



Ohio STEM Committee Meeting Minutes

May 6, 2024

9:00 a.m. – 12:30 p.m.

Department of Education & Workforce

25 South Front Street, 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
William Ashburn, Workforce Project Manager, 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
Dr. Chris Woolard, Ph.D., Chief Integration Officer, Ohio Department of Education & Workforce, Designee for Director of the Ohio Department of Education & Workforce

Committee Members Absent:

Andrew L. Aichele, Vice President of Education, COSI, appointed by the Governor
Jeff Polesovsky, Vice President of Public Policy, Columbus Partnership, appointed by the Speaker of the Ohio House of Representatives

Ohio Department of Education & Workforce Present:

Mary Ellen Dobransky, Associate Director of Innovative Approaches to Teaching and Learning
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:

Rich Granger, DriveOhio
Jeff Damadeo, Indian Hill High School
Christa Krohn, TIES
Mary Schneider, PAST Foundation
Dr. Daniel Roberts, West High School
Ellen Marrison, TIES
Sheila Ross, OAISS
Steffany Congelio, Incarnate Word Academy
Mike Wisnor, Incarnate Word Academy
Anne Hribar, Incarnate Word Academy
Marisa Saelzler

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 9:01 a.m.

- Ohio Department of Workforce & Education Director Stephen Dackin addressed the Committee. He said that DEW is trying to figure out how we can expand STEM and STEM pedagogy so that all students in Ohio have access, and get districts to embrace this as “how we do school.” He emphasized that STEM is not a program, it’s the way kids learn and how we do school.
- Dr. Tom Schwieterman responded that it’s nice to have a STEM pioneer in the state of Ohio as the DEW director, and the political support the Committee has gotten for STEM pedagogy is much appreciated.
- Kelly Gaier Evans added that OSLN appreciates the support of DEW; this work is not something you can do by yourself.
- Director Dackin assured the STEM Committee and OSLN that “you have a partner at DEW in this endeavor.”

Partnership Spotlight

DriveOhio

- Mary Ellen Dobransky introduced Rich Granger, Managing Director of Workforce and Economic Development at DriveOhio, an initiative of the Ohio Department of Transportation and the state’s center for smart mobility innovation, on the ground and in the air. In this role, Rich manages workforce development programs from Pre-K to Ph.D. to prepare Ohio’s talent for transportation jobs of the future. He also supports economic development initiatives across Ohio to help create new jobs in the fast-growing sectors of electric vehicles and advanced air mobility. Mary Ellen added that he partnered with her when she was the principal of a STEAM school.
- Rich Granger told the Committee that he’s glad to be here. Due to equipment malfunction, Rich was unable to show a short video by ODOT’s director, Jack Marchbanks, but emphasized that Director Marchbanks is a big champion of STEM, and his message to students is, “you are a STEM student.”
- What is DriveOhio? Rich said that they focus on technology & infrastructure for smart mobility (charging stations, etc.), and he works in workforce development, preparing students for these jobs.
- Rich spoke about advanced air mobility – a lot of testing is happening right here in Ohio. Individual electric air vehicles, air taxis. Joby will be building air taxis right here in Ohio (will be needing jobs filled in the Dayton area within the year). DriveOhio has curriculum around all this.
- Rich next spoke about driving. Honda is building an electric vehicle battery plant here. Rich said this was a huge announcement that was overshadowed by the Intel announcement (if not for Intel, this would be the biggest workforce announcement of the year for Ohio).
- The Ohio Manufacturing Competency Model was developed by the Ohio Manufacturer’s Association and the Governor’s Office of Workforce Transformation; career pathways include electric vehicles/batteries, aerospace/defense, semiconductors, surveying with drones, etc. – students can earn industry-recognized credentials through this model.
- DriveOhio has created a K-12 educator toolkit (based on feedback they received from school visit and summer programs). It was launched this school year and includes free resources. Some of the lessons/units include a cardboard vertiport challenge (partnered with PAST Foundation to develop this) and Smart City Adventure (based on Reynoldsburg City Schools’ third grade city planning unit). DriveOhio has portable innovation labs for schools without the equipment (funded by the PAST Foundation), free of charge, very popular (more funding always helps!). If schools already have equipment, they can use the curriculum in the toolkit.
- Rich said that after a year of being used in school settings, a tweaked version of the educators’ toolkit will be rolled out this fall. DriveOhio is also currently working on a higher ed toolkit.
- Rich told the Committee about DriveOhio’s STEM “Charging Stations” around the state. These informal information centers will be placed in libraries, museums, parks, etc. (signs feature QR

codes and people can use their own devices to explore STEM). One station is currently installed and there will be more to come.

