Newtown Board of Education
Newtown, Connecticut
Curriculum and Instruction Subcommittee

Minutes from the Board of Education Curriculum and Instruction Subcommittee held on Tuesday, January 10, 2019, in Conference 1 Room Municipal Building.

Present: Jean Evans Davila	Tom Einhorn	Anne Uberti
John Vouros	Kevin Eppley	Jessica Fonovic
Michelle Ku	Rachel Smith	Peter Berson
		Todd Stentiford

J. Vouros called the meeting to order at 10:16 a.m.
J. Vouros moved to approve the minutes from the December 11, 2018, meeting.
M. Ku seconded the motion.

Public Participation – None.

T. Einhorn, K. Eppley, and R. Smith provided an update on integration of Science, Technology, Engineering, and Mathematics (STEM) instruction at Newtown Middle Schools (NMS), including the new Project Lead the Way (PLTW) course in Automation and Robotics (AR). T. Einhorn explained the interest in adopting the AR course at NMS includes its position as a gateway course to PLTW programs at Newtown High School, and the pathway to Introduction to Engineering and Design (IED) sequence of PLTW. As a gateway course sequence, AR is designed for middle school students while serving as an appropriately challenging and rigorous program in itself. The AR pathway was selected for NMS in consultation with PLTW Director Susan Snow and following a site visit to Jockey Hollow Middle School in Monroe to see the curriculum and instruction in action. In addition, a team from NMS attended a regional PLTW conference. Presently, 22 NMS students in grade 8 have self-selected AR as their specials rotation and are taking part in the pilot program this year. Resources for the course included the purchase of seven robots, State of Connecticut and grant-funded at $1100 per unit, allowing for a 3:1 student to robot ratio for instruction. Students have been counselled in the transition from this middle school course to the PLTW pathways that will be available to them at NHS.

K. Eppley discussed his observations of the enhanced student engagement that he has observed by students in his AR lessons. He explained that the course is problem-based, which enables students to work collaboratively toward solutions. Students find the coursework motivating, and they enjoy experimenting to resolve the challenges presented to them, as there is no one right or wrong answer.

R. Smith discussed the ways in which she approaches instruction in her Grade 7 and Grade 8 Computer Integration course. She described her use of a variety of tools which enable her to personalize student learning while ensuring alignment with student learning expectations within the courses offered at Newtown High School (NHS) through the Business Enterprise and Applied Technology Department (BEAT). T. Einhorn noted that R. Smith worked with a group of students afterschool on cyber-robotic coding, and they were recently recognized at our Board of Education (BOE) for having won an award in a regional competition.

Next on the agenda, A. Uberti introduced the implementation of a STEM program that is new to Reed Intermediate School (RIS) this year. All fifth and sixth graders rotate through this special one time during a six day cycle. She observes that the students are highly motivated and fully engaged during the lessons. P. Bernson, the teacher of the course, described how he has designed the lesson activities to integrate science, engineering, and computer concepts. The course is housed in the labs at RIS. Lessons usually begin with a self-start activity for students, followed by a brief introduction before the students are given self-directed inquiry activities that they approach both independently and in small groups. P. Bernson described the instructional supplies he has purchase for the class, which include planks, building materials, Lux Blocks, and Edison Robots.

T. Stentiford, RIS STEM Coach, described his new assignment working with teachers to enhance instruction aligned with Next Generation Science Standards (NGSS). RIS students are engaged in 45 minutes of Science instruction every day, and sometimes have 90-minute block of science. T. Stentiford demonstrated for the committee members a "thought exercise" that he has used with students and teachers, as an example of the way in which he promotes a shift toward helping students to think like scientists. A. Uberti explained that teachers can coordinate their schedule to have their students participate in a lesson with T. Stentiford or teachers can observe his instruction to learn practices they can integrated into their own Science lessons.

Public Participation-None

The meeting adjourned at 11:19 a.m.

These draft minutes are subject to the approval of the C & I Committee.