STEM Committee Meeting Minutes

January 23, 2017 Conference Room B-004

A meeting of the STEM Designation Committee established in Ohio Revised Code 3326.02 was held on January 23, 2017, at 12:30 p.m. at the offices of the Ohio Department of Education.

Committee members in attendance:

- Mr. Paolo DeMaria, Superintendent of Public Instruction, Ohio Department of Education;
- Mr. Matt Peters, Assistant Director, Ohio Development Services Agency (designee for David Goodman);
- Ms. Jessica Mercerhill, Senior Director of Educator Preparation, Ohio Department of Higher Education (designee for John Carey);
- Dr. Tom Schwieterman, VP, Clinical Affairs and Chief Medical Officer, Midmark Corporation, Appointed by the Ohio Senate.

Not present:

 Mr. Stephen Lyons, EVP, The Columbus Partnership, Appointed by the Ohio House of Representatives.

Also present were:

- David Burns, Director, Battelle STEM Innovation Networks Ohio STEM Learning Network;
- Steve Gratz, Senior Executive Director, Center for Student Support and Educational Options, Ohio Department of Education;
- Buddy Harris, Director, Office of Innovation, Ohio Department of Education;
- Holly Lavender, Office of Innovation, Ohio Department of Education;
- Deb Munis, Office of Innovation, Ohio Department of Education;
- Sandy Watkins, Principal in Residence, Tennessee STEM Innovation Network;
- Sheila Vitale, Office of Chief Legal Counsel, Ohio Department of Education;
- Heather Sherman, Ohio STEM Learning Network;
- Dustin Pyles, Vaza Consulting, LLC;
- Michele Timmons, EnvisionEd Plus;
- Craig Lauterschleger, EnvisionEd Plus;
- Thomie Timmons, Reynoldsburg City Schools;
- Lauren Monowar-Jones, Joint Education Oversight Committee;
- Stephanie Lammlein, BioMed Science Academy STEM School;
- Meka Pace, Executive Director, Metro Schools;
- Dan Badea, Ohio Department of Education;
- Melissa Drury, Reynoldsburg City Schools;
- Brian Coffey, Reynoldsburg City Schools;
- Kathy Payne, Chillicothe City Schools;
- Tyrone Olverson, Youngstown City Schools;
- Nickey Brown, Wright State University;

I. Call to order:

Dr. Tom Schwieterman called the meeting to order at 12:39 p.m. Minutes were recorded by Deb Munis.

II. Welcome and introductions:

Buddy Harris and Mr. Paolo DeMaria welcomed all attendees and the committee members introduced themselves.

Buddy Harris provided a brief overview of the purpose of the meeting. Mr. DeMaria spoke briefly about the importance and power of the STEM learning approach in making learning relevant for students and the growing interest in STEM education in Ohio.

III. Approval of minutes:

Minutes from the September 14, 2016, meeting were sent to committee prior to the meeting. Mr. Matt Peters moved to **approve** the minutes from the September 14, 2016, meeting of the STEM Committee, seconded by Ms. Jessica Mercerhill. The **motion carried**.

Old Business:

IV. Review of Linden McKinley progress toward meeting conditions for approval:

At the June 6, 2016 meeting to designate new STEM schools, Linden McKinley STEM Academy was approved with conditions. These conditions outlined a review of specific curriculum items, conducted by the Ohio STEM Learning Network and scheduled at 3 month intervals, and stated that OSLN would report back to the committee following each review.

Dr. David Burns from the Ohio STEM Learning Network (OSLN) provided an update on the progress of Linden McKinley. He stated that Marcy Raymond is providing professional development for the school. Although the last report was very positive, there have been some significant challenges recently. The school experienced two shootings not long ago and they are focusing on counseling at this point rather than STEM. OSLN would like to go back and visit soon and will continue to monitor their progress.

Dr. Schwieterman asked what the next step would be. Dr. Burns stated that this is probably more of a pause than a "stop," and that more evidence should come forth in the next few weeks to determine if they're ready to move forward. Dr. Schwieterman expressed the committee's support, and welcomed a re-application or perhaps another approach in March if needed. No further action was taken by the committee at this time.

New Business:

V. Discussion and Resolutions to Approve, Approve with Conditions, or Disapprove amended proposals from two STEM-designated schools

A. Bio-Med Science Academy STEM School:

The school has submitted an amendment to their originally approved proposal for STEM designation, requesting addition of grade levels. Ms. Stephanie Lammlein, Chief Academic Officer of the school, spoke to the committee about the proposed amendment. The additional grades will be housed in a separate building but no new IRN will be created, the additional grades will be added to the existing IRN. Mr. DeMaria asked for clarification on the timeline and grade levels that will be added. Ms. Lammlein clarified that the request was for extension of the designation down through grade 6, with grades 7 and 8 to be added first in the 2017-2018 school year.