- Dr. Tom Schwieterman was curious about drones being developed in Dayton – why Dayton? Rich Granger answered that the location was very competitive, but Ohio had a lot of infrastructure already in place (Wright-Patterson Air Force Base, etc.) and a large air testing facility already existed in Springfield.
- Dr. Chris Woolard asked what the hurdles are that we can help overcome to get this information into educators’ hands. Rich Granger said that we need to help educators be confident that they can teach this material. Teachers are busy and it’s a lot but we do have resources; more planning time always helps, and the toolkit is specifically turnkey to help them out. It’s important to boost teachers’ confidence to engage with this content on behalf of their students.
- Director Dackin share that in the governor’s State of State speech he said that every student should have some kind of pathway to postsecondary careers/education (bring CTE to students, eliminate waitlists). We should add career planning (and paying for it) as part of currently required graduation plan. This calls for rethinking what we now call high school. It’s a very ambitious idea. We will start small with legislation and think big and build fast. We need to ask how we get this model to scale to all students, and not just leave access up to students’ ZIP codes.
- Dr. Tom Schwieterman emphasized that the state has so many good resources and thanked Rich Granger for highlighting one.

Welcome and Introductions

Dr. Tom Schwieterman welcomed Committee members, Director Dackin, DEW/OSLN staff, and guests to the meeting.

Approval of Agenda

Motion made to approve May 6, 2024 meeting agenda made by Dr. Krista Maxson, seconded by Will Ashburn.

All votes aye; none opposed. Motion approved.

Approval of February 12 Meeting Minutes

Motion made to approve February 12, 2024 STEM Committee meeting minutes made by Dr. Tom Schwieterman, seconded by Dr. Krista Maxson.

All votes aye; none opposed. Motion approved.

Discussion Items:

Policy & Compliance Updates

Status of Schools Currently on Growth Plans

5 schools on growth plans (corrective action plans)

1. Hughs STEM High School – growth plan finalized January 16, 2024
 2. St. Vincent-St. Mary – growth plan finalized February 8, 2024
 3. Mater Dei Academy – growth plan in development
 4. Linden McKinley STEM Academy – growth plan in development
 5. West High School – growth plan in development
- Dr. Sarah Redick let the Committee know that Hughes STEM High School and St. Vincent-St. Mary have already had their quarterly growth plan meetings.
 - Dr. Daniel Roberts, principal of West High School (Columbus City Schools) shared his thoughts about the growth plan process. He is the sixth principal of West High School in the last twelve

years. He's been working with the team on developing the growth plan and looking at what STEM means for high school students. The DEW/OSLN team has been very available and specific and intentional. Dr. Roberts likes the concept of a "growth plan" (words/phrasing matters), because if you're not growing, what are you doing? He said that it's so helpful to have somebody to walk you through the rubric.

- The DEW/OSLN team met with the principal and West High School's STEM advisory council. Dr. Roberts stated that last year West only had 6-8 community partners, and now they have over 100; the DEW/OSLN team helped us to connect with new partners). The Growth Plan has been a very helpful project and created some excitement among staff, and they are looking forward to working on professional development over the summer. After they complete the process, West High School will have another site visit in January or February. Dr. Roberts concluded by saying that "STEM is not a marathon, it's a race that never stops."
- Dr. Tom Schwieterman responded that the Committee is on the same journey – we've spent the last 7-8 years improving and refining the STEM designation process.

