

Additional Graduation Options for the Class of 2020

Capstone Guidance for Districts and Schools

For the class of 2020, legislation directs the Ohio Department of Education to develop guidance for districts and schools that outlines the components of a successful capstone project and a process for evaluation. The capstone guidance should ensure the project is a culmination of the student's high school experience. This document provides an introduction to capstone projects, the required components and the process districts should follow to evaluate students' work.

Introduction

Each Child, Our Future, Ohio's strategic plan for education, calls for a student-centered system that addresses the needs of an increasingly diverse student population and prepares students for a rapidly changing workplace. To support this call, curricula, instruction and assessment must align to support the development of foundational knowledge and well-rounded content and skills. Through the high school experience, all students should have the opportunity to build and demonstrate leadership and reasoning skills, as well as develop important social and emotional competencies that are vital for future success. Capstone projects complement test-based graduation requirements by giving students authentic learning experiences that can stretch and deepen academic, technical and professional knowledge and skills.

Successful Capstone Projects

A successful capstone project should justify that a student is well prepared for future success in the workplace, college, the military or another self-supporting vocation. By completing a capstone project, a student will demonstrate a mix of the foundational knowledge, social and emotional skills, and leadership and reasoning abilities, as well as show his or her readiness to transition to an identified next step after high school.

Successful capstone projects:

- Allow students to initiate, design, conduct, analyze and revise projects that demonstrate what they know and are able to do within a real-world context;
- Challenge students to exhibit higher-order thinking and analytical skills, draw on multiple disciplines to synthesize information, develop creative solutions and generate new ideas;
- Promote student innovation, discovery, creativity, resilience and persistence through project completion;
- Are academically rigorous;
- Demonstrate deep knowledge students gains through high school in a way that allows for career exploration;
- Promote the development of self-awareness, self-management skills, relationship skills, responsible decision-making skills and social awareness;
- Require students to apply the knowledge and skills learned in the classroom in real-world settings.

General Requirements

State law requires that students satisfying the capstone component of the Additional Graduation Options for the class of 2020 must complete their capstone projects during their senior years. To satisfy the requirement, all capstone projects must include a **proposal, anchor experience, culminating portfolio of work and presentation**. Also, through these capstone project components, students must demonstrate a culmination of knowledge and skills in five core areas: **mathematics, research, writing, technology and communication**.

This document offers guidelines for schools for each component of a successful capstone project, as well as a process for evaluating students' work.

Required Components of a Capstone Project

I. CAPSTONE PROPOSAL

Student planning, self-direction and motivation are foundational to any capstone project. The student must develop a capstone proposal that clearly outlines the project plan and action steps — the who, what, when, why, where and how — the student will follow to complete the proposed project. The proposal should be a formal document signed by the student, parent or caregiver, a capstone advisor and a mentor who will serve as the guide for the student's capstone project. The proposal must include:

1. Objective

The student must provide a statement outlining the proposed capstone topic, a clear description of an anchor experience, a description of the culminating portfolio of work and a presentation plan for the capstone. The student's objective should identify clearly the following:

- (a) An area of study that serves as a **culmination of the student's high school experience** and focuses on connecting the student to his or her next steps after high school.
- (b) A **proposed anchor experience** that explores the capstone topic through an application such as an internship, problem-based research project, public service project, artistic demonstration or another means.
- (c) Areas within the capstone components, such as an anchor experience, culminating portfolio of work and/or presentation, in which the student will integrate **technology skills, mathematical proficiency and research, writing and communication skills**.
- (d) An outline of the **deliverables for the culminating portfolio of work**.

2. Timeline and Resources

The student must identify a timeline and plan of action for completing the capstone project. Districts may require certain deadlines that should be clearly communicated to the student during the proposal process. The timeline and resources identified should:

- (a) Set up a clear, detailed timeline for project completion. The timeline is student driven and may be aligned to local policies and deadlines for graduation. The timeline should include:
 - i. Established benchmarks for project completion; and
 - ii. Identified check-in points with capstone mentors or supervisors.

