Ohio STEM Committee Meeting Minutes
February 12, 2024

9:00 a.m. – 12:30 p.m.

Ruling Our eXperiences (ROX) Headquarters

1335 Dublin Road, Suite 18A, Columbus, Ohio 43215

Committee Members Present:

Dr. Tom Schwieterman, M.D., Vice President of Clinical Affairs and Chief Medical Officer, Midmark Corporation, STEM Committee Chair, appointed by the Ohio State Senate
Andrew L. Aichele, Vice President of Education, COSI, appointed by the Governor
William Ashburn, Deputy Director, Governor's Office of Workforce Transformation, Designee for the Director of Development
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
Jeff Polesovsky, Vice President of Public Policy, Columbus Partnership

Committee Members Absent:

Julia Simmerer, Ed.D., Senior Executive Director of the Center for Teaching, Leading, and Learning, Ohio Department of Education & Workforce, Designee for the Superintendent of Public Instruction

Ohio Department of Education & Workforce Present:

Mary Ellen Dobransky, Associate Director of Innovative Approaches to Teaching and Learning (STEM Office)
Dr. Sarah Redick, Ph.D., STEM Education Program Specialist
Jenny Russell, STEM Program Administrator 1
Ethan Walk, STEM Intern

Ohio STEM Learning Network (OSLN) Present:

Kelly Gaier Evans, Director
Dr. Sandra Wilder, Ph.D., STEM Relationship Manager
Sandy Guinto, STEM Relationship Manager

Others Present:

Martin Ginnan, Assistant Legal Counsel for the Department of Education & Workforce
Sheila Ross, Ohio Alliance for Independent STEM Schools (OAISS)
Christy Brock, Community STEAM Academy – Xenia

Ohio Department of Education & Workforce Staff Recording Meeting Minutes:

Jenny Russell, STEM Program Administrator 1

Opening:

Dr. Tom Schwieterman called the meeting to order at 9:03 a.m.

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Partnership Spotlight

Ruling Our eXperiences (ROX)

Dr. Lisa Hinkelman, Ph.D., founder and CEO of Ruling Our eXperiences, gave a presentation about the work ROX does and introduced the findings of their latest research study, the Girls' Index (published in 2023). ROX started in 2006, when Lisa was training grad students in counselor education at OSU; she saw many issues facing girls that were affecting their education and future. They received a $10,000 grant to develop a pilot program (which they ran with 57 girls in Columbus City Schools). Leaders in the fields of sexual violence, counseling, career development, social-emotional learning, and others came together to run it. ROX incubated at OSU for five years and became an independent nonprofit in 2011.

- Mission: To create professionally delivered school-based empowerment programming for girls in grades 5-12. (ROX groups consist of no more than 15 girls.)
- ROX also works with parents, teacher, counselors, athletic coaches, etc. They currently have a 20-week program model, which is in 30 states across the country. Program results: girls are more connected with other girls their age, have more confidence, and feel able to speak assertively to keep themselves safe.
- ROX recently released their Girls' Index report – national study of over 17,000 girls. The results are very sobering. The first Girls' Index was produced in 2017. Since that year, girls have had a decline in all indicators, with the youngest girls (fifth and sixth graders) showing the most negative impact. Dr. Hinkelman said that "we've got to stop this trajectory."
- Reasons for decline: social media has made a huge impact (wasn't really a thing when ROX started). Community-based programs are few and far between; mostly anchors are in schools. Puberty is getting earlier – now seeing issues in fourth and even third grades. The study's executive overview was passed out to committee members and the full 43-page report is available on the ROX website (www.rulingourexperiences.com).
- ROX wants to make sure girls feel authenticity/care/belonging at school. ROX programs currently in 322 schools in Ohio.

Dr. Tom Schwieterman asked where ROX gets its funding. Dr. Lisa Hinkelman said they are mainly funded through grants, but some schools can fund programs in their schools; they also make a lot of philanthropic requests (it costs $600 to train a facilitator and $100 per girl to go through program).

Data from Girls in STEM Reports shows that as girls get older, STEM interest actually increases but their view of themselves as capable in STEM goes down. There's also a bit of an optics problem with STEM careers – more than three quarters of girls want to help others in their careers, and we have to go the long way around to convince girls that STEM careers are helping careers.

Welcome and Introductions

Dr. Tom Schwieterman thanked Dr. Lisa Hinkelman for presenting and hosting. He said that he is impressed with her visionary work.

