

## STEM Committee Meeting Minutes

September 14, 2016  
Conference Room 102

*A meeting of the STEM Designation Committee established in Ohio Revised Code 3326.02 was held on September 14, 2016, at 9 a.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, 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:

- Dr. David Burns, Director, Battelle STEM Innovation Networks - Ohio STEM Learning Network;
- Dr. Steve Gratz, Senior Executive Director, Center for Student Support and Educational Options, Ohio Department of Education
- Mr. Buddy Harris, Director, Office of Innovation, Ohio Department of Education;
- Ms. Holly Lavender, STEM Education Lead, Ohio Department of Education.
- Ms. Emily Blair, Office of Chief Legal Counsel, Ohio Department of Education;
- Dustin Pyles, Vaza Consulting, LLC
- Annalies Corbin, PAST Foundation
- Sheli Smith, PAST Foundation
- Robin Fisher, Dayton Regional STEM School
- Todd Stahr, Reynoldsburg City Schools
- Joshua Haluszczak, Thermo Fisher Scientific
- Michele Timmons, EnvisionEd Plus
- Tricia Moore, EnvisionEd Plus
- Jeanne Gogolski, Ohio Soybean Council
- Lauren Monowar Jones, Joint Education Oversight Committee
- Dana Letts, Unioto Elementary
- Jenni Domo, Unioto Elementary
- John Klipfell, Believe in Ohio
- Micky Bumpus, Canal Winchester Schools
- Aimee Kennedy, Battelle Education (OSLN)
- Mandy VanDeusen, Unioto Elementary
- Michael Evans, Governor's Office of Workforce Transformation
- Suzanne Allen, Geauga County Educational Service Center
- Markay Winston, Dayton Public Schools
- Stephanie Lamlein, BioMed Science Academy STEM School

#### I. Call to order:

Buddy Harris called the meeting to order at 9:09 a.m.  
Minutes were recorded by Sarah JanTausch.

#### II. Welcome and introductions:

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

Buddy Harris provided a brief overview of the purpose of the meeting, and Holly Lavender provided a short slide presentation about the function and purpose of the committee as outlined in statute.

#### III. Approval of minutes:

Minutes from the June 6, 2016, meeting were sent to committee prior to the meeting.

Mr. Matt Peters moved to **Approve** the minutes from the June 6, 2016, meeting of the STEM Designation Committee, seconded by Dr. Tom Schwieterman.

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. The curriculum must demonstrate evidence that it:

- emphasizes the role of science, technology, engineering, and mathematics in promoting innovation and economic progress,
- includes scientific inquiry, technological design and engineering approaches to problem solving,
- supports personalized learning,
- supports the development of teamwork skills, and
- includes the arts and humanities.

David Burns from the Ohio STEM Learning Network (Battelle Education) provided an update on the progress of Linden McKinley. He stated that Linden McKinley has been proactive and aggressive in meeting the conditions for approval of STEM designation. Linden McKinley has shown commitment and leadership at the building level and the district supports the STEM model.

No further action was taken by the committee at this time.

#### New Business:

#### V. Nominate and elect a committee chair:

Buddy Harris provided an explanation regarding the need for a Committee Chair, and proposed consideration of Dr. Tom Schwieterman as chair because he has served on the committee the longest.

Mr. Matt Peters moved to **nominate** Dr. Tom Schwieterman as Chair of the STEM Committee, seconded by Mr. Paolo DeMaria.

The **motion carried** unanimously.

Buddy Harris provided an explanation regarding a Vice Chair. The STEM Committee is not required to elect a Vice Chair. The duties typically performed by a vice chair will be covered by the Ohio Department of Education Office of Innovation. Newly elected Chair Dr. Tom Schwieterman recommended and the committee agreed that Buddy Harris would preside over the remainder of the meeting.

## VI. Reynoldsburg late assurances:

Buddy Harris and Holly Lavender provided an explanation regarding late submission of assurances for Reynoldsburg High School eSTEM Academy, Reynoldsburg High School Health Sciences and Human Services Academy, and Baldwin Road Junior High School. STEM schools are required by law to submit opening assurances annually to the department of education, no later than 10 days prior to the opening of the school. Law also requires the department to consult with the STEM Committee if a STEM school is not fully in compliance with Chapter 3326 of the revised code. The Reynoldsburg STEM schools submitted assurances five days after the opening day of the schools. An explanation outlining the reasons for the late submission along with supporting documentation was provided by the district and reviewed by the committee prior to the meeting:

- They were waiting on background checks to be received for a couple of school board members.
- A fire inspection done in early July identified three items that needed to be addressed prior to the opening of the schools. One of the items was re-inspected and approved one day prior to opening.

The other two items are in process but did not prevent the schools from opening.

Buddy Harris invited Mr. Todd Stahr, a representative from Reynoldsburg City Schools, to address the committee and share additional information regarding the circumstances. Mr. Stahr indicated that the district conducts regular inspections. One of their generators did not come on. The issues are being resolved, but the delay impacted the submission of assurances. Holly Lavender indicated that the department received a completed fire inspection, assurances, and a letter signed by the district treasurer.

Mr. DeMaria moved and Mr. Peters seconded the motion to **accept** the late assurances **with no further action taken**.

Roll Call: Mr. DeMaria – Yes, Ms. Mercerhill – Yes, Mr. Peters – Yes, Dr. Schwieterman – Yes  
The **motion carried**.

