issues.
- Both schools will provide updates to these systems in Spring as they are both a work in progress.

Certification Ongoings

- [Google IT Certification](#) (Leyden) - In addition to MOS certification and CompTIA certification, Leyden began offering Google IT certification in the Fall of this school year. This certification is one of the only where a final test is not needed to obtain the certification. Leyden has about 20 students district wide that are attempting this certification. Leyden will also ask their professional advisory about the usefulness of this certification at a future meeting. Leyden will report out in the Spring.

New and Evolving Curriculum

- [10 Fastest Growing Science/Tech Jobs in Next Decade](#), [Starting a Career in Cybersecurity](#), [Cyberstates/CompTIA](#) - The group reviewed and discussed the three documents above and used them as a steering for future curriculum decisions. The group decided to bring any new news or curriculum opportunities to each meeting starting in Spring of 2022.

Respectfully Submitted,

Tony Pecucci
Business/IT Committee Chairperson