Approval of Agenda

Motion made to approve February 12, 2024 meeting agenda by Andrew Aichele, seconded by Jeff Polesovsky.
All votes aye; none opposed. Motion approved.

Approval of November 15 Meeting Minutes

Motion made to approve November 15, 2023 STEM Committee meeting minutes by Dr. Krista Maxson, seconded by Andrew Aichele.
All votes aye; none opposed. Motion approved.

Discussion Items:

Policy & Compliance Updates

Dr. Sarah Redick reviewed the Growth Plan/Corrective Action Plan process for STEM schools. This was talked about at previous STEM Committee meetings, so this is not new information, just a refresher.

- There are five steps in the process:

1. STEM Committee votes to put a school on Corrective Action Plan (language used in statute)/Growth Plan (preferred name because it sounds less punitive).
2. Within three months of Committee vote, the Department of Education & Workforce (DEW) and the Ohio STEM Learning Network (OSLN) meet with school to create Growth Plan.
3. Progress monitoring through quarterly meetings with school, DEW, and OSLN.
4. School submits application by uploading artifacts to SlideRoom for attributes identified in Growth Plan. Site visits scheduled as needed.
5. Within twelve months of initial Growth Plan meeting, STEM Committee votes to revoke designation or approve additional five years.

- Three months after the Committee vote (Step 2) gives us time to create growth plan, then we move on to quarterly meetings, and towards the end schools upload artifacts for attributes (in the rubric) that they needed to work on.
- Dr. Sarah Redick emphasized that we currently have two schools on growth plans but we anticipate many more. DEW & OSLN have a pre-work meeting before every meeting with schools. We're finding that it takes an average of 3-4 meetings to get schools to develop their growth plans – with SMART goals & plans. Once growth plan is approved, school has 10.5 months to work on it – then they submit application with artifacts in SlideRoom. It takes one year from development of growth plan to go through process.
- Dr. Tom Schwieterman commented that it's obviously very well-documented the whole way through, because revoking designation (if a school doesn't meet goals of growth plan) is a big deal. Dr. Sarah Redick confirmed that signature document, growth plan documents, meeting notes, etc. are all recorded in the growth plan.
- Dr. Tom Schwieterman pointed out that sometimes when growth plan is so onerous, "we need to be honest about if it's going to actually work." How are those conversations with schools going? Dr. Sandra Wilder replied that a lot of the goals schools are working on apply to more than one attribute – many goals are connected. She said that the team is feeling more positive now that we've gone through the growth plan process with 2 schools than we were feeling in the beginning just looking at everything there was to do.

Status of Schools Currently on Growth Plans

Growth plans due February 15, 2024
1. Hughes STEM High School – growth plan finalized January 16, 2024
2. St. Vincent-St. Mary High School – growth plan finalized February 8, 2024

Dr. Sarah Redick is also encouraged by the two schools we've worked with.

Jeff Polesovky wanted to know how the calendar works. Same year as designation? Dr. Sandra Wilder replied that the calendar is rolling, depending on when actual growth plans are finalized (so don't have to wait to take action).

Dr. Tom Schwieterman pointed out that this is a lot of work. He asked DEW & OSLN, "How much does this add to your plates?" Dr. Sandra Wilder said that first growth plan was probably most difficult one because we had to learn the process. There's significant investment of time. The process is high stakes. Lots of

steps. Not easy to say the growth plan is approved. Significant time needed because it's important to support these schools and get them back to where they were when they were last/first designated. Kelly Gaier Evans agreed that this first 5-year redesignation cycle will be the hardest. Redesignation wasn't a thing when schools were initially designated, like in 2010.

Dr. Tom Schwieterman said that STEM Committee's role is to make sure this is a long-term tenable situation (now that we have redesignation). Workload is getting bigger, not stable. He believes that's concerning in terms of a work dynamic for the whole team. Dr. Sandra Wilder told him the team appreciates that; we did know that it was going to be happening.

Brief break (5 minutes)

Schools Updates

School closure: St. Mary Vermilon (STEM-equivalent private school) closed at the end of the 2022-2023 school year (not enough students enrolled to stay open).

