



LOUDOUN COUNTY PUBLIC SCHOOLS

21000 Education Court

Ashburn, VA 20148

SCHOOL BOARD

Ad Hoc Committee for the Academies of Loudoun

Meeting Minutes

Eric Hornberger, Chairperson

May 3, 2017

5:00 p.m.

Administration Building, Room 500

Committee Members: Mr. Jeff Morse and Ms. Debbie Rose, School Board
Ms. Cynthia Ambrose, Asst. Supt. for Instruction, Staff

Committee Members Present: Eric Hornberger and Jeff Morse

Staff Members Present: Cindy Ambrose, George Wolf, James Dallas, Neil Slevin, Odette Scovel, Tinell Priddy, Ashley Ellis, Gary Van Alstyne, Neri Gonzalez-Sales, Dr. Julie Sohl, Jenna Whitehill (AOS student)

I. Call to Order

II. Approve Minutes from February 23, 2017 Meeting

Approved (2-0-1)

III. Public Comment

None

IV. Academy of Science Updates

A. *Research Question Response from September Ad Hoc Meeting*

Students engage in a 2-year research project during their junior and senior years and learn problem solving and how to conduct an experiment beginning in 9th and 10th grade. Students also learn the important skills needed for the research project beginning in freshman year.

“Umbrella Day” – Teachers share potential project ideas to get students thinking about ideas for research projects and meet the research teachers. Students work with teachers on narrowing down project ideas.

Research teachers interact with students from Umbrella Day forward. Students come with big ideas, and researchers help narrow their focus and identify safety constraints while keeping the students’ excitement and sense of discovery.

A junior or senior class will have students working on very different projects simultaneously. The projects are student-led, and they are supported by the teachers throughout the process. Each teacher will oversee 12 projects or fewer. Students spend 90 minutes every A day working on their research in the lab. Students also do a lot of work at home, when possible.

Students participate in lab meetings and present their work to the research class during first semester. Safety is incorporated into instructions and is a component of the project rubric. During the second semester, students deliver a more formal presentation to two research classes and two AOS teachers; a subset of students go on to the LCPS Regional Science and Engineering Fair. Finally, all juniors and seniors present their research at the AOS Symposium in June.

A question was asked regarding constraints or opportunities that AOL will bring. The opportunity to collaborate and take different courses will be extremely beneficial.

B. Information on AOS Graduates

We now have four years of graduation data for AOS. The alumni association director surveyed AOS graduates on their majors in college. Mr. Wolfe shared the data collected by the alumni association director. Alumni of the month are also highlighted on the AOS website. It was somewhat surprising that among those who responded, the largest concentration of college majors were in the area of Computer Science.

A comment was made that it would be interesting to see a breakdown of students who attend a technical school or liberal arts college, etc.

Of the 540 graduates, approximately 1/3 responded.

V. Academy of Engineering and Technology (AET)

A. Advanced AET Course Offerings Plan –Revised

Dr. Priddy provided an update on the Advanced AET Course Offerings. We have incorporated the feedback from our previous Ad Hoc meeting. We have developed a plan to address students who apply to the Advanced AET program. The plan further articulates course options. Students have more flexibility in their senior year. We may be able to offer even more courses and flexibility, given the direction VDOE is going and the possibility of being a Division of Innovation.

Computer Science is credited as a science course at AET, but it is considered a science elective course for diploma requirements; we do have structures in place to ensure students will achieve all of the necessary credits toward graduation. All AET courses are designated as honors or above. The honors courses have a 0.5 GPA bump, and the AP courses have a 1.0 GPA bump.

It was suggested to write up a summary of the issue to give to Dr. Richards for the legislative program in the fall. *AP Computer Science A* is credited as a science course for the AET program. Per Superintendent's Memo #022-15, the course provides a standard credit to satisfy graduation requirements. At the AET the course is credited as a science elective and students must still obtain the required science courses for the Advanced Studies Diploma. One problem is that each school division must keep track of the substitution of the *AP Computer Science A* as a standard credit in mathematics, science or CTE as the state course codes have not been changed to reflect the credit options. An additional issue is that teachers of *AP Computer Science A* need a mathematics endorsement, but the students are getting a science credit. These are mostly record-keeping issues, but we need to make sure that we are closely monitoring students to ensure they have the appropriate science credits for their diploma.

B. Growth Plan

Dr. Priddy shared a draft of four growth plans for clarification and feedback. In growth model 1, we get to a maximum number of AET students, but this model means that there is no guaranteed admission to Advanced AET for students enrolled in AET 1 (9th and 10th grades). Growth model 2 allows for a few additional seats for Advanced AET (11th and 12th grades). Growth Model 3 guarantees admission to AET 1 and Advanced AET, but the number of total students is reduced.

Feedback from committee members is to allow those in AET 1 to move forward to Advanced AET without reapplication, unless there is a concern about their ability to be successful in the program, while still allowing space to expand to students who did not attend AET 1.

A question was posed about the potential to expand AET in the future within the Academies of Loudoun facility. There are 92 teaching stations. Some changes would require infrastructure changes, depending on the nature of the change.

Growth model 1 is not preferable, and growth models 3 and 4 seem more appropriate to meet the goals of the program. Growth model 4 would mean that entrepreneurship is taught at the student's home school; however, entrepreneurship could easily be incorporated into the coursework.

A recommendation was made to take a look at entrepreneurship across the division.

At the present time, the committee feels strongly that growth model 3 maximizes both variables.

VI. Academies of Loudoun

A. Enrollment Data

Ms. Scovel shared admission data answering the following questions:

- What is the distribution of current students at AOS and AET by gender?
- What is the distribution of current students at AOS and AET by ethnicity?

A request was made for the applicant pool broken down by year, ethnicity and gender. Another request was made for applicants by geographic region.

B. Facility Update

Mr. Van Alstyne provided an update, including photos, on the AOL facility. The job is proceeding wonderfully. Major work underway now involves the mechanical and electrical systems. Some changes in construction have been made to account for programming. The project is still on schedule, and the timeline is reviewed on a biweekly basis. Completion is still scheduled for the end of April 2018.

VII. Future Topics

MATA programming as it transitions from MTC to MATA (discussion slated for Fall 2017)

A growth plan for AOS and MATA, similar to the plan shared today for AET (Fall 2017)

Reschedule the HHMI meeting (potentially for Fall 2017)

VIII. Next Meeting

Early Fall 2017

IX. Adjournment

The meeting was adjourned at 6:35.
