OSAAPT Ohio Section Meeting National Inventors Hall of Fame School Middle School – An Akron STEM Public School May 10, 2014

Morning Plenary Session:

President Aaron Ballonoff and Sue Ramlo of the University of Akron opened the meeting. They introduced Alison White, Director of the Akron Hub of OSLN, who described the middle school and the school's position within the Akron community.

Alison invited those present to introduce themselves and their current occupations in OS AAPT. Many of us are retired and serving in various consultative, part time or supportive roles.

Students in the area can apply to the National Hall of Fame STEM Middle School if they are interested in STEM regardless of their background or academic strength. There is a lottery for the middle school (5th through 8th grade) and a second lottery for the STEM high school level.

The greater Akron area is divided into clusters, and depending on the number of applicants within each cluster, students have a good or fair chance in the lottery. There are 108 students accepted for each graduating class. The curriculum is rigorous with emphasis on STEM but covering the gamut. They are a one-on-one digital community with each student receiving a laptop.

Some high school credit is granted in the middle school so that students can graduate high school a year or possibly even two years early. STEM schools throughout the State do some collaborating when designing curricula. Some STEM schools are brick-and-mortar, and others are entirely online. There is now a new Statewide STEM designation available. STEM schools include engineering, problem-based learning, integrating across subject areas, and increased rigor. Mastery is emphasized, so that students "keep trying" until they reach an acceptable standard on assessments. During Alison's keynote, a number of questions were posed by the assembled group and addressed articulately by Alison concerning the nature of STEM education and the mission of her school, the NIHF MS. Two websites were mentioned. <u>www.OSLN.org</u> is the website for the Ohio STEM network, and <u>www.AkronSTEM.org</u> is the website for the Akron area STEM program.

The gathering was then split with Alison conducting the tour, and Susan Hall describing the STEM program.

The group with Susan Hall went down to the learning commons. She quoted an expression they use with their students: "We are verbs, not nouns so we are active." Susan first asked us to introduce our backgrounds so that she could understand how to address the group.

Susan gave a presentation on the Ohio STEM Learning Network, and the OSLN Akron Hub. This Akron Hub was surfaced by the business and industry community in the area, who at one point had expressed concern that students coming out of the schools were ill-prepared for what the working community needed in terms of skills. Her presentation included "founding" partners and "funding" partners.

The Greater Akron Chamber of Commerce is one of their founding partners, including a group called, Akron Tomorrow. The University of Akron, including the College of Education, is a partner as well. The Downtown Akron Partnership has helped the middle school with geocaching in the advisories (groups of 15 students). Invent Now is a group of inventors providing support. The Akron Public Schools support the STEM schools by providing funding.

Susan described several OSLN-Akron Hub Platform Schools. These included BIO-MED, and the NIHF STEM MS and HS as part of the platform. Susan explained that the administration, faculty and staff here all "built the school" from the ground up with a commitment to STEM and the mission of STEM. The school started as a Professional Learning Community online, and created team mutual support beginning in April, 2009. Susan described the Akron Hub, the Ohio network, and the STEMx national network. In dealing with student success as a core concept, she explained the professional learning community.

They are committed to a curriculum that includes art and music as well as physical education. They are committed to allowing students to do research based on access to primary sources. Each day starts with a learning target, e.g., "I can identify text evidence that supports my conclusions." They also self-assess and the instructor listens, re-directs, etc. The "students as learners" idea is primary. All students are in the same room, and there are "breakouts" to deal with specific learning needs to reach for mastery.

The Akron Hub offers 2014 summer workshops at the University of Akron:

June 17 to July 22	Professional Learning Communities
June 17 to June 19	Problem Based Learning Design Workshop
June 19	Innovative STEM Leadership Series
August 5 to August 7	Digital Literacy/Web 2.0 Skills in a STEM School

Information and registration for the above sessions is available at: www.tinyurl.com/OSLNAkronHubPD

Alison White led the other split group on a tour of the MS at the 6th grade level, showing us the labs, the classroom spaces, and the various schedules and plans posted on the walls. Participants discussed the practices with Alison, and explored various options.

OS AAPT Business Meeting:

Aaron Ballonoff as outgoing section president (now becoming past-president) opened the business meeting at 11:00. He introduced Myra West who gave the Section Representative's report. (See report on green stock or in previous email from Myra.)

Myra asked to be relieved of the position of Section Representative for personal and family reasons. Aaron led the group in thanking Myra for her service over the years as the Section Representative to the National AAPT.

Next, Sue Ramlo as local host clarified some of the map directions we would need to follow to take ourselves to lunch.

Then Aaron opened the discussion on election of officers by thanking Brian Carpenter for his services as the Corresponding Secretary, and announced that Holly McTernan of St. Ed's in Lakewood had indicated that she would be able to accept the position as Corresponding Secretary.

Bill Reitz announced that he would be willing to serve as Section Representative. He was nominated, seconded and approved immediately by voice vote. His name was also added to the slate of officers.

Myra moved and Sherri Stefanovic seconded the slate, and a voice vote by the group present approved the slate of officers including Bill Reitz as section Rep, and Holly McTernan as Corresponding Secretary.

How I Do It:

There was one contribution for the How-I-Do-It session:

Dick Heckathorn: The GUESS method of problem solving Given, Unknown, Equation, Substitute, Solve "Physics teachers have to demand this!" <u>http://web.cvcaroyals.org/~rheckathorn/index.html</u>

Announcements:

Steve Majoros: The AAPT PER group (Physics Education Research) has made their conference proceedings available on the web. Steve plans to see that this link is placed on the OS AAPT website, and sent through the Listserv to the section membership. **Ohio Section current website:** <u>http://www.osaapt.org/</u>

Myra West: We are looking for a site for the fall meeting in 2014. The spring section meeting (2015) is planned for CSU.

Gayle Hammer (University School): Gayle offered University School as a possible site for the fall meeting. Gayle said that she would check with US to see what dates might be available this fall for the section meeting.

Bill Reitz and group discussion: He wondered how we could increase the number of people coming to section meetings. There were a number of ideas for this. Aaron suggested approaching colleagues directly. Sherri suggested making sure that colleagues receive fliers (PDF?) in their mail slots. Perhaps increasing the "showiness" of the content of workshops would help. Fred of Stark State thought that a U-tube video with links could be sent out. Sue Ramlo said that going through DOE Ohio didn't help very much in the past. Getting people on the listserv, which is free, might be a more efficient way of contacting people. How about education students? We could announce the OS AAPT meetings as "helpful job networking."

Following the business meeting, the board set the next OS AAPT board meeting for **5:30 PM on Tuesday, May 27, 2014,** at the Bob Evans restaurant in Macedonia.

[We adjourned for lunch in the area. There were two workshops in the afternoon, one by Lori Kraft called "Introduction to Corrosion" and another by Alper Buldum called "Introduction to Nanotechnology."]

[Ken was unable to attend the workshops. He will provide a set of 26 photographs of the morning activities on CD to Myra, Brian and Holly.]