Metro Early College Middle and High School Addendum

- Kelly Gaier Evans talked about the Metro Schools addendum. The Metro Early College Middle and High School is an independent STEM school in Columbus that offers grades 6-12. Initially designated in 2012, redesignated 2023, now seeking to add grades K-5; first school to go through our addendum process. We know this school employs best practices in STEM and PBL and has deep partnerships (partners serve on governing board); they have detailed plan on how they propose adding grades. Their partners are committed to supporting extension and being on oversight committee. They plan to add kindergarten in fall 2025 – they've been going through professional development in a pilot with one of their school partners who serves elementary students.
- Dr. Tom Schwieterman asked if this extends school's designation and Kelly Gaier Evans responded no. Dr. Tom asked how long we can "addendum" grade levels without a site visit? Can it wait 5 years until redesignation time? Kelly said the team thinks so. Dr. Tom said that it will be judgment of OSLN & DEW when to do a site visit (if it's a long time). Mary Ellen Dobransky reiterated that DEW & OSLN can do a site visit at any time if we feel the need to, if we have any concerns.
- Andrew Aichele mentioned that COSI is heavily involved with Metro Schools and is supporting them. COSI has pledged commitment to support of this process (adding grade levels).

Motion to approve the Metro Schools addendum to add grades K-5 made by Dr. Krista Maxson, seconded by Jeff Polesovsky.
All votes aye; none opposed. Motion approved.

Framing the Five-Year Designation Cycle

Kelly Gaier Evans went over a brief history of STEM designation in Ohio.

2008: Working from legislation drafted by Ohio Business Roundtable, first 5 STEM schools were selected/created. Schools received start-up grants of ~$750,000 from Batelle.

2009: Hughes STEM High School designated – last to receive start-up funding and first school to go from existing (in their case, public) school to a STEM-designated school.

2014: STEM-school equivalent designation created (allowed charter and private schools to receive designation). First private school (New Hope Christian Academy) designated in 2015.

2017: STEAM designation and also designation for elementary schools passed into law; initial trial of site visits to applying schools (no site visits previously). Ohio STEM Quality Model created. First elementary schools received designation in 2018.

2019: Designation application/process revamped to focus on quality model; moved from a binary yes or no system to designation based on rubric.

2020: First official site visits conducted (online due to COVID-19 pandemic)

2021: Redesignation passed into law (schools must reapply every 5 years to remain designated; before this, designation was indefinite)

Spring of 2022: Eight schools pilot redesignation process; first official site visits conducted in person

2022-2023 school year: Thirty-three schools designated in 2017 or earlier signed 5-year compliance application for redesignation and three undergo their quality monitoring

2022-present: Twenty-four schools designated in 2017 or earlier undergo their quality monitoring

Kelly Gaier Evans told the committee that about 2 years ago we shared the timeline, framing need for 5-year designation cycle.
Original STEM school designation legislation was drafted by Ohio Business Roundtable.
2008 – first STEM schools created
2014 – first STEM-school equivalents (private & charter schools)
2017 – Ohio STEM Quality Model created
2018 – first elementary schools designated
2020 – first site visits conducted (virtual)
2021 – redesignation requirement passed into law
2022 – first official site visits conducted in person; quality monitoring for redesignation begins

- Kelly Gaier Evans said that what I want to emphasize here are a few key takeaways from the timeline – first STEM schools were designated in 2008; a lot has changed since then, we have learned a lot; prior to 2020 we had no site visits – relied on written descriptions of school practices. We knew there was a need for redesignation because after 10-15+ years, schools have had changes in leadership, practices, staff. The Ohio STEM Learning Network advocated for redesignation so we can hold those designated schools up as models to similar schools.
- Kelly added that we knew and expected that a number of schools would need to go on growth plans (instead of just being redesignated outright).
- Kelly also said that Ohio set the stage but other schools are following our model – when Tennessee did their STEM-designation legislation, for instance, they included the 5-year redesignation cycle. Our schools here in Ohio didn't know when they initially applied that they would need to go through redesignation at some point. So, this is the historical context for our recommendations – there have been big changes in the last 20 years. We believe the work of a growth plan can be done within the year.
- Dr. Tom Schwieterman asked if the schools are aware of their site visits, other requirements.
- Kelly Gaier Evans answered that there are a series of Deep Dives (for school leaders) for the first two cycles – what does site visit look like, what kind of artifacts they need to submit, etc. The first cycle is challenging.
- Dr. Tom Schwieterman mused that it reminds me of renewal for FDA approval of medications, which is of course a whole different scenario, especially with how cybersecurity is these days… I feel for these schools.
- Kelly Gaier Evans noted that it will become easier as we go through the process – we are speaking with administrators to make sure practices don't get lost over time through leadership changes, focusing on sustainability over time.
- Dr. Tom voiced concern that we have to be so consumed with redesignation and rubric that we can't "get there" – there's so much work with the limited resources that we have. He worries about doing continuous work without being able to innovate to the next level.

