



Department of Education

Mike DeWine, Governor
Dr. Stephanie Siddens, Interim Superintendent of Public Instruction

Ohio STEM Committee Meeting Minutes

February 10, 2023

9:45am-11:57am

Tree of Life School (Polaris)

2150 East Powell Road, Columbus, OH 43035

Committee Members Present:

Dr. Tom Schwieterman, VP of Clinical Affairs and Chief Medical Officer at Midmark Corporation, STEM Committee Chair appointed by the Ohio State Senate

Andrew L. Aichele, Senior Director of Engagement & Education at COSI

Dr. Melissa Weber-Mayrer, Ph.D., Director of the Office of Approaches to Teaching and Professional Learning at The Ohio Department of Education, Designee for the Interim Superintendent of Public Instruction

Jeff Polesovsky, Vice President of Public Policy, Columbus Partnership, appointed by the Speaker of the Ohio House of Representatives

Ellen Marrison, Content Strategist, The State Science & Technology Institute, appointed by the Governor

Dr. Krista Maxson, Ph.D., Associate Vice Chancellor, P-16 Initiatives, Ohio Department of Higher Education, Designee for the Chancellor of the Department of Higher Education

Committee Members Absent:

Eric Leach, Executive Director of the Ohio Third Frontier, Ohio Development Services Agency, Designee for the Director of Development, Deputy Director, Governor's Office of Workforce Transformation

Ohio Department of Education Present:

Mary Ellen Dobransky, STEM Administrator

Janna Mino, STEM Education Program Specialist

Kyaundra Ellis, Administrative Professional 2

Ohio STEM Learning Network (OSLN) Present:

Kelly Gaier-Evans, Director

Dr. Sandra Wilder, Ph.D., Relationship Manager

Sandy Guinto, STEM Relationship Manager

Others Present:

Alyssa Brigs, Ph.D., Teaching Institute for Excellence in STEM (TIES)

Kaci Roach, New Growth Group

Marc Cooley, Tree of Life, Polaris campus

Judy Hoban, Tree of Life, Polaris campus

Melanie Mugge, Tree of Life, Polaris campus

BJ Thaman, ESC of Central Ohio

Clint Chapman, Yaskawa America

Nicholas Miller, Baldwin Road Junior High School

India Wilson, Baldwin Road Junior High School

Ohio Department of Education Staff Recording Meeting Minutes:

Kyaundra Ellis, Administrative Professional 2

Opening:

Dr. Tom Schwieterman called the meeting to order at **9:45AM**.

Welcome and Introductions

Dr. Tom Schwieterman invited everyone to introduce themselves.

Approval of Agenda

Motion made to approve February 10th meeting agenda made by Ellen Marrison, seconded by Andrew Aichele.

No opposed. Motion approved.

Affirmative Votes: Dr. Tom Schwieterman, Andrew Aichele, Dr. Melissa Weber-Mayrer, Jeff Polesovsky, Ellen Marrison, Dr. Krista Maxon

Approval of October 19 Meeting Minutes

Motion made to approve October 19th STEM Committee meeting minutes made by Jeff Polesovsky, seconded by Dr. Melissa Weber-Mayrer.

No opposed. Motion approved.

Affirmative Votes: Dr. Tom Schwieterman, Andrew Aichele, Dr. Melissa Weber-Mayrer, Jeff Polesovsky, Ellen Marrison, Dr. Krista Maxon

Discussion Items:

Policy Updates

Mary Ellen Dobransky shared a review of the Ethics Commission requirements with the STEM committee which requires the committee to submit financial disclosures electronically every year. In terms of legal concerns at previous STEM Committee meetings, the committee discussed whether they wanted to address schools who were using STEM and STEAM in their names without STEM or STEAM Designation. The Department's Legal Counsel confirmed that there are no additional action steps needed at this time in reference to these schools.

Addendum to Modify STEM or STEAM Designation Prior to Five Year Reapplication

Janna Mino provided an overview of the addendum process which would be used if a school goes through their five-year designation or their initial designation and feels that they are ready to change their designation before the five-year reapplication begins. This would affect independent STEM schools as they grow additional grade levels under one IRN, for example. Janna shared that in the proposed process, the committee has the autonomy to request additional materials or require a site visit to make sure enough evidence is being provided for the STEM committee to make an informed decision on whether a school can modify their designation before their next five-year reapplication. Within the assurances the school agrees to in the Addendum, the school confirms awareness that the Committee maintains the autonomy to approve, deny, or postpone the school's request, and that there is no guarantee that their addendum will be approved.