Schools Updates

- Dr. Sarah Redick gave quick a update on the upcoming (2018) redesignation cycle and shared the approved quality monitoring schedule. Ten schools submitted compliance reapplications.
- Mary Ellen Dobransky spoke about the timeline for next year's initial designation cycle. She said that we completed one and we're jumping right back in. The intent to apply form will be available and SlideRoom application opens in June. In October and November, we will offer virtual technical support sessions to go through the designation rubric, answer questions, and direct schools to the technical supports we offer). The application closes in February to give us time to get the rest of the process done before May. In March and April we will have lots of site visits. In April/May we will notify schools and the STEM Committee will vote on designation at the May 2025 meeting.
- Dr. Tom Schwieterman asked if we are completely out of the primary redesignation cycle now. No. Not yet. Dr. Sandra Wilder said that we go all the way through 2020 for our first round of redesignation. We have two more cycles of catch-up. Dr. Schwieterman said "wow."
- Kelly Gaier Evans explained that the schools initially designated in 2017 and earlier are the bulk of the schools who need to go through redesignation, and those schools are now finished. As OSLN/DEW dug into the reasons for not applying for redesignation, schools have told us that the leaders who wanted to be STEM designated have left, there have been changes in their priorities, this is no longer their path. DEW sent assurances to these schools to sign to make sure they understand what not being redesignated means. Dr. Tom Schwieterman pointed out that these schools' decisions are all voluntary; the Committee is not so much "revoking" their designation as much as the schools are choosing not to continue with the redesignation process.

2017 Schools Declining Quality Monitoring for 2023-2024 School Year

Dr. Tom Schwieterman moves that the Committee conduct individual votes on each school having their designation voluntarily revoked (due to not completing quality monitoring or submitting reapplication), seconded by Dr. Krista Maxson.

Dayton Early College Academy Middle/Prep

Motion to revoke Dayton Early College Academy Middle/Prep's STEM school designation made by Dr. Tom Schwieterman, seconded by Dr. Krista Maxson.

All votes aye; none opposed. Motion approved.

Mad River Middle School

Motion to revoke Mad River Middle School's STEM school designation made by Dr. Tom Schwieterman, seconded by Dr. Krista Maxson.

All votes aye; none opposed. Motion approved.

Pickerington Ridgeview Junior High School
Motion to revoke Pickerington Ridgeview Junior High School's STEM school designation made by Dr. Tom Schwieterman, seconded by Dr. Krista Maxson.
All votes aye; none opposed. Motion approved.

St. Gabriel School
Motion to revoke St. Gabriel School's STEAM school equivalent designation made by Dr. Tom Schwieterman, seconded by Dr. Krista Maxson.
All votes aye; none opposed. Motion approved.

St. Mary of the Immaculate Conception School
Motion to revoke St. Mary of the Immaculate Conception School's STEAM school equivalent designation made by Dr. Tom Schwieterman, seconded by Dr. Krista Maxson.
All votes aye; none opposed. Motion approved.

Stebbins High School
Motion to revoke Stebbins High School's STEM school designation made by Dr. Tom Schwieterman, seconded by Dr. Krista Maxson.
All votes aye; none opposed. Motion approved.