Mr. DeMaria invited Ms. Tricia Moore, a former employee of Reynoldsburg City Schools, to address the committee regarding the work of the district's STEM schools. Ms. Moore stated that the district has two STEM-focused elementary schools that wish to seek designation in the future. The district has approximately 900 students in the two high schools, 600 students at Baldwin Road Junior High school, and approximately 900 – 1000 students at the elementary level, approximately 50 percent of the district's population. David Burns from the Ohio STEM Learning Network indicated that Reynoldsburg High School is often pointed to nationally as an exemplar STEM school in a district.

## VII. Review of the STEM designation process:

Buddy Harris requested discussion of the timeline for the submission process for schools applying for STEM designation. Holly Lavender provided an explanation of the issues. Several schools have indicated that an earlier approval date would be very helpful. For example, when the approval occurs late in the school year, it is sometimes challenging to market the school and recruit students after school is out. The department would like to discuss the possibility of making the application available sooner and approving proposals earlier in the spring. David Burns stated that this is essential for planning purposes.

Michele Timmons from EnvisionEd Plus was invited to share feedback from the schools her organization serves. She stated that the planning process is critical throughout the year, but recruitment and enrollment must happen as soon as possible, and schools cannot recruit until they have an IRN. This is even more essential for new start-up schools. Her organization worked with iSTEM Geauga STEM school. This school received designation in the month of May, but could not recruit and enroll until after the designation. The only possible downside to [moving up the timeline] is that it pushes the planning process back. It requires additional foresight of the planning team.

Buddy Harris asked when a possible STEM school would begin to approach the state, and David Burns responded that it's usually about 6 to 9 months in advance.

Holly Lavender suggested that the department make the rubric available in the fall (October or November) rather than the winter. This could allow the designation meeting to occur in March or April. Holly Lavender asked for committee discussion on modifying the dates for the process. Dr. Tom Schwieterman asked for more frequent communication and preparation so that [the committee] can see what is coming down the pike, advance scheduling, and opportunities for visits. Dr. Schwieterman also requested a 2-week period for reviewing the proposals, the possibility of posing questions to David Burns during the review period, and to please avoid the week of Easter. Mr. Peters stated that moving the dates would be OK, but ensure that communication is clear with all schools and those who may apply. The committee generally agreed that going through the Ohio STEM Learning Network is a valuable experience for the schools.

Dr. Steve Gratz suggested that the scheduling be an administrative function within the department. Buddy Harris requested that the committee also discuss some possible adjustments to the format of the rubric used by the committee for evaluating STEM proposals. Holly Lavender provided an example of the proposed adjustments, and explained that the format was changed to better reflect the qualitative way that the rubric is currently being used in the designation process.

Mr. DeMaria recommended that the committee give the green light to proceed with the discussed changes, and the committee determined that a formal motion was not needed. The committee agreed by general consensus that the department should move forward as discussed.

### **VIII. Discussion of Feedback from Informal STEM Discussion Group:**

Buddy Harris provided an explanation of the committee's role: One function of the committee is to collaborate in supporting public and private STEM education initiatives. On August 2, [2016], the Office of Innovation engaged in an informal conversation with a small group of STEM educators. The purpose of the discussion was to identify goals and priorities, and to discuss how the department might best support good work being done in STEM. Holly Lavender presented a brief summary of the feedback from the discussion group, outlining the need for accessibility to a high quality STEM education and STEM literacy for ALL Ohio students, the need for better teacher preparation and support for STEM teaching and learning, and the need for strengthening partnerships and alignment with regional industry and higher education partners.

David Burns recommended that experts in the classroom be involved in determining quality as it pertains to the committee making decisions for this work. The highest concern over quality comes first from OSLN and then the schools that have been designated. Dustin Pyles was invited to address the committee and comment on his work with STEM schools. He encouraged the committee to consider a continuum for STEM, and recommended that the state proceed to work with elementary STEM programs.

Holly Lavender invited school leaders and educators in attendance to address the committee about their work and challenges:

Dana Letts and Jenni Domo from Unioto Elementary addressed the committee about the need for an elementary STEM designation. They stated that they found science was being taught through literature rather than through hands-on experiences, so they have created STEM opportunities for their elementary students. They shared evidence of their work at their school and their programs, called "SCOPES," "Kinderscopes," and "Microscopes" [pre-K].

Mickey Bumpus from Canal Winchester schools addressed the committee, and stated that their district vision aligns with Battelle's as "**Strategies That Engage Minds.**" They use a holistic district approach, and they utilized a Straight-A grant to get the work started.

Robin Fisher from Dayton Regional STEM School and Stephanie Lammlein from BioMed Science Academy STEM School addressed the committee. STEM schools sometimes struggle to find teachers with the expertise and the ability to communicate with kids, or someone who has the content knowledge, is great with kids, but isn't licensed. Their schools utilize student teachers and partnerships with universities to help find teachers. Mr. DeMaria asked where teacher candidates go to train in PBL and other strategies. Ms. Lammlein stated that they come to the STEM schools, because the training needed often isn't available elsewhere.

Dr. Aimee Kennedy addressed the committee about teacher preparation and the need for relevant programs or network approaches. She stated that a teacher shortage problem is coming to Ohio.

Dr. Steve Gratz addressed the committee about STEM and the New Skills for Youth program in Ohio.

Mr. Brian Roget addressed the committee about some of his own experiences in a teacher externship program, and how the program helped him as a former teacher to see how content knowledge was transferred to real-world applications and used in industry.

**IX. Adjournment:**

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

**The meeting adjourned at 11:03 a.m.**