

Ohio STEM and STEAM Designation Application Site Visit Protocol

This protocol is a guide for school leadership, staff, students, and stakeholders as they prepare for the site visit. It includes the components of the visit and outlines the roles and responsibilities of the site visit team and the school. Please read the protocol carefully. That will ensure that the visit runs smoothly and produces the intended outcomes.

Purpose

The purpose of the site visit is to collect evidence pertaining to the three domains of the STEM and STEAM designation application:

- Culture for Learning
- Learning and Teaching
- Pathways to Success in Careers

The evidence collected during the site visit will accompany the artifacts and narratives provided by the school in their written application for STEM and STEAM designation. The purpose of the site visit is to collect additional evidence that will supplement and support the school's written application.

Site Visit Benchmark for Designated STEM and STEAM Schools

Currently designated STEM and STEAM schools applying for an additional five years of designation will need to meet several requirements in order to participate in a site visit. The Ohio STEM Learning Network will make a recommendation for site visit participation based on the evidence provided by the school in their written application for STEM or STEAM designation.

Benchmark for site visit participation:

- The school's habits of mind (community values) appear to align with STEM cultural strategies of innovation, inquiry, collaboration with individual accountability, and an entrepreneurial spirit (1.1 Cultural Strategies)
- The school calendar, master schedule, and professional development schedule indicate school structures that promote or sustain interdisciplinary teacher collaboration (1.3 School Leadership)
- The school's governing body/STEM or STEAM advisory group consists of members selected for their expertise in STEM/STEAM pedagogy. The school's curriculum team includes all the required members: the school's chief administrative officer, a teacher, a representative of the higher education partner and a member of the public with expertise in the STEM/STEAM disciplines (1.4 Governing Body, STEM/STEAM Advisory Group and Curriculum Team)
- The school provides evidence sufficient to earn Establishing on attribute 2.1 Integrity of Academic Disciplines

A public-private partnership of:

- The school provides evidence sufficient to earn Establishing on attribute 2.2 Teaching and Learning Approaches
- The school submits letters from its established Higher Education and Business and Industry partners. The letters, dated within the last 12 months, detailed the partnership between the school and the organizations.

If the site visit benchmark is not met, the OSLN and ODEW representatives will meet with the school leadership and review the areas of concerns. If the concerns can be alleviated with additional artifacts that can be submitted by the school within 3-5 days, the review process will continue.

If the conversation with the school leadership reveals that the key requirements of STEM or STEAM designation (as outlined in the site visit requirements) are not in place, the school will not participate in a formal site visit. Instead, OSLN will make the recommendation during the next STEM Committee meeting, and ODEW and OSLN will initiate the growth plan development. This may include an informal visit to the school to observe classrooms, talk with teachers and leadership, etc. in order to inform the growth plan.

Site Visit Benchmark for Schools Seeking Initial STEM or STEAM Designation

If a school applying for initial STEM or STEAM designation earns the Emerging rating on five or more attributes, the school will not be able to participate in a site visit. The Ohio STEM Learning Network will make a recommendation for site visit participation based on the evidence provided by the school in their written application for STEM or STEAM designation.

If the benchmark is not met, the OSLN and ODEW representatives will meet with the school leadership, share the feedback based on the written application, and offer supports for strengthening and advancing the school's STEM cultural and instructional practices.

Scheduling Visit Dates

The Ohio STEM Learning Network will work with the school to schedule their site visit.

The site visit will take place no earlier than two weeks after the school's written application has been submitted. The selected date should be a typical school day, with no testing, or any other events outside of the normal academic programming taking place on the day of the visit. The school should refrain from scheduling any field trips on the date of the site visit. To meet the requirements of the STEM and STEAM designation, the school will need to demonstrate evidence of several attributes across all grade levels. This would be challenging if one or more grade levels, or clusters of students, are on a field trip during the site visit.

Once the date of the site visit is determined, the school leadership should inform their staff and students of the upcoming visit.