2008-2017 STEM & STEAM Schools Redesignation Process

- Dr. Sandra Wilder let the Committee know that today marks the completion of a two year-cycle. In 2022, 36 schools were redesignated based on going through quality monitoring. Legislators anticipated that not every school would be ready for redesignation, so they created a way to extend the process by creating corrective action plans (ORC 3326.03, 2). "Corrective action plan" is the name in statute, but we call them growth plans to emphasize that this is a move in the right direction – and we have support systems for these schools
- Dr. Sandra Wilder added that we're right at the initial stages of this process, but we have seen that over the year, these schools on growth plans will become model STEM schools. She said that we are confident that schools that commit to that process will be stronger and will be model STEM schools at the end.
- Dr. Sandra Wilder spoke a little about the 2008-2027 cohort of schools. She said that of these 36 schools, we've seen a few groups develop. Some schools have managed to overcome obstacles, and some schools have struggled – at different levels of struggle – and we want to share these numbers before OSLN makes our final set of recommendations.
- Dr. Sandra Wilder shared that of these 36 schools whose compliance applications were approved in June 2022, 13 schools met or exceeded the redesignation requirements, 9 schools were approaching meeting requirements for redesignation, 8 schools had significant areas of growth to work on (such as partnerships, staff turnover, maintaining culture of instruction), and 6 let us know that designation is just not a path for that school any longer, which we understand. With the 8 schools with significant areas for growth, we worked on stretch goals. They are still committed and they still want to be STEM-designated for their students and communities. OSLN will prioritize these schools when it comes to supports and programs.
- Dr. Tom Schwieterman said that we're just so indebted to these schools, including those on growth plans. A lot has changed, we have become more aware of what STEM pedagogy and culture looks like, and we as a committee see STEM designation as a very significant area of achievement and attainment. Redesignation was created to ensure we weren't losing the essence of STEM over time. We appreciate Dr. Roberts talking about the positive aspects of growth plans. The true intention of this committee is to approve all these schools. It takes a lot of time and relationship-building, so thank you to OSLN and DEW. We're stretching our resources pretty thin, but we want to make sure these schools are getting there.
- Dr. Tom Schwieterman asked that the minutes reflect that the STEM Committee's intention is to get schools to the position of being awarded designation. It's not a competition; we want everyone to success and be designated.

- Dr. Sandra Wilder said that the goal posts were pretty basic in the beginning. Designation was novel, but it's no longer new. She thinks it will be interesting to see what will happen with the 2018 schools; fewer of these schools are on a growth plan because those schools were initially designated closer to the creation of the rubric and the adoption of higher standards.

STEM and STEAM School Designation Recommendations:

Bio-Med Science Academy STEM School

Dr. Sandra Wilder started out by letting the Committee know that Bio-Med is an independent STEM school in northeastern Ohio. It first opened as a secondary school in 2012, then added grades 5-6 in 2019 and grades K-4 in 2020 (the "pandemic year"). They made a commitment and went ahead and opened a new school when everyone else was struggling. They focused on common challenges schools are facing and how they really impact STEM schools. At the time of redesignation, Bio-Med had almost a quarter of their teachers new to STEM (meaning it was their first year teaching STEM). 60% of teachers had 5 years or less of STEM experience.

Motion to place Bio-Med Science Academy STEM School on a corrective action plan made by Dr. Krista Maxson, seconded by William Ashburn.

All votes aye; none opposed. Motion approved.

iSTEM Geauga High School

- Sandy Guinto started out by saying that iSTEM is an independent STEM school in suburban northeastern Ohio serving grades 6-12. They just added 6th and 7 grades and moved to a new building. They have dedicated teachers; some are relatively new to STEM. This school is rethinking high school. Sandy shared that all coursework is completed in grades 9 and 10 so in grades 11 and 12 students can focus on college credit, CTE, industry internships, etc. These students are not even on campus sometimes. iSTEM just has little things to tweak (they have a very new staff and design thinking isn't quite as embedded as we hope).
- Dr. Chris Wollard said, they need some tweaks...what is the timeline? Dr. Sandra Wilder answered that the school has 3 months to develop their growth plan after the Committee's vote, then 10 and-a-half months to implement the plan, and the last 6 weeks they do another application and site visit. Sandy Guinto added that the school will only be reevaluated on attributes that needed work (iSTEM had 4). Dr. Krista Maxson told the Committee that the support really helps schools get better.

Motion to place iSTEM Geauga High School on a corrective action plan made by William Ashburn, seconded by Dr. Chris Woolard.

All votes aye; none opposed. Motion approved.

Tri-State STEM+M School

- Kelly Gaier Evans introduced the school by saying that it's in the very southeastern corner of Ohio, very rural. It's an independent STEM school and we really want to celebrate its success. When it comes to identifying partnerships, Tri-State is really thriving and can serve as examples for other schools across the state. Kelly said that almost all students are involved with the school's musical production, whether it be performing, set design, audio, lights, etc. There are lots of different STEM components to theater. They have also been wonderful at connecting to community and industry partners within their region (such as the local reptile house and local community gardens); they've really done a fabulous job of figuring out local problems that are important to students.
- Dr. Krista Maxson asked how Tri-State compares to schools on growth plans. Dr. Sandra Wilder replied that on the written OSLN recommendations, attributes that are green are attributes which meet the required minimum rating – could be establishing, doesn't have to be executing, depending on the attribute.