Motion made to approve the process for the Addendum to Modify STEM or STEAM Designation made by Dr. Tom Schwieterman, seconded by Dr. Krista Maxson.

No opposed. Motion approved.

Affirmative Votes: Dr. Tom Schwieterman, Andrew Aichele, Dr. Melissa Weber-Mayrer, Jeff Polesovsky, Ellen Marrison, Dr. Krista Maxon

Progress Update on Schools with Compliance Concerns

Mary Ellen Dobransky provided an update for schools currently on a Corrective Action Plan. Tri-State STEM+M High School is in the process of obtaining their letter from the supporting school district. Mary Ellen Dobransky has a meeting scheduled with Tri-State STEM principal and a representative from the Department of Higher Education to discuss options and action steps regarding the "Early College" Designation and naming convention. Mary Ellen

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provided an update on Marysville High School regarding their Early College naming convention. This school does not currently have an update for the committee.

Mary Ellen Dobransky brought a school with a compliance concern to the Committee's attention. Willoughby-Eastlake School of Innovation, first designated in 2017, submitted their compliance reapplication June 16, 2022. Representatives from this school attended the Department/OSLN's Deep Dive into Designation Session on September 28, 2022. At this session, the school's representative brought the compliance concern to the attention of the Department and OSLN team. The team met with the school several times to discuss their options and urged them to consider agreeing to a Corrective Action Plan to provide them with a full calendar year to address the compliance concern and be able to maintain their STEM Designation. However, it was the desire of the school to maintain the policy that is out of compliance with Ohio Law and requested that their Designation be revoked by the STEM Committee. The STEM Committee noted their appreciation for the candor of the school to come forward with their compliance issue and expressed their sincere hope that the school continues to innovate their pedagogy and stay involved with STEM initiatives in Ohio.

Motion made to revoke the STEM Designation for Willoughby-Eastlake School of Innovation per the school's request made by Dr. Tom Schwieterman, seconded by Dr. Krista Maxson.

No opposed. Motion approved.

Affirmative Votes: Dr. Tom Schwieterman, Andrew Aichele, Dr. Melissa Weber-Mayrer, Jeff Polesovsky, Ellen Morrison, Dr. Krista Maxon

STEM/STEAM Growth Plans for Schools Undergoing Quality Monitoring

Janna Mino shared with the STEM committee that so far, the Corrective Action Plan (CAP) process since introduced into Ohio Law has only been used by the committee for schools with compliance concerns. However, as schools undergo the Quality Monitoring process of five year reapplications, the Department and OSLN team have prepared a CAP process aligned to the Quality Monitoring rubric and implementation of STEM best practices to model the model and facilitate innovation, as opposed to the simplified compliance-driven CAPs used so far. One major difference is the purposeful use of the title "STEM/STEAM Growth Plans" instead of CAPs to better reflect the intention of supporting growth rather than addressing concerns in a punitive way. The STEM/STEAM Growth Plans are designed to support schools and help them reach the goals they wish to achieve in STEM Designation when their Quality Monitoring review process has identified area(s) that did not meet the required minimum rating(s) on the STEM and STEAM Designation Rubric. Once on the STEM/STEAM Growth Plan is designed between Department and OSLN team members and school leaders, Ohio Law allows for a full year to demonstrate implementation of goals and be reassessed on the areas that the school did not meet the minimum required rating.

Q&A

Andrew Aichele commented on the alignment of the Document for STEM/STEAM Growth Plans to Design Thinking and expressed appreciation for the thoughtful approach to help schools "model the model" in their goal setting aligned to the pedagogy expectations in the classroom.

Dr. Tom Schwieterman asked if the only action allowed by the STEM Committee after the year time limit is to revoke the school's Designation, or if there are other options for recourse. Mary Ellen Dobransky confirmed that, based on the team's understanding of the legal requirement, there is no option to extend the Growth Plan beyond the year.

Dr. Krista Maxson expressed concern about the Department and OSLN team's capacity to continue the initial application process, five-year reapplication process, and provide support to schools placed on STEM/STEAM Growth Plans. Dr. Melissa Weber-Mayrer shared this concern and suggested to the team that additional supports be considered to address capacity. Kelly Gaier Evans shared that OSLN hosts reviewer training sessions to build the capacity of STEM practitioner reviewers for both initial applications and reapplications. Janna Mino also shared that in the STEM/STEAM Growth Plan Document, the Department and OSLN team will solicit support for the school from OSLN Hub Directors and other experts as needed for based on the school's goals and areas of growth.