Site Visit Team

The site visit team will consist of 3-6 reviewers. The team will include OSLN and the Ohio Department of Education representative(s). The team will also include current STEM and STEAM practitioners (for example, STEM and STEAM school leaders and/or teachers, OSLN regional hub directors, etc.). All team members bring expertise in various areas related to the [Quality Model for STEM and STEAM Schools](#), STEM and STEAM best practices, curriculum and instruction, business and industry partnerships, and/or school leadership. The names of the site visit team members will be shared with the school leadership during the site visit planning meeting. If there are any changes to the site visit team, they will be shared with the school leader prior to the visit.

An OSLN staff member will serve as the site visit coordinator. The site visit coordinator will communicate with the school leader on all matters related to the site visit, including scheduling and facilitating the planning meeting. The school leader will be the point of contact for the visit. If the school leader is not available, they may appoint a designee who is knowledgeable about the school, its daily practices, staff, and all involved stakeholders. This person is expected to be available throughout the site visit and oversee the events scheduled for the day.

Site Visit Planning and Preparation

The site visit coordinator and the school leadership team will meet virtually to review the elements of the site visit. The school leader (principal, chief academic officer, director, etc.) may select the members of the school staff to accompany them to the site visit planning meeting; however, only the school leader is required to attend this meeting. The planning meeting is expected to take 30-45 minutes.

The school leader will share a draft of the agenda (using the template linked here) with OSLN at least 2 business days prior to the planning meeting. In addition to the agenda, the school leader will share the following materials prior or during the agenda planning meeting:

- School map or directions indicating where each grade level and/or content area classrooms are located
- Parking directions

The agenda will be finalized during the meeting.

The site visit team will collect data through classroom visits, school observations, meetings with teachers, students, and school leadership, and any additional opportunities that may present themselves during the site visit. The site visit team will need access to a private meeting space during the visit.

Agenda for schools with approximately 400 students or less (download the [agenda template here](#)):

Site visit component	Time
Arrival of the review team	8:00:8:30 AM
Review team meeting	

Brief tour of the school led by the school leadership (school map required)	8:30-9:00 AM
Classroom observations	9:05-10:05 AM
Review team debrief	10:05-10:20 AM
Conversation with teachers	10:20-10:50 AM
Break	10:50-11:00 AM
Conversation with students	11:00-11:30 AM
Lunch and review team debrief (Lunch provided by OSLN)	11:30-12:15 PM
Conversation with school leadership	12:15-12:45 PM
Final review team debrief	12:45-1:15 PM

Agenda for schools with more than 400 students (download the [agenda template here](#)):

Site visit component	Time
Arrival of the review team	8:00-8:30 AM
Review team meeting	
Brief tour of the school led by the school leadership (school map required)	8:30-9:00 AM
Classroom observations	9:00-10:30 AM
Review team debrief	10:30-10:50 AM
Conversation with teachers	10:50-11:30 AM
Lunch and review team debrief (Lunch provided by OSLN)	11:30-12:15 PM
Conversation with students	12:15-12:45 PM
Review team debrief	12:45-1:10 PM
Conversation with school leadership	1:10-1:45 PM
Final review team debrief	1:45-2:15 PM

Classroom Visits

- All members of school staff and students are informed of the site visit at least a couple of weeks prior to the date of the visit. We recommend reminding the school community of the visit during morning announcements or morning meetings/homeroom.
- During the site visit planning meeting, the school leadership team can recommend 3-5 specific classrooms to be visited by the site visit team. The site visit team will make an effort to visit the recommended classrooms, but this may not always be possible.
- The site visit team will be given the classroom schedule and the school map. The schedule should indicate the grade level and subject (if applicable). **The site visit team will have the flexibility to move freely through the school and classrooms during their visit so they can see a variety of classes, different grade levels, and lessons at different stages. Teachers and students should be prepared for drop-in visitors on the site visit day.**
- The school leadership team can indicate which classrooms (if any) should not be visited by the site visit team (if such visits would cause disruption to students).
- Class visits should not disrupt the classroom or lesson. The site visit team will interact with students only with permission from the teacher to ensure no learning is disrupted. Whenever possible, the site visit team will be provided with opportunities to interact with students.
- A visit to a classroom will take approximately 10-15 minutes.
- The purpose of classroom visits is to collect evidence aligned with the components of the STEM and STEAM Designation rubric. The purpose is not to evaluate individual teaching or teachers.
- The site visit team will be taking notes and may collect student handouts, if any are available in the classroom.