- Kelly noted that our current situation is temporary, and Dr. Tom asked for how long. Kelly said that we should be very busy with redesignation for about a year or so – all of these schools are coming due at once; a big set of schools, the largest group of schools – and none of them had site visit or the Quality Model when initially designated. But school leaders talk to one another, and they can support each other and also share the supports we have for them.
- All school site visits will be concluded by April 24 and then the committee will vote at May meeting.

Schools Declining Quality Monitoring for This School Year

Mary Ellen Dobransky noted that a couple more schools are declining quality monitoring and so won't be going ahead with the redesignation process. Pickerington Ridgeview Junior High School is going through a restructuring process and will apply under their new IRN (per statute, designation is by IRN, not building or name). St. Mary of the Immaculate Conception School (Lorain County) has decided not to move forward.

A couple of meetings ago the committee came up with assurances that schools declining Quality Monitoring have to sign off on, and they have been sent to those schools.

STEM and STEAM School Designation Recommendations:

Valley STEM+ME2 Academy

- Dr. Sandra Wilder started out by letting the committee know that the Academy's superintendent really wanted to be here but unfortunately the career center superintendent needed her to take his place for the day today.
- Sandra introduced the school by saying that Valley STEM is a rural independent STEM school (in the Akron hub) that only serves students in grades 9-10. It's housed in the same building as Mahoning County Career Center and they have a close partnership – a model we would love to see other schools apply as well. There is a seamless transfer from Valley STEM to the career center. School has aligned curriculum to career center pathways for grades 11-12.
- Jeff Polesovsky asked how can Valley STEM be rural if they're in Akron hub. Kelly Gaier Evans answered that a single hub covers several counties. Sandra added that a map might be helpful for next time.

Motion made by Dr. Tom Schwieterman to approve an additional five years of STEM school designation for Valley STEM+ME2 Academy, seconded by Dr. Krista Maxson.
All votes aye; none opposed. Motion approved.

National Inventors Hall of Fame STEM High School

Dr. Sandra Wilder told the committee that this school has a strong STEM culture and a really diverse school. Their "STEM Expedition" is a 4-year experience integrated through all 4 years. NIHF High School is a great example of how culture is critical to the success of a STEM school. Dr. Tom Schwieterman commented that going on site at the National Inventors Hall of Fame Middle School was really helpful.

Motion to approve an additional five years of STEM school designation for National Inventors Hall of Fame STEM High School made by Andy Aichele, seconded by Dr. Krista Maxson.
All votes aye; none opposed. Motion approved.

Linden McKinley STEM Academy

- Kelly Gaier Evans introduced the school by saying that it's a public school within Columbus City Schools, it serves grades 7-12, and it first earned designation in 2015.

- Kelly identified growth areas – Linden McKinley needs to really work with key stakeholders (district leadership, industry partners, university partners). What's their "why" behind STEM education? There is not currently buy-in throughout staff for STEM best practices, and STEM culture throughout staff is a big goal. School leaders have worked over the past two years on a "strategies for success" course. It's not available to all students but serves students in each period. They've done a good job of pulling in community to serve students in this course. Eligible students have trauma background. Community partners talk about problems like addiction, etc. Linden McKinley is located within a high-need community. Spark could be used. Staff & students strongly invested in this.
- Dr. Tom Schwieterman asked if on the rubric, this was the school's determination. Kelly Gaier Evans said that the determination (for the recommendation) is ours (DEW, OSLN, practitioners in the field) (what's required by the rubric is in parentheses, below that is team recommendation). The rubric pulls attributes apart, but we know in practice one doesn't occur without the others.
- Jeff Polesovsky asked if, in regard to relevant community experiences, if OSU is considered a part of this team already. Kelly Gaier Evans stated that no letter received from OSU. We asked for letter multiple times and it's hard to determine partnership without that. Kelly added that Linden McKinley is having a really hard time with a traditional agriculture pathway – school located in food desert. They need a pathway that's exciting for students and brings in authentic learning. There has been lots of turnover in school leadership.
- Dr. Tom Schwieterman is wondering if, on a green/yellow/red scale, what's our confidence level in their growth plan – please keep us aware of growth plan progress.