Dr. Tom Schwieterman asked if the team has considered a baseline of how many attributes that score below the minimum required rating for Designation would be practical for a school to demonstrate implementation within a year, and if there might be a threshold where a fresh new initial Designation application might be required instead of a STEM/STEAM Growth Plan. The Department and OSLN team noted this as an area to track as more schools undergo Quality Monitoring. Kelly Gaier Evans also shared that the team's hope is that with the increased supports offered to schools, such as Deep Dive Sessions, that STEM/STEAM Growth Plans will not be a frequent occurrence.

Motion made to adopt the STEM/STEAM Growth Plans Process and Documents for schools undergoing Quality Monitoring made by Andrew Aichele, seconded by Dr. Tom Schwieterman.

No opposed. Motion approved.

Affirmative Votes: Dr. Tom Schwieterman, Andrew Aichele, Dr. Melissa Weber-Mayrer, Jeff Polesovsky, Ellen Marrison, Dr. Krista Maxon

Schools Updates

Baldwin Road Junior High School STEM Designation Five Year Reapplication and Quality Monitoring

Kelly Gaier Evans shared an overview of the strengths observed in Baldwin Road Junior High School's Quality Monitoring application and site visit. The school is very intentional in teaching community values and STEM cultural strategies through their Portrait of a Graduate. Lesson planning templates create a space for teachers to intentionally plan how they will connect curricula to these values. The school environment is inclusive and culturally responsive to all students. Reviewers observed strong practices of teachers providing space and structures for students to take ownership of their learning. Kelly Gaier Evans shared that it was clear that teachers have worked with students to design inclusive learning spaces and equipped students with the tools for learning that allow students to pull in their own understandings (for example the review team observed a Socratic seminar and students proposing "legislation" based on their interests) to share and expand upon students learning. Administrators discussed how they have been very intentional to build inclusion into the school especially inclusion in "gifted" classes by expanding access beyond those who are identified as gifted to be inclusive of students who are interested in taking these classes. OSLN recommended the committee approve five years of STEM Designation for Baldwin Road Junior High School starting in the 2022-2023 school year.

Two representatives from this school attended the meeting. The Committee Chair, Dr. Tom Schwieterman, addressed these representatives to thank them for their commitment and congratulate them on their success.

Motion made to approve five additional years of STEM Designation for Baldwin Road Junior High School made by Dr. Tom Schwieterman, seconded by Ellen Marrison.

No opposed. Motion approved.

Affirmative Votes: Dr. Tom Schwieterman, Andrew Aichele, Dr. Melissa Weber-Mayrer, Jeff Polesovsky, Ellen Marrison

Metro Early College High School STEM Designation Five Year Reapplication and Quality Monitoring

Dr. Sandra Wilder shared an overview of the strengths observed in Metro Early College High School's Quality Monitoring application and site visit. Metro Early College Middle and High School exhibits several areas of strength within the domain of Culture for Learning. The most notable ones are the school's habits of mind and the mastery learning model supporting personalized learning. The school's values (commonly referred to as Metro habits) are interwoven in every aspect of teaching and learning experiences at Metro. Students start every day with an individual commitment to a selected habit of mind, habits of mind are embedded in lessons and tasks, and an ongoing goal-setting process uses Metro habits as indicators of student progress. The intentionality behind the way that the school leverages its habits of mind is clearly and strongly communicating Metro's commitment to fostering its school culture and wellbeing of students and staff. Metro is a model school with respect to its design and implementation of personalized learning and mastery learning. At the core of the school's culture is a shared belief that every student can succeed, and that students learn at different paces and in different ways. Mastery learning is part of every class, and this framework allows students to continue learning until they have mastered the core topics of each course. Students who do not demonstrate mastery before the end of a school year remain in the course until they are adequately prepared to advance. This leads to a fluid grade-level design at Metro, as students of different ages (what in traditional schools would be referred to as grade levels) are in classes together working toward achieving mastery. OSLN recommended the committee approve five years of STEM Designation for Metro Early College High School starting in the 2022-2023 school year.

Motion made to approve five additional years of STEM Designation for Metro Early College High School made by Dr. Tom Schwieterman, seconded by Jeff Polesovsky.

No opposed. Motion approved.