Motion made by Dr. Krista Maxson to approve an additional five years of STEAM school designation for Tri-State STEM+M School, seconded by Dr. Chris Woolard
All votes aye; none opposed. Motion approved.

St. Sebastian Parish School

St. Sebastian is a private school that serves grades K-8. Dr. Sandra Wilder told the Committee that she thought of this school when we were talking about challenges. Everything they do is about STEM education but the clarity around what STEM is is not quite there, and we are working with them. They believe in what STEM education does for their kids, and I think they will meet their goals. The STEM quality model and updated rubric are helping, but there are still misconceptions about what we mean by STEM. We want them to understand that it's not a noun, it's a verb.

Motion to place St. Sebastian Parish School on a corrective action plan made by Will Asburn, seconded by Dr. Krista Maxson.

All votes aye; none opposed. Motion approved.

St. Mary School Chardon

- Dr. Sandra Wilder explained that St. Mary Chardon also serves grade K-8; she would love to bring them together with St. Sebastian so they can support each other. At St. Mary, we have to disrupt the current beliefs/mindsets about what STEM education is. What does success look like for St. Mary's? We have to help them discover this. How can we paint a clear picture of what the domains look like in their school?
- Dr. Tom Schwieterman said that it sounds like they've migrated away from the essence of STEM. Dr. Sandra Wilder said that nothing is impossible, but it's a lot of work; with the right mindset, St. Mary's is open to supports.

Motion to place St. Mary School Chardon on a corrective action plan made by Dr. Krista Maxson, seconded by Will Ashburn.

All votes aye; none opposed. Motion approved.

Thurgood Marshall High School

Thurgood Marshall is an urban public high school in Dayton. Dr. Sandra Wilder explained that Thurgood High School is dropping the "A" and going from STEAM to STEM. Their new principal is working on STEM culture. There have been large changes in student population (big shifts every quarter – there are two group homes in the school's service area and those students move in and out). The students have a personal life coach who has been there for just eight months. Most of the attributes are with teachers and teachers were already assigned what and how before the new principal started. They have big plans for next year. Dr. Tom Schwieterman commented that it sounds like the timing of this growth plan is pretty good to plan over the summer.

Motion to place Thurgood Marshall High School on a corrective action plan made by Will Ashburn, seconded by Dr. Chris Woolard.

All votes aye; none opposed. Motion approved.

MC2 High School

Dr. Sandra Wilder introduced MC2 High School; it's part of Cleveland Metro Schools, urban, serves grades 9-12. They are creative with problem-solving. They organize their day around a community problem – students own voice and choice, identify their own questions within that community problem, then everything they do centers on that. We asked about new students- every urban district will be pretty transient. How do you work with that? And the principal told us that they accept any student at any point at any grade level. On our site visit, we couldn't tell which students were new because the culture was so good. The school has three different locations and they are a year-round school which allows for frequent professional development.

Motion made by Dr. Tom Schwieterman to approve an additional five years of STEM school designation for MC2 High School, seconded by Dr. Krista Maxson.

All votes aye; none opposed. Motion approved.

Springfield High School

Kelly Gaier Evans introduced Springfield High School, a large urban, public high school (over 1400 students). The leadership makes an intentional effort to make every student feel included. They have a large immigrant population, and the school takes that into account and has additional supports for those students (they even have a heritage language course in French Creole). This ties in with the inclusive mission of school. In going through redesignation, the school took a landscape analysis, so they knew going in that they would be going on a growth plan. Their pathways were developed with community college partners and industry partners. They have been focused on partners first, then began moving into teacher support. School leaders are invested in continuing their STEM journey.

Motion to place Springfield High School on a corrective action plan made by Dr. Tom Schwieterman, seconded by Dr. Krista Maxson.

All votes aye; none opposed. Motion approved.

Dr. Tom Schwieterman added that because of their location, Springfield High School has so much opportunity growing in their backyard.