Motion to place Linden McKinley STEM Academy on a corrective action plan made by Dr. Tom Schwieterman, seconded by Jeff Polesovsky.
All votes aye; none opposed. Motion approved.

Dr. Tom Schwieterman concluded this school's overview by saying that we want to make sure positive intent comes across through growth plan.

Mater Dei Academy

Sandy Guinto told the committee that this is a private urban school in the Cleveland area. Very small school, one of its greatest strengths is leadership. School has had three principals since initial designation. The latest started six months before visit. They have a strong culture but not necessarily STEM culture. No really strong community partners – principal's really working on it. About half of staff is very good with STEM pedagogy – other half is pretty new but eager and open to learn.

Motion to place Mater Dei Academy on a corrective action plan made by Dr. Tom Schwieterman, seconded by Andy Aichele.
All votes aye; none opposed. Motion approved.

West High School

- Dr. Sandra Wilder explained that West High School is part of Columbus City Schools, serves grades 9-12, and was part of first group of schools designated in 2008. As you can see from the letter, we are not recommending redesignation at this point. Sandra emphasized their conversation with Dr. Roberts (principal). He was very sick that day but he is eager to work on it. He is example of leader and school ready to embrace feedback and become better.
- Sandra reminded the committee that OSLN is not recommending three out of five schools. Like Kelly Gaier Evans shared before, they will come out stronger at the end and moving forward will keep up practices. Attributes 3.1 and 3.2 are emerging – this is a school that has 15 COO courses and 3 CTE pathways. They have over 100 partners ready to engage with their school.
- Sandra asked what to do with partners. How can they impact what is happening in the classroom at West High School? Dr. Roberts is the leader who can work with staff to do this. Our

recommendation looks a little disheartening, but we believe we will be able to share a different letter with the committee next year.

- Dr. Krista Maxson said that she thinks these schools will be welcoming assistance provided, mentoring etc. – kudos to OSLN for such good work.
- Andy Aichele added that this is creating infrastructure that was not in place before. "Here's what's going to bring you up to" what we need. West High School is more hopeful than Linden McKinley with what they can work on. Dr. Sandra Wilder agreed that West is so far ahead with their mindset (the big difference is culture) – they've embraced feedback, already started steps, before we even finalized plan. Not seeing the growth plan as punitive; schools get it.
- Dr. Tom Schwieterman said the committee recognizes that it's not the same process schools went through initially.
- Kelly Gaier Evans reiterated that this is a tremendous opportunity for Ohio. We're getting the community to goal post so you can walk into any STEM school in state and see it as a model.
- Dr. Tom Schwieterman agreed that with the Global Impact STEM Academy visit, walked out with a whole new understanding of culture.
- Dr. Sandra Wilder pointed out that growth plans are not something done *to* a school, growth plans are made up of their goals because it's their school.

Motion to place West High School on a corrective action plan made by Andy Aichele, seconded by Dr. Krista Maxson.
All votes aye; none opposed. Motion approved.

Next Cycle Redesignation Timeline (2018 Schools)

- Dr. Sarah Redick told the committee that schools will all have completed compliance reapplications by June 2024 – site visits will be completed by April 2025 (10 schools).
- Schools Applying for Initial Designation: Mary Ellen Dobransky shared that right now we are at the step of doing site visits for new applicants; visiting four schools at this time. We're going to do a slight change in the process. It's a very heavy lift with the redesigned process. What DEW and OSLN are proposing is an application review, and if five or more attributes rated as emerging, we will not conduct a site visit; will offer technical supports before we take the time to do a site visit. OSLN has hub leaders that can engage, do walk-throughs of buildings, etc. If schools are not submitting required artifacts, we will not consider their applications. We can't be chasing people down for these things – we don't have the capacity for that.
- Kelly Gaier Evans added that we've used this process for a year and a half – used info from previous applications to decide on number of attributes, have seen trends. If site visit would move them over the top, we want to provide that site visit. But five attributes seems to be the right cut-off. As for documents, if they have one thing missing, we might remind them. But multiple documents missing makes it hard.
- Dr. Tom Schwieterman asked what resources are offered in lieu of site visit. Kelly Gaier Evans answered that we will still provide thorough feedback (where they are on each attribute in rubric and where they have to be) on applications. For initial applicants, hub leaders will do "informal site visits"/walk-throughs.
- Dr. Tom Schwieterman wants to check that once a school does apply and they're denied, there's nothing in statute. No timeline? Just have to reapply in the future? It will be smoother to do development prior to first submission. He wants OSLN and DEW to make this pointed.
- Kelly Gaier Evans said that we want to make sure schools think they could get through the process before we use all our resources. We are only a team of 5-6. Most schools are self-identifying; schools know they're two years out before being ready to apply, they want to wait.
- Dr. Tom Schwieterman feels that as a committee, it's hard to say no.
- Dr. Sandra Wilder mentioned that we would still have to vote on applications. Dr. Tom asked *do* we have to vote? Can schools retract their applications? It's up to them, if they want a vote. We have to make the decision. They did submit their application through SlideRoom. If we end up with schools who don't get a site visit, do we have to vote?