- (b) Identify key resources and project needs, such as:
 - i. Identifying and establishing an anchor experience;
 - ii. Identifying internship or mentoring needs.
 - iii. Helping with technology needs (for example, tools and resources for project planning, digital portfolios, data collection and analysis, and communicating and presenting); and
- (c) Necessary supporting materials (for example, a cover letter and resume, job application, credit flexibility plan, off-site permissions and work-based learning agreement).

3. Identify a Capstone Advisor and Community or Career Mentor

Identify a **capstone advisor within the district or school** and a **community or career mentor** who is knowledgeable in the identified area of focus. The capstone advisor should be a teacher or administrator within the district or school to whom the student will report. The mentor should be an adult who is knowledgeable in the field of interest or area of study who will help guide the anchor experience and the work. The capstone advisor and community or career mentor must be willing to witness, encourage, guide, support and evaluate the student as he or she works through the capstone project.

4. Clearly Defined Expectations for Evaluation

Ohio's Learning Standards outline the academic content and essential work-ready skills today's employers and colleges seek most. Through the completion of the capstone project, students participate in demonstrations of learning, during which they exhibit their proficiency in core academic areas and work-ready skills. The capstone project must be evaluated according to a capstone rubric that clearly reflects knowledge and skills defined in Ohio's Learning Standards.

During project planning, the student, in coordination with his or her advisor and/or mentor, should clearly identify the expected learning outcomes as defined in the capstone rubric and identify a plan for the learning demonstration. Additionally, the student will identify, with support from his or her mentor or advisor, three additional academic, technical or professional learning outcomes closely related to his or her capstone focus area.

The evaluation team will evaluate the degree to which the student achieved the learning outcomes that are outlined in the capstone rubric. The student may demonstrate the learning through the anchor experience, culminating portfolio of work or presentation. Because the experience should be authentic, it also may provide unexpected, rich learning opportunities, as well as those clearly defined. The student should reflect upon both in his or her demonstration of learning.

5. Signed Pledge

The student, parent or caregiver, advisor, and mentor must agree to and confirm the scope of work outlined in the project proposal. The pledge also should indicate the student is willing to work independently, with support from the advisor, mentor, and parents or caregivers, to produce a final capstone project that includes the student's original work and satisfactorily meets all project requirements. This also may include references to the district or school plagiarism policies, where appropriate.

Find sample capstone resources (toolkit, rubrics, etc.) [here](#), which includes sample forms and a sample capstone rubric to support implementation. This toolkit and rubric are for illustration only, and schools and districts may modify it to meet local needs. Districts may develop their own forms and rubrics that reflect the capstone criteria or modify existing, locally defined capstone materials as needed.

II. ANCHOR EXPERIENCE

The anchor experience is a student-directed, authentic learning experience that merges the student's passions, creativity and future career interests with the knowledge and skills the student gained in high school or elsewhere. The experience should be rigorous enough to address the capstone objective statement through experiential learning the student designs. Examples may include a:

- Semester-long public service project;
- Internship with a business aligned to a student's career interest;
- In-depth research project that builds on the student's particular interest;
- Substantial compilation of student-created works or demonstrations of art, creative writing, computer programming, videography, musical composition or other skills; or
- Campaign or event for a particular cause for which the student is passionate.

III. CULMINATING PORTFOLIO OF WORK

The culminating portfolio of work should serve as the connection between the anchor experience, which is the real-world application, and the culmination of knowledge and skills the student learned in high school. The portfolio should show evidence of successful learning outcomes defined in the capstone proposal. The portfolio will include the collection of documents and major deliverables called for in the capstone project and may be electronic or developed as a digital portfolio.

All portfolios must include:

- a. Capstone proposal and supporting documents;
- b. Documentation of progress;
- c. Evidence of completion of the anchor experience;
- d. Reflections; and
- e. Self-evaluation and capstone advisor and mentor evaluations.