Springmill STEM Elementary School

Sandy Guinto introduced Springmill STEM Elementary School, which serves grades K-6 in Mansfield City Schools. Springmill is a pilot school in their district. There is an extremely strong partnership component to their school and they do an amazing job with career awareness for an elementary school. They have a strong culture and are committed to being a STEM school. The school is invested in being a model for their district and also Ohio. They have been inviting other students from Mansfield in to give them the experience with their classrooms/interactive space. They do have a fairly new principal and young staff.

Motion to place Springmill STEM Elementary School on a corrective action plan made by Will Ashburn, seconded by Dr. Krista Maxson.

All votes aye; none opposed. Motion approved.

Dayton Early College Academy – High School

- Kelly Gaier Evans told the Committee that DECA Early College Academy High School was Ohio's very first early college school. They are a community school that uses a series of gateways (six total) that prepare students for the next phase of their education. On our site visit, students said those gateways make them feel prepared. The staff is currently less focused on the importance of STEM education, such as best practices around design thinking, integration of concepts, etc. Dr. Tom Schwieterman commented that getting them back up to par sounds like a fairly fundamental shift for staff. Dr. Sandra Wilder said that some things probably came as a surprise, but we've engaged with them.
- Mary Ellen Dobransky added that we're talking about tweaks; they just have to shift to incorporate pedagogy a little more thoroughly. I don't think it will be a monumental shift if they choose to take part in the technical supports offered.
- Dr. Krista Maxson is concerned that the school is very focused on prepping for college and might lose sight of pedagogy for STEM.
- Dr. Sandra Wilder said that their gateway program is so strong, it's hard for them that they have to change it. They need an ideation session. How can we make that strong gateway better through the lens of STEM?

Motion to place Dayton Early College Academy – High School on a corrective action plan made by Dr. Tom Schwieterman, seconded by Dr. Krista Maxson.

All votes aye; none opposed. Motion approved.

Canal Winchester Middle School

Dr. Sandra Wilder told the Committee that if we were to take our rubric and assess any school in Ohio hopefully they would all demonstrate Canal Winchester Middle School's attributes of inclusive mission

and community-based learning. Their journey has shifted away from STEM a little bit. Many things work really well for their students; however, STEM education looks a little bit different than it should. We haven't had their initial corrective action plan meeting yet. The school may need fundamental changes.

Motion to place Canal Winchester Middle School on a corrective action plan made by Will Ashburn, seconded by Dr. Chris Woolard.

All votes aye; none opposed. Motion approved.

Background on Northwestern Schools

Dr. Sandra Wilder spoke about the next three schools – the only three schools in the rural Northwestern School District (elementary, middle, and high). All three are currently designated. They've had a rough journey – there is a lot of work that all three schools will have to focus on, a lot of supports that they will need. This is the work we want and we are very much committed to supporting them as a rural district. There are some significant areas of growth across all of the domains across all grade levels. It's a small district but STEM designation is a district initiative through all three schools.

Northwestern Elementary School

Motion to place Northwestern Elementary School on a corrective action plan made by Dr. Tom Schwieterman, seconded by Will Ashburn.

All votes aye; none opposed. Motion approved.

Northwestern Middle School

Motion to place Northwestern Middle School on a corrective action plan made by Dr. Krista Maxson, seconded by Dr. Chris Woolard.

All votes aye; none opposed. Motion approved.

Northwestern High School

Motion to place Northwestern High School on a corrective action plan made by Dr. Chris Woolard, seconded by Will Ashburn.

All votes aye; none opposed. Motion approved.

- After all redesignation votes, Dr. Tom Schwieterman said that the Committee has the preview of the schools that have hills to climb. Schools have one year to work on stuff; there is no wiggle room, no flexibility whatsoever in that time line. The timeline is a legal matter, not a committee decision. He wants to make sure schools understand this.
- Mary Ellen Dobransky told the Committee that there is strong communication around this. She added that a lot of attributes are very closely related; once the culture kicks in, it's not hard to have them come along. There is also nothing to preclude them from going through another designation if they think they need more time.
- Dr. Tom Schwieterman said that if it's obvious six to eight months into the growth plan [that a school is not going to make it], we don't want to have a situation where we throw a school into a tailspin around having their designation revoked.
- Dr. Sandra Wilder agreed that we need to be very honest with schools. It takes three to four meetings to develop a growth plan. If the school has eleven robust goals, we will have to have difficult conversations as we get to the end of the CAP cycle. She added that Dr. Sarah Redick is very good at asking probing questions when we meet with schools.
- Dr. Tom Schwieterman is impressed with the amount of work, attention to detail, and empathetic discussions with schools this all takes. I can tell you know them personally, thank you. Thank you for all your effort.