- Dr. Krista Maxson doesn't believe an application should be considered complete without a site visit, so no vote. Dr. Tom Schwieterman agreed. Andy Aichele added that we don't want to use the resources if the schools are not there yet.
- Dr. Sandra Wilder said then I don't think we need to vote; goes against grain of positive intext. We can explain to schools that if they don't get a site visit, they won't get a vote.
- Dr. Krista Maxson said that an application is not complete without a site visit; still in process. Dr. Tom Schwieterman feels that we should have a negotiation/discussion with the school. Andy Aichele added that a vote seems inappropriate if they're just exploring. Jeff Polesovsky asked when they would earn a site visit. Kelly Gaier Evans answered that they can wait a year and resubmit. Mary Ellen Dobransky said that honestly, for a school to get five or more emerging attributes, there are opportunities for support, which will probably take at least a year anyway to implement.
- Dr. Sandra Wilder confirmed that schools will engage with us and receive support. Dr. Krista Maxson asked if there is peer support. Sandra told the committee that OSLN has a monthly call will school leaders, can introduce applicants to a similar school (mentorship/residency/teacher partners). Kelly Gaier Evans said that now that OSLN has data on shared challenges, we ask participating school leaders to vote on which area to concentrate on for next monthly call.
- Dr. Tom Schwieterman said that the beauty of this model is no one is competing with each other. Dr. Tom agrees with the unanimous feeling of if five attributes rated as emerging, will not do a site visit.

Change in Initial Designation Process

If a school applicant has five or more emerging attributes, the committee has two decisions to make. Should the school get no site visit? Should the committee not vote on designation? Kelly Gaier Evans reminded the committee that we also provide concrete feedback to such schools.

Motion to put rule in place that if a school applying for initial designation has five or more attributes rated as emerging on the rubric, that school will not receive a site visit and the STEM Committee will not vote on their designation made by Dr. Tom Schwieterman, Andy Aichele seconded.
All votes aye; none opposed. Motion approved.

This year, thirteen schools completed intent to apply, each had call with Dr. Sandra Wilder of OSLN and Dr. Sarah Redick of DEW to go over what the process looks like. Only four schools actually followed through and applied for initial designation. Dr. Sandra Wilder told the committee that we had conversations; schools know more, what it's going to take, so are choosing to wait. Many of these schools are involved with OSLN programs. We've had conversations with them. Hopefully next year we will be busier with initial designations as these schools apply.

Community STE(A)M Update

- Community STE(A)M Academy is an independent STEM school in Xenia (falls in Dayton hub) that opened this past fall and serves grades 6-10.
- The STEM Committee voted to designated them with conditions in May 2021.
- Kelly Gaier Evans shared that after the committee voted, the school ended up delaying opening until fall 2023. Per committee request, DEW and OSLN did a site visit after school opened. We conducted the visit nine weeks into the school year. At time of visit we could see that expectations were in place, mastery implemented school-wide. At the same time, growth opportunities are to be expected. Staff needs ongoing PD to facilitate Project-Based Learning, design thinking. None of this was unexpected. School needs to enrich partnerships they have in place; what does curriculum progression look like for developing pathways?
- We recommend another site visit & full review closer to the end of next school year; this gives Community STE(A)M almost two years to get practices in place and for us to make recommendations to lift conditions.