Conversations

- **The site visit will include a conversation with teachers.**
 - The teachers should include core teachers, STEM and STEAM teachers (if any), and if the school is applying for the STEM and STEAM designation, the arts teacher(s).
 - Members of the school or district administrative (leadership) team are not allowed to be present during the conversation with teachers.
- **The site visit will include a conversation with the school leadership team**
- **The site visit will include a conversation with students**
- The site visit team will ask questions related to the three domains of the STEM and STEAM Designation rubric:
 - Culture for Learning
 - Learning and Teaching
 - Pathways to Success
- The site visit team members will be taking notes during the conversations.

Student, Teacher, and Leadership Example Questions

The following are examples of questions and prompts that may be used by the review team during the site visit. Please note that this list is not exhaustive and that reviewers can ask any questions pertaining to the attributes of the STEM and STEAM Designation Rubric.

The intended audience for each question is denoted by the following labels:

(S) - students

(T) - teachers

(A) - administrators

1.1 Cultural Strategies

- (A, T) What is this school's STEM identity?
- (A, T) What do you think the students would answer if asked this question?
- (S) What makes this school a STE(A)M school?
- (T) Tell us about a lesson you have implemented that focused on community values (habits of mind, etc.)
- (T) Provide an example of students demonstrating community values.
- (S) What are your school's values [USE LANGUAGE THE SCHOOL USES IN THE APPLICATION]?
- (S) How do you learn the school/community values?
- (S) How do your teachers and other adults in the building model these values?

1.2 Inclusive Mission

- (A) Describe your recruitment process.
- (T, A) How do you make sure that student cultures and languages are valued and recognized in the school/classrooms?
- (T, A) How do you make sure that student experiences are valued and recognized in the school/classrooms?
- (S) Do you feel welcomed, included, and safe in the school? In your opinion, do all students feel welcomed, included, and safe in the school?
- (S) If you could describe the school in one word, what word would you choose? Thinking about your school, use that word in a sentence.

1.3 School Leadership

- (A) Explain how you empower teachers to engage in design thinking, problem or project-based teaching and learning, and/or personalized learning.
- (A, T, S) Tell us about your vision for the school.
- (A) What structures are put in place to allow for interdisciplinary teacher collaboration?
- (A) How do you support teachers who might be new to STEM/STEAM pedagogy? How do you help them feel supported?
- (A) What structures are in place for teachers new to your building to be onboarded and supported?
- (A) What structures are in place for teachers who struggle with innovative approaches or lack buy-in related to STEM pedagogy?
- (T) Tell us about your collaboration opportunities (who do you collaborate with, how often, how long, etc.)
- (T) What, if anything, stands in the way of collaboration with other teachers?

- (T) Tell us about your collaboration with the arts teacher(s). How do you incorporate art into your subject? [REQUIRED FOR STEAM]

1.4 Governing Body and/or Advisory Group and Curriculum Team

- (A) Describe the STEM/STEAM expertise of the members of your governing body/advisory board/curriculum team [CHOOSE BASED ON THE APPLICATION AND SCHOOL ORGANIZATION]
- (A) Tell us about your arts partner and their involvement with the school [REQUIRED FOR STEAM]

2.1 Integrity of Academic Disciplines

- (T) Describe one of your lessons that intentionally integrates another discipline.
- (T) What was the focus of the lesson? How did you select the content standards for the lesson? How was the lesson designed and planned to ensure quality integration of other discipline(s)?
- (S) Tell us about a learning experience that required you to learn knowledge from more than one subject.
- (S) Tell us about a learning experience in (math, ELA, science, etc.) that required you to learn knowledge from another subject.

