

CAPSTONE



EXPERIENCE



THE CAPSTONE EXPERIENCE:

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INTRODUCTION

Welcome to the *Capstone Experience* –or, alternatively, the *CTE Completer Project*.

These culminating activities – either the Capstone Experience or the CTE Completer Project -- provide the opportunity for all Mercer County seniors to demonstrate their mastery of the skills that will be necessary to be successful when they graduate and enter the next phase of life, whether it is entering college or the world of work.

This handbook provides you an overview to each of the elements of the Capstone Experience – the portfolio, the product, and the presentation. Forms and rubrics are included so that you may begin with the end in mind. You will have a faculty mentor who will help guide you in the selection, investigation, and development of a topic that you will then share in a presentation to your two-member Capstone panel.

If you are eligible to choose the CTE Completer Project, please read the information in Appendix E of this document.

We hope that you will be truly proud of what you have learned and eager to showcase your skills!

THE CAPSTONE EXPERIENCE:
A Mercer County School Graduation Requirement

PATHWAY SELECTION

Select your **Culminating Project** by checking the appropriate box below.

Option 1 – Capstone Experience to be executed at your high school

Option 2 – CTE Completer Project for students in career/technical concentrations

Student's name: _____

Date: _____

Teacher/facilitator: _____

Note: Students completing the Capstone Experience should submit this form and proceed to follow remainder of instructions in this packet.

THE CAPSTONE EXPERIENCE:

Overview

The Capstone Experience is a three-part assignment that includes the following:

- Product that grows out of investigation and independent work;
- A portfolio that contains the evidence of your thinking and learning;
- An oral presentation to a small panel that tells the story of your product.

To complete the Capstone Experience, you will work with a faculty mentor and a second panel member.

NOTE: Seniors will still complete graded, formal research papers in English 12, but these papers will no longer be evaluated as part of the Capstone Experience.

Each high school will determine its own procedure for implementing Capstone. In particular, teachers/administrators will decide how/when to best pair seniors with faculty mentors and how to schedule and coordinate the panels.

The faculty mentor's role is as follows:

- Assist and advise the student;
- Hold student accountable for meeting deadlines (student does not advance to next phase until the element is complete);
- Sign off on the student's proposal and portfolio;
- Review student work;
- Schedule the Capstone panel;
- Serve on the panel and, with a second panel member, score the student's Capstone Experience using the provided rubrics;
- Schedule any other necessary meetings.

The second panel member's role is to serve on the student's panel and, together with the mentor, score the student's Capstone Experience. Panelists will independently or collaboratively score the components, each panelist using his own set of rubrics (Appendices B, C, D).

The student's role is to do what follows:

- Develop a proposal (which will later be included in your portfolio)
- Create a product
- Complete a portfolio
- Deliver an oral presentation
- Complete each element in the correct sequence (you must complete step 1, before progressing to step 2, and so on.

(See detailed Student Checklist -- Appendix A.)

About the Product . . .

Before deciding a specific Capstone product, you should **(1)** first select a topic that best demonstrates what you have learned in high school and/or the field or subject in which you have had the greatest interest. This will vary from student to student –instrumental music, environmental science, the Vietnam War, nutrition and health, astronomy or physics, etc.

Next **(2)**, you will be given an opportunity to connect with a faculty member who shares your interest or has knowledge of the subject. This individual will be your mentor throughout the process, and may – early on—suggest some *specific areas* of reading and research.

(3) Begin to investigate this more narrow topic. You must keep a list of all the sources you use (a bibliography) and follow a specific format for writing down the publishing information. Modern Language Association (MLA) and American Psychological Association (APA) are the most common styles. You will then write two paragraphs about the source including one paragraph which briefly *summarizes* what this source says about the subject; and a second paragraph that *assesses* how credible the source is and how useful it is to your investigation.

Your panel members will be sure to ask you about these sources, so make sure you know the content.

More about sources: Your investigation might lead you to many sources of information: books, articles, interviews with “experts” including an approved internship, a visit to a site or monument , letters, courthouse records, scientific evidence, historical documents. You may use the sample on page 9 as your guide.

(4) Set up a time to talk with your mentor about what product you could develop. The product may be a physical artifact, written artifact, performance, or physical experience. It could involve teaching or be leadership, career, or community service related. Regardless of the form, the product must fit within the guidelines below:

Guidelines

- Must be student generated; it is a showcase of your skills not your parents'/mentors'.
- Must show evidence of academic stretch.
- Must be approved by mentor(s).
- Must be beneficial in some way.
- Product alone must require *a minimum* of 15 hours of work. (Many students spend 40+ hours to produce a product that reflects the level of work they are capable of doing.)

Below is a list of suggested products that COULD WORK: (You and your mentor may think of many others.)

- ✓ Design a cookbook using food that could be found in local pantry.
- ✓ 2. Complete a gardening project where you plant or maintain a garden area at the school-- weeding, watering, mulching, fertilizing. You could investigate the type of annuals, perennials, and bulbs that would work best, and grow annuals/perennials from seed or starts.
- ✓ 3. Write and develop into videos a series of PSA's for the school: For example, safe behavior, good decision-making with regard to Prom and/or Graduation; texting, tweeting, and calling while driving; using seat belts; overall constructive rather than destructive decision-making; safe on-line behaviors; and others.
- ✓ 4. Write a school-appropriate song with original lyrics and an original score and perform it at an event.
- ✓ 5. Design an assembly topic and presentation that involves student volunteering and/or offers a motivating message. (For example Dress Code do's and don'ts with accompanying slides or models.)
- ✓ 6. Prepare and facilitate Teacher/Adult trainings on I-products (technology) complete with demos, power point, presentation, lesson, and a practice plan for the teachers on a collaborative Wednesday. Topics could include movie making, photography, note taking, organization apps, setting helps, etc.
- ✓ 7. Produce a set of exercise routines. You and/or classmates could follow the routine for a certain amount of time and log progress. You could also demonstrate it during your presentation or show a video of the participants engaged in the work-out.
- ✓ 8. Create a website for a club, school department, or business.