- Dr. Tom Schwieterman said he's glad OSLN said it's understandable – building culture, etc. takes time, doesn't happen automatically in a new school.
- Mary Ellen Dobransky confirmed that in the meantime, we will be supporting them in any way they need. DEW is providing support along with OSLN. The school is not technically designated a STEM school, so we can't put them on growth plan, but we will be giving them supports.
- Dr. Tom Schwieterman wants to know how the committee works with a brand-new school. It takes two years maybe for a school to be able to implement STEM best practices.
- Kelly Gaier Evans answered that Mary Ellen Dobransky has shown a lot of leadership in this very area.
- Mary Ellen Dobransky told the committee that Sheila Ross is here at the meeting, she represents independent STEM schools and is looking at what statute needs to change. The status of "designation with conditions" doesn't exist in Ohio statute. We need to make designation attainable and confer it responsibly – we can't do a site visit when a new school isn't open yet.
- Dr. Tom Schwieterman said that the committee commends Community STE(A)M for their courage.

Dr. Tom Schwieterman moved to approve OSLN's recommendation that Community STE(A)M Academy's conditions not be removed at this time and that the school undergo a full STEAM school review by April 2025. Andy Aichele seconded.
All votes aye; none opposed. Motion approved.

Partnership Updates

Department of Education & Workforce Updates
- Mary Ellen Dobransky is thrilled to announce that the Department of Education & Workforce has a new director, Stephen D. Dackin. The Ohio Department of Higher Education also has a new chancellor. Dr. Krista Maxson shared that Mike Duffy has an MBA from the Ohio State University. He was vice-chancellor of ODHE for five years so there will be a seamless transition.
- Dr. Tom Schwieterman is glad to see a bit of a STEM/STEAM championship at the top. That's great. Does the department now encompass development, education, and workforce? Mary Ellen Dobransky answered that development is not part of the department. There will be two deputy directors, one for education and one for workforce. Dr Tom asked William Ashburn is he is connected with that, and William said yes (William is the deputy director of the Governor's Office of Workforce Transformation).

Ohio STEM Learning Network Updates
- Dr. Tom Schwieterman suggested that OSLN have a display of our 77 designated schools with logos or something like that, so people can say "there's us!"
- Kelly Gaier Evans said that OSLN is building technical support, thinking about different levels within buildings (coaches, teachers, administrators). For Leaders, they are offering two Innovative Leaders Institutes. One is reimagined and the other is new (Bridge to STEM). For Coaches, they are offering the Fostering STEM Institute, and for teachers, they are offering the Teacher Academy with Workforce Fellowship.
- Innovative Leaders Institute: Bridge to STEM. The Innovative Leaders Institutes (ILI) are communities of practice for STEM school leaders, sort of a STEM 2.01. The Bridge to STEM ILI is specifically for rural schools and focuses on building foundational STEM practices – really digging into five experiences and building foundations (five topics are STEM School Immersion; STEM Culture and Identity; Business, Community, and School Connections; Teacher Experience in STEM Schools; and Student Experience in STEM Schools).
- Dr. Krista Maxson asked if this will be virtual and how long it will last.
- Kelly Gaier Evans answered that they are still fleshing this piece out – five in-person days, virtual mix – institute will be one year long (will do deep dive into STEM designation about three-quarters of the way through).
- Kelly spoke about Teach Computer Science grants and advancing STEM for All (even if schools will not be seeking designation.) The Teach Computer Science grants is a new program. The State Committee on Computer Science released a report in fall 2022. This committee was charged with making Ohio a leader in

computer science. The report includes ten recommendations; the sixth recommendation is licensing computer science teachers. Benchmarks computer science as a subject against health as a subject. There are 4600 health teachers and only 1800 computer science teachers, many approaching retirement. In January it was announced that the Lt. Governor's Office is awarding grants to OSLN and two ESC partners. Partnering with Putnam County ESC (NW Ohio) and ESC of Central Ohio. Working on an I-71 corridor for STEM schools and computer science courses. These areas need help growing their number of computer science teachers. The goal is for every student to have access to a foundational computer science course. We need to support teachers in licensure for computer science.

- Dr. Krista Maxson said that it's worth noting that our new chancellor was chair of the State Computer Science Committee. Dr. Tom Schwieterman remarked that this is way overdue.

- Dr. Krista Maxson shared that ODHE would like to double the number of computer science teachers in Ohio. There have only been 128 newly licensed teachers over the past three years. Most computer science teachers are math or science teachers who have a computer science endorsement.

- Kelly Gaier Evans told the committee that Dr. Sandra Wilder shared with you in the November STEM Committee meeting that OSLN's Summit is coming up on (Tuesday) June 4. We are tweaking the format with more ways for educators & partners to engage. We will have additional sessions and different session types. Early bird registration goes until May 13. We hope to see you there – hold the date on your calendar if you can. Committee members can expect an invitation to awards dinner on June 3 (honoring initial designees and redesignation).