Incarnate Word Academy

Kelly Gaier Evans talked about Incarnate Word Academy. They are a suburban school serving grades K-8 seeking STEAM equivalent designation. She wanted to highlight the fact that school leadership has really

transformed STEAM over the last 4 years. They went gradually, had a strategic roll-out, and got teacher buy-in across entire school. We are so excited to welcome them to the network.

Motion made by Dr. Tom Schwieterman to approve five years of STEAM school equivalent designation for Incarnate Word Academy, seconded by Will Ashburn.
All votes aye; none opposed. Motion approved.

Principal Steffany Congelio was invited to speak. She said on behalf of Incarnate Word Academy, we want to thank you for giving us this opportunity. We are so excited. We applied two years ago and completed a site visit, but were not recommend for designation. We were disappointed, but we knew we must model the mindset of going back, making improvements, and setting goals that would allow us to grow. We implemented master school changes, professional learning opportunities for teachers, and STEM vocabulary for teachers and students. We learned from others – all of our faculty visited STEM schools across Ohio. We took workshops and participated in ILI through OSLN. We had hoped to reapply in 2023 but we took one more year to integrate STEM curriculum-wide, develop practices, and strengthen culture. Throughout our journey, we have relied on our partners, who support learning for students, teachers, and faculty on-campus and off. Our STEAM learning extends beyond our campus and into the community. We want to give a special thank you to OSLN for walking alongside us through every step of our journey.

Indian Hill High School

Dr. Sandra Wilder told the Committee that there are two things to emphasize about Indian Hill High School: STEM is not the principal's or superintendent's initiative – it's all or nothing. And they have a school-wide approach. So many attributes say "school-wide," which is difficult. School-wide can be tricky for high schools, but Indian Hill High School embodies a shared learning model. Everybody has a voice – there is a platform for it and they are heard.

Motion made by Dr. Tom Schwieterman to approve five years of STEM school designation for Indian Hill High School, seconded by Dr. Krista Maxson.
All votes aye; none opposed. Motion approved.

Principal Jeff Damadeo was invited to speak. He told the Committee that as Steffany [of Incarnate Word Academy] said, we are the people that get to thank you, but leaders try to set the conditions, and the teachers and students get us there. This team has been instrumental in that and I want to express my gratitude. Two years ago, our district superintendent brought up STEM designation. We are one of three district schools that have/are pursuing designation. We leaned on our primary and elementary schools; they did not get designation the first time they applied, but they went back and asked hard questions. We at the high school asked, why are we doing this? We connect with partners around the state, but it's hard to get the story into classrooms to teachers and connect STEM to what we already do. (not just science, technology, engineering, and math, but applying what we already do and not a huge shift in identity). We are already doing problem-based learning and the iterative design process – and that's STEM! The folks in the classroom every day are incredible.

Partnership Updates

Department of Education & Workforce Updates

- Mary Ellen Dobransky spoke about the BEYA Stars and Stripes program (BEYA is the professional organization for black engineers). In February, we had the pleasure of taking students to the BEYA STEM Conference in Baltimore where they participated in the Stars and Stripes mentoring program, a way to connect students of color to STEM careers in the military. The armed forces was a missing piece in the ways we connected with schools and districts. We took 20 students from Warrensville Heights High School, who were matched with decorated military service members (including communications specialists, medical personnel, and other military jobs that aren't on students' radar). They discussed STEM job training, higher education, and pathways to military careers. While they were in Baltimore, the students also visited Morgan State University (HBCU).
- The governor would like to replicate the Stars and Stripes mentoring program here in Ohio. Kelly Gaier Evans mentioned that Springfield High School has a very active ROTC program so they might be a resource

for this. Mary Ellen said that because of Wright-Patterson Air Force Base and other facilities, Ohio has lots of opportunities and resources in this area.