2.2 Teaching and Learning Approaches

- (T) Describe your favorite PBL or authentic learning that you implement in your classroom.
- (T) Describe the design process of PBL's or authentic learning experiences.
- (T) Provide an example of a PBL, authentic learning, integrated lesson, or design thinking task that you implemented in your classroom that involved collaborating with business or community partners.
- (T) Provide an example of a learning task that required students to present their learning to an authentic audience.
- (S) Provide an example of a real-life/authentic problem you solved in one of your classes.
- (S) Who decides the problems you are asked to solve?
- (S) Provide an example of a learning experience when you were required to present your learning to an authentic audience (business or community partners).
- (S) Provide an example of a problem you solve using design thinking.
- (S) What steps do you take when solving a problem, learning something challenging, answering a hard question, or creating something? [SPECIFICALLY ASK ABOUT A VARIETY OF CLASS EXAMPLES - CORE DISCIPLINES]

2.3 Computational Thinking

- (T) Provide an example of how you incorporate modern technologies in your instruction.
- (T) Provide an example of how you incorporate computational thinking in your instruction.
- (S) Provide an example of using technology (computer science, 3D printing, CAD/engineering, digital tools, etc.) to solve problems in different subjects.

2.4 Personalized Learning

- (S) What choices do you have in your classes when it comes to what you learn and how you learn it?
- (S) Do you ever choose what you will learn?
- (S) Is the pace at which students learn the same for everyone?
- (S) What happens if you take an assessment, and you don't do well on it? What happens next?
- (S) What happens if you feel that something was way too easy instead of too challenging. What do you do?
- (S) Do you have multiple ways to show your teacher what you have learned?

- (S) How do you know when you have really learned something?
- (S) What do you do when you are struggling with an assignment or project? How do you overcome a challenge?
- (S) Do you set your own classroom/learning goals? What does this process look like? Who makes the final decision?
- (T) Explain how you implement mastery in your classroom?
- (T) What different ways, if any, do students have to show what they have learned?
- (T) Explain the process of learning goal setting in your classroom? Who drives this process?
- (S) How do you show your teacher that you have mastered a concept/topic?
- (S) How do you know when you really understand a topic or your solution or design works? How do you prove it to your teacher?
- (S) What opportunities to demonstrate your learning in unique ways have you been given in your classes (not a test/quiz)?
- (S) Tell us about different types of assessment you complete in your classes.
- (S) What choices, if any, do you have related to how you demonstrate your learning?
- (T) Tell us about different assessments you use in your classes (both formative and summative).
- (T) Describe a performance-based assessment you used in your class.

2.5 STEM/STEAM Teaching Staff

- (A) Describe STEM/STEAM focused professional development that your staff engages in throughout the year.
- (A) How do you personalize professional development for your staff?
- (A) What does the onboarding support look like for new teachers (new to teaching, new to STEM, etc.)?
- (A) Tell us about opportunities your staff have had to share their STEM/STEAM expertise outside of your school.
- (A) How do you support teachers that struggle with STEM instructional strategies?
- (A) How do you support teachers who have mastered STEM pedagogy?
- (T) Tell us about professional development focused on STEM/STEAM practices you have engaged in recently.
- (T) What additional professional learning supports do you need?
- (T) What professional development supports do you have access to throughout the school year?
- (T) What was it like for you when you first started? How were you supported through onboarding?
- (T) How have you continued to learn throughout your tenure?
- (T) Tell us about opportunities, if any, you have had to share your STEM/STEAM expertise outside of your school.

