DVR IT Committee Minutes

November 15, 2022 West Leyden High School, Eagles Wing 1:00 - 2:30 pm

I. Introductions

Tony Pecucci (Leyden), John Cloud (Leyden), Stephanie Sneath (Ridgewood), Neil Posmer (Elmwood Park), Patrick Woulfe (OPRF), Maureen Miller (OPRF), Erica Kouba (DVR)

II. Conference or Webinar Attendance Sharing - Past and Future?

A. NICE K12 Cybersecurity Conference

Leyden will be attending the NICE K12 Conference in December 2022. Leyden believes that this is one of the most valuable conferences to attend given that only 9% of Illinois high schools teach a course specifically on Cybersecurity. The conference is specifically geared towards educators K-12. Ridgewood shared that they will be starting a Cybersecurity program next year; Morton High School will also be starting a cybersecurity program next year.

III. New Triton Developments/Possible Dual Credit Update/Information (Michael)

A. Certification Dual Credit (Leyden)

Michael Henson (Triton) was ill and unable to attend this meeting. However, the group did speak about certifications available at each high school, how/if they transferred over to Triton, and how to market that opportunity to students. The group also discussed various opportunities to build dual credit within the technology curriculum offered at each school.

IV. Coding/Programming/Video Game Design Updates/Ongoings

A. Move from Raspberry Pi to Adafruit (Leyden)

Although Leyden had been using Raspberry Pi for years, they recently made a decision to move on with Adafruit. This move has brought some renewed interest and engagement for students due to the project nature of the program (Ping Pong Launchers, etc.). See additional details on the link which leads to more information below.

B. Move from Fusion to GameGuru (Leyden)

Leyden has been using Fusion for many years to teach Video Game Design. While the program has its merits in terms of teaching logical coding, the graphical interface is becoming outdated. Leyden shared its current use of GameGuru - which is a new software, but more graphically appeasing with more flexibility to create current games. Students in Video Game Design II have been piloting the software for the first semester.

C. Anyone use micro:bit and free curriculum from Parallax?

Leyden will be attending the conference listed above and will be attending a workshop on how to use the micro:bit for Cybersecurity reasons. Besides Ridgewood, no other school is currently using Parallax tools in their classrooms. Leyden will report back at the second meeting regarding the workshop and any additional lesson plans that have been created to share.

D. OTHER?

V. Cybersecurity Updates/Ongoings

A. <u>Cyber.org</u> & <u>US Cyber Range</u> Update (Leyden)

Leyden provided an update on their use of cyber.org for curriculum and US Cyber Range for executing the curriculum. Students have really enjoyed the hands-on cybersecurity labs that this curriculum/online software provides. Because it is in a sandbox environment, the students can do no harm to any network, OS, or PC. Students also get a real world look at the work one does in the field, so this provides a stronger look at the Kali Linux OS. Kali Linux has been recommended by the Leyden Advisory Board for years.

B. IBM Work Based Study Opportunity (Leyden) Folder

Leyden shared the IBM Work Study Opportunity. Leyden had not heard back regarding the participation in this opportunity - but will share when/if the program becomes available and what the current status is.

C. Investigation of Computer Forensics introduction

Through conversations with students, we have heard that many are interested in law enforcement/solving cases. The group discussed some possible ways to introduce digital forensics into the curriculum - along with some possible mentorship from local law enforcement. The group agreed to look at some of the options available and see if we can brainstorm at the next meeting. It was also suggested that Triton be brought into the loop to see if there are any coordination opportunities.

D. OTHER?

VI. Certification Ongoings

A. New Certiport Certifications (Data, Cloud Computing, Software Dev.) (Leyden)

Recently, Certiport has introduced some new tech certifications - mostly in software development and cloud computing. The group discussed these certifications and the value of them to high school students. The group also discussed how many of them were achievable for high school students. We will table this conversation for when we can discuss with Triton at the next meeting.

B. OTHER?

VII. Cyberstates Report

VIII. Fastest Growing Tech Jobs in 2022

The group discussed the two articles/links above. Both are looking forward as to what the tech trends will be in the future - and where we should consider expanding our programs. The group discussed where their programs either meet or don't meet the future needs of the industry.

IX. High school to career (non-college bound)

- A. Example success stories?
- B. Resources/Contacts?

Leyden shared that many students that come out of their programs go on to have solid jobs without any college experience or education. The group discussed that the current entry level job openings do not really stress the need for a college degree; instead they are more angled towards experience in certain tech areas or lack of experience in those areas. This signals the need for more "real world" experience needed at the high school level, opportunities for internships, and opportunities for work study type options.

X. What do YOU want these meetings to look like? What would be most beneficial to you?

The group discussed the current format of these meetings and if they are meeting the needs of all that attended. Some options that were thrown out included field trips to IT companies, guest speakers or a more integrated approach with Triton instructors and IT leaders. The group voted to keep the meetings with the same format for now and in the future.

- XI. Other
- XII. Adjourn

In Fall of 2021, we purchased 30 of the Adafruit Circuit Playground Express. They are an updated version of a previous larger model. Using JavaScript (text or block code) in Microsoft MakeCode, students program different patterns of sound and light.

Projects include...

- 1) Make a police siren (alternate red/blue lights with siren noise)
- 2) Recreate your favorite song (students have to recreate a small portion of their favorite song using JavaScript)
- 3) Tilt trumpet (students change pitch with a front to back tilt and change volume with a left/right tilt)
- 4) Ping pong launcher students use code to power a small spindle motor attached to rubber grip wheel to grip ping pong balls and launch them