Ohio STEM Learning Network Updates

- Kelly Gaier Evans spoke about the OSLN vision and mission. Vision: Every Ohio community has access to a quality STEM education. Mission: Championing STEM education by establishing a network of professional learning programs and enduring partnerships between schools, communities, and industry.
- We can lose sight a little because so much of these meetings focus on designation, but we want all students to have opportunities. The work to get there doesn't start with designation, it starts with a spark of interest. Schools looking to grow STEM practices [but not seeking designation] are important as well as designation. We want to scale up and sustain processes for all schools/teachers. We are also going through the design process at OSLN.
- B2STEM: Dr. Sandra Wilder talked about Bridge to STEM, which is about expanding access to STEM education. STEM designation is the ultimate recognition from the state, but we're about robust STEM education for every student. What stands in the way? What supports can we create for schools to help them overcome these obstacles? What about schools at the very beginning of their journey? We have a very clear rubric so they know what that goalpost is. Schools ask, "where do we start?" Bridge to STEM is a leadership program that evolved from our Rural Innovative Leadership program, and is a new opportunity for next year. We will focus on STEM school immersion; STEM culture and identity; business, community, and school connections; teacher experience in STEM schools; and student experience in STEM schools. Sixteen schools will be joining us (the program kickoff will be in September) for this first round of Bridge to STEM.
- This leadership institute will be a little different than others we have offered. We will think about how we take what we already have and make it better. We are engaging with NIHF Middle School, which will serve as our immersion school. The program's goal is not for all participating schools to be designated – it's to come back a year from now and say these schools went from no STEM practices or cultures to some of these.
- Dr. Tom Schwieterman shared that he attended a Versailles High School program that embodied all the things we talk about. Is there any opportunity where we can put a designation on a program and not the whole school? Some of these smaller rural schools have such diverse programs.
- Mary Ellen Dobransky let the Committee know that there is a "CTE STEM Programs of Excellence" distinction in statute passed in 2021. The task force to develop the framework and rubric for this distinction meets for the first time in June. Schools who offer registered CTE pathways can apply for this type of program designation. We have been working with the Career-Technical Education office at DEW to identify stakeholders that would be good to bring together to work on this issue. Dr. Sandra Wilder added that the initial meeting is scheduled for June 20 – we can give a brief update when we meet in the summer so you can see where we are in this process. Rich Granger added that the business advisory council process could help with this, and Mary Ellen let him know that we have crosswalks to help BACs.
- Kelly Gaier Evans told the Committee that hopefully they have all received an invitation to the OSLN Innovation Summit and the awards dinner the night before (schools who have been granted initial STEM school designation and redesignated schools are invited to the dinner). We hope that you join us – we use this as a platform to showcase, spotlight, and network. Reach out if you have any questions. Dr. Tom Schwieterman let the Committee know that when he attended it was a high energy event that was fun to go to.

STEM Committee Meeting Schedule

Dr. Sarah Redick spoke about the upcoming STEM Committee meeting schedule. There is just one more meeting scheduled for this year, on July 10. There is no location yet for the July 10 meeting.

Public comments:

None

Closing:

Dr. Tom Schwieterman closed by saying, “I just want to echo that we are stressing this team to the height of expectations. With all the designations and state-wide initiatives, I don’t think that the workload’s going to diminish, I think it’s going to continue to expand. As a committee we want to be able to help you get the resources you need – if there’s anything we can do to help, please let us know.” This is the foundation of that house (and DriveOhio is another stud that’s going in). Thank you to the schools who have applied for redesignation – at this time, we don’t have any liberty to extend growth plans.

Adjournment:

Motion to adjourn the STEM Committee meeting made by Dr. Tom Schwieterman, seconded by Dr. Krista Maxson.

All votes aye; none opposed. Motion approved.

Dr. Tom Schwieterman adjourned the meeting at 11:22 a.m.

The next STEM Committee Meeting will be held on Wednesday, July 10, 2024, at a location yet to be determined.