Dr. Tom Schwieterman moved and Mr. Paolo DeMaria seconded the motion to **approve** the amendment to the original proposal, to extend the school's STEM designation down to grade 6.

Roll call: Mr. DeMaria (yes), Mr. Lyons (absent), Ms. Mercerhill (yes), Mr. Peters (yes), Dr. Schwieterman (yes). The **motion carried**.

B. Metro Early College High School and Metro Institute of Technology:

The Metro schools have submitted an amendment to consolidate Metro Early College High School (MECHS) and Metro Institute of Technology (MIT) under one IRN but to still operate out of two buildings. Ms. Meka Pace, Executive Director of the Metro Schools, spoke to the committee about the proposed amendment. She stated that the second campus was created to provide additional program options for students, but that having two separate IRNs created roadblocks to doing this. She clarified that consolidating into one IRN would allow students to take courses in both programs and would also reduce some administrative work that was being duplicated. Sheila Vitale clarified for the committee that consolidating should be seamless but there would need to be some additional procedure to work through, including the relationship with the higher education partners for each of the two current schools.

Ms. Jessica Mercerhill moved and Mr. Matt Peters seconded the motion to **approve** the amendment to the designation for Metro Early College High School and Metro Institute of Technology to consolidate as a single school with IRN but to continue to operate both programs out of two buildings.

Roll call: Mr. DeMaria (yes), Mr. Lyons (absent), Ms. Mercerhill (yes), Mr. Peters (yes), Dr. Schwieterman (yes). The **motion carried**.

VI. Legislative Update and STEM school designation:

- A. Review of 2017 changes to law expansion of designation to include grades K-5
- B. Update of designation process and adjusted timeline for committee review

Holly Lavender gave a brief explanation of the recent changes to language in Chapter 3326 of the Ohio Revised Code that expands STEM designation to include all of grades kindergarten through twelve, effective March 2017. Because the change is effective prior to the date that the STEM Committee will be reviewing new proposals for STEM designation, the department will go ahead and accept STEM designation proposals from elementary schools this year, to be considered by the committee along with proposals from other schools. The department will also extend the deadline for submitting proposals back by one week to February 24, for all schools.

C. STEM in Elementary Schools

Sandy Watkins, Principal in Residence with the Tennessee STEM Innovation Network, gave a presentation to the committee about STEM in elementary school settings and what might look different at the elementary level when reviewing applications. She emphasized the importance of having the right teachers who are excited about lifelong learning, bringing business and industry into the school and involving them in professional development for teachers, getting teachers to work together collaboratively, and having a truly problem-based learning approach to instruction.



VII. Ohio STEM Learning Network (OSLN) review of STEM school applications and technical assistance to schools:

David Burns provided an explanation of the process that OSLN will be using to review the STEM school proposals and the technical assistance OSLN provides to schools interested in completing an application. Thirty-two schools attended the webinar about the STEM designation process, and twenty-three schools indicated intent to apply. The thirty-plus number of proposals looks real, so OSLN is reaching out to the existing network for additional readers. Their team will convene to discuss thoughts on the proposals and make recommendations to the STEM Committee. Dr. Burns also stated that applicants can submit their proposals to OSLN for a pre-read, and then OSLN can provide some technical support for improving the application before submitting the final document to the department and the STEM Committee for review. Dr. Tom Schwieterman posed a question – Is a STEM school that was designated five years ago still meeting the requirements? What does the quality look like after five years?

VIII. Update on progress of the STEM Innovation Working Group:

Buddy Harris and Holly Lavender gave an update on the development of a Quality Metric for STEM Schools. The working group has identified several essential criteria, or building blocks, of a high-quality STEM school or program and has begun the process of developing level descriptors for each of these criteria. The update included connections between authentic, problem-based learning and creative problem-solving, and the need for a school culture that supports this type of instructional approach in order for it to be successful. Several attendees commented about the connections between a high quality career tech school and a high quality STEM school, and stated that the essential criteria really should be attributes that all schools should have.

** Break** (2:08 p.m - 2:10 p.m)

IX. Discussion of Committee proceedings and continuous improvement activities:

Sheila Vitale gave a brief review and reminder of the protocol for public meetings, email, and discussion of Committee business, including the STEM school applications. It was determined that it was permissible for individual committee members to contact David Burns directly to talk with him one-to-one if they had a question about an application and needed clarification. In open discussion, Dr. Tom Schwieterman stated that it was important to ensure a quality review process for the applications. Mr. Matt Peters stated that the support of OSLN in the review process and the ability to get clarification from David Burns is very helpful. It was also determined that because of the large number of applications, the committee may not call every applicant forward during the designation meeting and would only do so if there was a question that needed clarification.

In closing, Dr. Tom Schwieterman suggested that there be some future discussion about what a STEM school should look like in the long term, and how quality might be monitored.

X. Adjournment

Mr. Matt Peters moved to adjourn the meeting, seconded by Ms. Jessica Mercerhill.

The meeting adjourned at 2:32 p.m.