And some combination of original student work from the list below:

- f. Artifacts or artistic work;
- g. College and career development-related supporting documents;
- h. Materials developed during the anchor experience;
- i. Literature review;
- j. Project;
- k. Prototype;
- l. Quantitative and/or qualitative data analysis;
- m. Research paper or report;
- n. Video, audio, photographic or artistic demonstrations; or
- o. Other items identified by the student and approved in the proposal.

IV. PRESENTATION

The student must present to a panel a summary of the capstone project, lessons he or she learned, and implications for post-high school actions to the school and/or local community (see Process for Evaluation below). The panel should be made up of individuals selected by the district to evaluate the presentation of the student's work. The student also should be able to respond to questions from the panel. To do the presentation, the student may use digital presentation tools, a student-developed website, a student-produced video or podcast, or other technology-based tools and resources.

Examples:

- Participation in an art exhibition or showcase;
- Presentation of research or project at a science fair or competition;

- Presentation to the city council, local board of education or local civic organization; or
- Participation in a district-defined capstone presentation day.

Process for Evaluation

An evaluation team should approve and evaluate each capstone project. The evaluation team will be made up of individuals determined by the district but may include the capstone advisor, community or career mentor, and a teacher or external expert in English language arts, mathematics and technology (to evaluate the content area demonstrations). The process for evaluation should include the steps outlined below.

Step 1: Planning and Approval

The student must complete the project proposal. It will include:

- a. Objective;
- b. Timeline and resource needs;
- c. Clearly defined expectations for evaluation; and
- d. Signed pledge.

The proposal must be reviewed and approved by:

- a. The student's parent or caregiver;
- b. The capstone advisor; and
- c. A community or career mentor.

Step 2: Documentation and Evaluation of the Anchor Experience

The student must document progress and meet with the capstone advisor and community or career mentor to discuss and evaluate progress.

1. Project progress reports
 - (a) The capstone advisor will complete these at least two times a semester during the student check-in.
2. Advisor and/or mentor progress evaluations
 - (a) Self-evaluation; and
 - (b) Advisor and/or community or career mentor progress evaluation.
3. Student project log
 - (a) The project log is a way for the student to keep track of what he or she did, when it happened and the amount of time spent on each activity;
 - (b) The mentor and advisor should check on the project and deliverables periodically to provide guidance, intervention and/or supports, evaluate student progress and ensure the student is on track to complete the project.

Step 3: Culminating Portfolio of Work Evaluation

An evaluation team selected by the district will evaluate the final portfolio of work at the end of the year based on the following:

1. Competencies shown in:
 - (a) Research and writing;
 - (b) Mathematical skills and knowledge;
 - (c) Technology skills and knowledge;
 - (d) Problem-solving and critical thinking;
 - (e) Innovation and creativity;
 - (f) Overall capstone cohesiveness; and

(g) The demonstration of three locally defined or student-identified competencies outlined in the project proposal. These can be academic, technical or professional competencies related to the capstone focus.

2. Self Evaluation:

The student will provide a self-evaluation of the research in the reflection essay.

Step 4: Presentation Evaluation

The student must present to a panel a summary of the capstone project, lessons he or she learned, and implications for post-high school actions to the school and/or local community. The panel should be made up of individuals who are selected by the district to evaluate the presentation of the student's work. The student also should be able to respond to questions from the panel. The presentation evaluation should focus on the following:

1. Effective communication;
2. Articulation or reflection of capstone requirements;
3. Logical organization of presentation;
4. Clear explanation of process and key findings and learning;
5. Use of technology and/or other media.

Find a sample presentation rubric [here](#). This presentation rubric is for illustration only. Schools and districts may modify it to meet local needs. Districts may develop their own materials that reflect the criteria above or modify existing, locally defined capstone materials as needed.