- Dr. Tom Schwieterman suggested that OSLN have a display of our 77 designated schools with logos or something like that, so people can say "there's us!"

- Kelly Gaier Evans reminded the committee that Dr. Sandra Wilder did the OSLN annual report overview in November. She went over high points, but if you have any questions please ask Kelly. We do want to circle back to one key question. "What opportunities for alignment to state priorities should OSLN be exploring as we revisit our three-to-five-year goals?"

- Dr. Tom Schwieterman answered that it's the two exact same things I've brought up for years. I always feel like the school has to do the lifting to get things going with business and university partners. Be more innovative around rural STEM practices; it's not an equal playing field if you're living in a rural community right now. I'm very worried about resources – you guys have to sleep. It's very important for you to have help.

- Andy Aichele added that he was inspired by host Dr. Lisa Hinkelman of ROX and her message today. How do we more intentionally look at and identify the confidence of students in our programs. Where and when does that come up?

- Jeff Polesovsky agreed with what Dr. Tom Schwieterman said about making sure industries are leading a little bit more from the front. Our three huge new emerging industries (EV battery storage technology, biosciences, and semiconductors) haven't been mentioned at all. The assets might be in central Ohio but impacting students statewide. He is happy to facilitate some conversations about what Ohio is doing with STEM Promise program. We all keep hearing these big names, but what are we doing with them at a grassroots level?

- Dr. Tom Schwieterman asked if the committee should bring them in to discuss. Or have a meeting in one of these locations? Jeff Polesovsky said that Columbus State Community College could facilitate for us. Capture this and do it soon. Even just telling them the story about what you all are doing and what we're doing here. It's new and it's going move quick.

- Kelly Gaier Evans believes that everybody got an invitation to OSLN's Design Challenge Showcase – they're partnering with Star Lab this year. Challenge to make space station more habitable for individuals for an extended period of time. State's top 21 teams coming to Batelle on Friday, February 23. Invites emailed a few weeks ago; do have to register by this Friday. Sandy Guinto added that NASA's going to be there and other partners. You're welcome to join us for lunch afterward – just let me know so we can include you in lunch numbers.

STEM Committee Meeting Schedule

Mary Ellen Dobransky spoke about the upcoming STEM Committee meeting schedule. No location yet for July 10 meeting.

Public comments:

- Christy Brock, Executive Administrative Assistant to Superintendent, Community STE(A)M Academy: On behalf of Community STE(A)M Academy I appreciate you allowing me to come and speak. I have some things to say today. Launching any entrepreneurial venture is a big task. Doing so with the intent to revolutionize education would be daunting if we were attempting to do it alone. We appreciate your support. Relationship building is at the heart of our venture. We recently signed an MOU with Wright Brothers Institute (real-world Air Force problems). A lot of things are in initial phases because we just started in the fall. We are working with OSLN's Dayton hub. Our school is ready to partner with you and provide students and families of Ohio with starts of twenty-first century careers and beyond.
- Dr. Tom Schwieterman responded that we see the school's efforts and their acknowledgement is so kind.
- William Ashburn shared that in January the Lt. Governor announced the High School Tech internship program, which reimburses up to $5000 to businesses who provide students opportunities. Six companies are participating. Sandy Guinto asked who was awarded the funds William said the ESC of Central Ohio and nonprofit associations.

Closing:

Dr. Tom Schwieterman closed by saying the committee agrees that we're the tip of the iceberg and you are all under the water. I worry about your stress and work-life balance. You are doing an enormous amount of work and communicating tough messages to schools. We want to acknowledge the stress of it all. If you're feeling overwhelmed, let us be your voice.

Andy Aichele reminded the committee that Ohio's largest STEAM Festival will take place at COSI on May 1-4 - come on our on Saturday and dress as your favorite Star Wars character. We have 24 partner cities this year. COSI has moved from focusing on STEM to focusing on STEAM. Get all the info at cosiscifest.org.

Adjournment:

Motion to adjourn the STEM Committee meeting made by Dr. Tom Schwieterman, seconded by Andy Aichele.
All votes aye; none opposed. Motion approved.

Dr. Tom Schwieterman adjourned the meeting at 11:37 a.m.

The next STEM Committee Meeting will be held on Monday, May 6, 2024, at the Department of Education & Workforce in Columbus.