Affirmative Votes: Dr. Tom Schwieterman, Andrew Aichele, Dr. Melissa Weber-Mayrer, Jeff Polesovsky, Ellen Marrison, Dr. Krista Maxon

Proposed Changes to 2019 + 2020 Cohorts' Quality Monitoring Schedule

Janna Mino shared with the committee the proposed changes to the 2019 and 2020 cohorts' quality monitoring schedule. These changes include requiring the Compliance Reapplication for the 2020 cohort and adjusting the

windows for the Quality Monitoring process for the 2019 and 2020 cohorts to ensure equitable time to prepare for the application and site visits that was granted to the 2018 and 2017-and-earlier cohorts.

Motion made to approve the proposed changes to the Quality Monitoring Schedule as presented made by Andrew Aichele, seconded by Dr. Melissa Weber-Mayrer.

No opposed. Motion approved.

Affirmative Votes: Dr. Tom Schwieterman, Andrew Aichele, Dr. Melissa Weber-Mayrer, Jeff Polesovsky, Ellen Marrison, Dr. Krista Maxon

Partnership Updates

Department Updates

Mary Ellen Dobransky shared with the committee the feedback received from the November 30th Regional STEM Partners Gathering and upcoming plans to convene stakeholders and partners in each region of the state to facilitate collaboration across sectors and promote STEM education access to all Ohio learners.

Janna Mino shared with the committee the collaboration with the Smithsonian Science Education Center, Zero Barriers in STEM, which focuses on making STEM accessible for students with disabilities. The department is collaborating with the Office for Exceptional Children, OCALI, COSI, and other partners on this initiative. Janna Mino also shared that the Department was recently accepted into another Smithsonian Science Education Center project: Building a Coalition to Recruit and Retain a Diverse STEM Teaching Workforce. This initiative will bring together the Department's STEM and Educator Effectiveness teams, The Ohio Department of Higher Education, and others.

Ohio STEM Learning Network Updates

Kelly Gaier Evans provided an update to the committee on how they are working to grow model STEM Designated Schools in every community by addressing two schools that applied for STEM Designation in last year's cycle, did not receive Designation from the Committee, and have since engaged in multiple supports through OSLN to grow their practices. These schools expressed intention to apply for STEM Designation again in the future.

Kelly Gaier Evans shared a new initiative based on community need. The existing Innovative Leaders Institute (ILI) program is hosting a cohort of exclusively rural educators in the Appalachian region of Ohio. OSLN is collaborating with the Ohio Appalachian Collaborative, Ohio's newest STEM Learning Ecosystem, to recruit educators for this cohort and align work to support rural needs, particularly due to the gap in access to a model STEM Designated School in this vast region.

Lastly, Kelly Gaier Evans shared the information for the inaugural OSLN STEM Innovation Summit on May 12, 2023. Kelly Gaier Evans invited the STEM Committee members to a dinner on the evening of May 11, 2023, where OSLN will award schools and their partners with awards aligned to STEM best practices.

Partner Spotlight: The Teaching Institute for Excellence in STEM (TIES)

Mary Ellen Dobransky and Janna Mino shared a video from a representative of TIES, Christa Krohn, who introduced Dr. Alyssa Briggs. TIES, an Ohio-based firm was awarded an ESSER grant with the Department to compile data, map assets and opportunities to deepen STEM access for all Ohioans, and design supports to connect K-12 STEM Education to the broader community. TIES is the backbone organization of the STEM Learning Ecosystems community of practice, a national and global network of PK-12 formal education entities, informal STEM education organizations, Institutions of Higher Education, business and industry organizations, community and nonprofit organizations, and government and legislative representatives. TIES and the Department are also collaborating with an organization called New Growth Group, which is also headquartered in Ohio. TIES and the New Growth Group are creating a crosswalk guide / self-assessment to initiate and deepen Education and Business & Industry partnerships tailored to various audiences: one for OSLN Hub Directors, STEM Learning Ecosystem Leaders, and other network providers, one for Educators, one for Business & Industry Leaders, etc. As a part of the State of STEM Report that the Department is publishing, TIES is including interviews with our model STEM Designated School Leaders to showcase the qualitative impact of these practices on student outcomes and supporting in data collection and dissemination.

Public comments:

No additional public comments were made at this time.

Adjournment:

Motion made by Dr. Tom Schwieterman to adjourn the STEM Committee Meeting, seconded by Andrew Aichele. No opposed.
Motion approved.

Affirmative Votes: Dr. Tom Schwieterman, Andrew Aichele, Dr. Melissa Weber-Mayrer, Jeff Polesovsky, Ellen Marrison, Dr. Krista Maxon

Dr. Tom Schwieterman adjourned the meeting at **11:57AM**.

The next STEM committee meeting will be on May 10th, 2023, at The Ohio Department of Education (Columbus, Ohio) at 9:00am.