3.1 Career Access and Exploration

- (T) How do you incorporate STEM/STEAM career explorations in your classes?
- (S) How do you learn about different STEM/STEAM careers in your classes?
- (S) What future careers are interesting to you right now? How do your classes prepare you for that career?
- (A) Tell us about mentorship/internship opportunities available to students in your school [HIGH SCHOOL ONLY]
- (A) Tell us about certifications, credentials, and/or college credit opportunities available to students in your school [HIGH SCHOOL ONLY]

3.2 Partnerships Extend Learning Opportunities

- (A, T) Tell us about your business and industry/higher education partners and their involvement with the school.
- (A) How do you maintain meaningful partnerships with your partners?
- (A,T) Provide an example of authentic/real-life problems the partners brought to the school.
- (A,T) Describe resources that partners share with the school (space, equipment, volunteers, mentors, speakers, internships, externships, etc.)
- (T) Provide an example of a time when partners served as an authentic audience to provide feedback on student work/solutions
- (A,T) What STEM/STEAM related forums, competitions, and/or exhibits (both virtual or in-person) have your students had opportunities to participate in?
- (A) How do you help your teachers and/or curriculum team and/or instructional coaches connect with your partners? How do you facilitate the connection that creates classroom experiences with partner involvement?

3.3 Relevant Community Experiences

- (S) Tell me about a problem you solved in one of your classes that involved your community/was relevant to you and your community.
- (S) How does what you are learning impact the world around you?
- (T) Provide an example of STEM/STEAM focused learning that was relevant to students and their community.
- (A,T) How do you involve the community in your school decisions?
- (A,T) How does your school positively impact the community? How do you communicate that impact to the community?

End of Visit Debrief

The site visit team will complete the final debrief at the end of the site visit. The debrief will take no longer than 30 minutes.

Subsequent to the site visit, the site visit team will make a recommendation to the OSLN director regarding the school's designation status. **The site visit team will not have that recommendation ready to be shared with the school at the time of the debrief.**

Site Visit Summary Report

The site visit team will finalize the review after the site visit. The site visit team will make a recommendation to the OSLN director regarding the school's designation status. The school will be notified of the team's recommendation within four (4) weeks of the site visit. The site visit coordinator will meet with the school leadership team to review the feedback, recommendation and the next steps.

The recommendation will incorporate the collective thoughts of the site visit team and the feedback on the artifacts and narrative provided in the written application. The final recommendation will be submitted to the Ohio STEM Committee for their approval.

Site Visit Checklist for School Leadership

Within 3-5 days of submitting the written application for STEM and STEAM designation:

- Review the site visit protocol in detail and share it with the school's governing authority and staff.
- Communicate with staff and students regarding the purpose of the site visit, what to expect during the visit, and their anticipated roles on that day.
- Inform the teachers that the site visit will involve classroom visits. Ensure that the purpose of the classroom visits is to collect evidence pertaining to the STEM and STEAM designation application process, not to evaluate individual teaching and/or teachers.
- Be on the lookout for an email from OSLN to schedule your site visit planning meeting.

5-7 days prior to the pre-planning meeting:

- Using one of the templates provided by OSLN, create an agenda for the site visit that includes all required components and share with OSLN
- Prepare all documents needed for the site visit planning meeting.
- The necessary documents typically include:
 - Information about the location of the school (parking instructions, signing in, any construction or anticipated obstacles in locating the school, etc.).
 - School daily schedule, including classes and other activities typically scheduled within a school day.
 - Map of the school.
 - A staff roster including administrator and teacher names. The teachers' names should be accompanied by the grade level and subject they teach.
 - Any other materials you may believe will aid the team in planning an effective and efficient site visit of your school.

Between the planning meeting and three days before the site visit:

- Secure rooms that will be used for conversations with teachers, leadership team, and students.
- Secure a private place that can serve as a meeting room for the site visit team throughout the day.

Two to three days before the site visit:

- Remind the school staff and students of the upcoming visit.
- Send reminders to all participants that will meet with the site visit team, including the location and time of their respective meetings.
- Remind all teachers to expect visits to their classrooms.
- Label classrooms that will not be included in the site visit (agreed upon during the planning meeting with OSLN)
- Distribute the site visit agenda to the school community.

During the visit:

- Please be on site early to troubleshoot any issues that may arise on the day of the visit.
- Bring any concerns and/or questions to the attention of the site visit coordinator as they arise.
- Show off the impact and outcomes of the hard work of your staff, students, and all your stakeholders!