Options for Implementation

Districts may utilize a variety of strategies to implement capstone projects into their schools. Districts are encouraged to be creative in how they allocate their time and resources toward students completing these projects. The following strategies may assist when considering options for implementation:

Existing coursework or curriculum

Districts may choose to integrate capstone projects into existing courses like social studies or English language arts. This may reduce any local need to expend resources on monitoring and evaluating students' capstone projects outside of traditional coursework.

Capstone course

Districts that wish to offer capstone projects to their students may elect to create a capstone course. This would provide local instructors and evaluators the ability to support and oversee any number of students completing the projects in a structured environment.

Independent study

Districts may choose to allow students completing capstone projects to pursue independent study. Students could then work individually with capstone advisors to create unique capstone projects that deepen the academic, technical and professional knowledge and skills they gain throughout the process.

Advising periods and study hall

Advising periods provide students daily time to create goals for the future and connect what they are learning to life outside of the classroom. These periods also would be ideal for capstone advisors to check students' progress and provide needed guidance throughout completion of the capstone projects.

Career advising initiatives

Career advising initiatives provide students and their families what they need to make informed choices about their futures. Schools may consider integrating capstone advising into new or existing career advising initiatives.

Selection of appropriate staff to serve as advisors/evaluators

Schools have discretion over the staff members within their district or school who serve as capstone advisors and evaluation team members. They should carefully identify staff with the capacity to serve in these roles in order to ensure they are successfully overseeing the duties and responsibilities outlined in the guidance.

As local capacities differ, districts are encouraged to be creative in selecting strategies that best align to their students' needs and their local resources.

Frequently Asked Questions

1. Can a student work on or complete the capstone project during the summer before his or her senior year?

The capstone project must be completed during the 12th grade year. Districts should consult local policy to determine when the 12th grade year officially begins and ends for a student. If the student is considered a 12th-grader during the summer prior to his or her senior year, the capstone may be completed during this time.

2. Does the anchor experience need to occur during 12th grade?

Districts may use discretion to determine and approve anchor experiences that occurred prior to a student's 12th grade year.

3. What are the benefits of implementing a capstone project in my school?

Capstone projects provide students authentic learning experiences that can stretch and deepen academic, technical and professional knowledge and skills.

4. Can schools create and use their own capstone evaluation rubrics?

Yes. The sample rubric for the culminating portfolio of work sets the minimum level of expectations for capstone projects. If districts or schools wish to modify the sample rubric or create rubrics of their own, they may do so. All projects should be evaluated consistently within a district or school when using a local rubric.

5. Are districts required to use the capstone presentation rubric provided by the Ohio Department of Education?

Districts may modify the sample presentation rubric or use an existing local capstone program presentation rubric to reflect the criteria outlined in the capstone guidance. They also may develop their own presentation rubrics based upon the criteria established in the guidance.

6. Are student capstone projects required to meet expectations in each of the competency areas listed under Step 3 of the Process for Evaluation section?

Yes. Through completion of capstone projects, students participate in demonstrations of learning, during which they exhibit their knowledge and skills in core academic areas and work-ready skills. The capstone projects are evaluated according to a supplemental rubric that clearly reflects the knowledge and skills defined in Ohio's Learning Standards.

7. What is the process for documenting the required capstone project components?

[The Capstone Project Toolkit](#) provides sample documentation that districts may use to verify and document student progress throughout completion of capstone projects. Districts may modify documents within this guide to meet local needs, or they may develop new documents that reflect the criteria outlined in the capstone guidance.

8. Our school already incorporates a capstone project into our English language arts or social studies curriculum. Do we need to develop a new program to satisfy the capstone project requirements?

To use the capstone project to satisfy the Additional Graduation Options for the class of 2020, students must satisfy the required components identified in the guidance documents. Districts may need to modify existing projects to incorporate the requirements of the capstone guidance into existing courses and curricula if students will be using the capstone project to satisfy Ohio's graduation requirements.

9. Can a parent or family member serve as a community or career mentor for a student's capstone project?

Yes, but the student should work with the school advisor to establish an appropriate method for evaluation of the capstone; a parent or family member should not evaluate the project.