- ✓ 9. Build a computer.
- ✓ 10. Create and organize a fair, perhaps an art or history fair.
- ✓ 11. Plan, coordinate, and implement a Prom Promise week.
- ✓ 12. Create a portfolio of original fashion designs. Create a garment based on the design.
- ✓ 13. Complete a creative writing project not assigned or completed in class – a collection of poetry, short stories, children’s books – with or without illustrations.

Products that WILL NOT WORK...



- X** Any activity you would normally do in or outside of class anyway.
- X** Hospital volunteering, because this is an activity someone else organizes and the student would just participate rather than develop.
- X** Any activity that someone else organizes or arranges such as band concerts, music competitions or performances, or prom volunteer work
- X** Poster boards or tri-fold boards unless the student is creating an original piece of art or an advertisement.
- X** Shadowing (however, students may take what they learn on the job and create something from that)
- X** Family or other scrapbooks

(5) Before you proceed with the actual product, write your proposal, using the rubric in this packet. Your mentor will approve and sign it or ask you to make changes and resubmit. The approved proposal must be included in your portfolio.

(6) Once your proposal is approved, you may begin working on your product. You are encouraged to seek your mentor’s guidance throughout the process.

(7) Be sure to study the Product Evaluation form that panelists will use to score your product (attached). ***The product, portfolio, and presentation are all weighted equally in evaluating your Capstone Experience.***

(See Product Evaluation form – Appendix B.)

About the Portfolio . . .

Your portfolio will contain the following:

- Your **proposal** (one to two pages, typed, double spaced, 12-pt. font)
- **A synopsis of your investigative research** (two paragraphs per source, annotated, typed, double spaced, 12-pt. font)
- **Your Project Conclusion** (minimum of one well-developed paragraph, typed, double-spaced, 12-pt. font)

The Proposal

Before beginning your Capstone Experience, you need to meet with your mentor teacher and present your proposal (see questions below). The mentor teacher must approve your proposal before you continue your research. The proposal needs to be typed and should answer the following questions.

What?

- What is your proposed topic?
- What area or field of study does it include?
- What teacher is qualified to be your mentor?
- What questions (minimum of three) would you like to be able to answer by the end of your research?

Why?

- Why did you choose to research or investigate this topic?

Who?

- Who will your project benefit?
- Who will assist you with your project ? (You may list more than one person.)

Where?

- Where will the majority of work on your project take place?

When? (All panels must be completed by April 1. Other deadlines vary by school.)

- When do you think you will complete your project (research, portfolio, presentation)?

How?

- How do you plan to research this topic (be specific – list methods you will use)?
- How do you plan to complete your project (list steps you will use)?

The Investigative Research Synopsis

The synopsis should include a minimum of five sources. (Sources may include but are not limited to books, articles, interviews with “experts” including an approved internship experience, a visit to a site or monument, letters, courthouse records, scientific evidence, historical documents.) For **each** source (primary and/or secondary) you will need to write (type) a two paragraph synopsis which includes the source annotation (see samples). Your annotations may be in MLA or APA style (but use the same style for all annotations). The first paragraph of this synopsis needs to briefly **summarize** your source: What does it say about your subject/product. The second paragraph needs to **assess** your source. The following questions will guide you in assessing the source:

- Why is this source credible? Why is this source reliable? Is it dated? Is it signed by an author? Is it updated regularly?
- Is it a .com, .edu, .gov., .mil., .org., or .net site? (Remember - .com is a *for profit* site.)
- Is it from a reputable database such as *Proquest* or *Wilson Web*?
- Does the information appear biased or objective? Why?
- Does the opinion or position of this source contradict what other sources say about the same topic? Why?
- What makes the author qualified to write about this topic?
- Did the author document his/her facts? How?
- How does this source connect or relate to your topic of study?

NOTE: The first paragraph summarizes; the second paragraph assesses the credibility, argument, and/or helpfulness of this particular

MLA Annotation (see MLA 2009 Formatting and Style Guide/7th edition)

EXAMPLE: Craft, Amanda. *You're Never Too Young to Invest*. New York: Henry Holt and Company, 1995. Print.

APA Annotation (see APA Formatting and Style Guide)

EXAMPLE: Craft, Amanda (2012). *You're never too young to invest*. New York: Henry Holt and Company.

Below is a sample MLA annotation and research synopsis

Goforth, Robin. *Birds of a Feather: Creating Aviaries in Your Backyard*. New York: Anchor Books, 1995. Print.

Goforth's book offers common sense advice about attracting song birds into backyards - even city yards. She covers various types of birdfeeders, garden plantings, bird baths, and other devices for luring and keeping birds close. The tips for discouraging pest birds like Starlings and Cow Birds are quite extensive. The author also offers pointers to attract birds with do-it-yourself feeders and common food items. These tips may be helpful once I've built the Martin house and, possibly, even before.

While Goforth appears to be a genuine "birder" and an excellent photographer, she does not have any academic credentials. I found her book somewhat useful for my project on Purple Martins - especially the tips she gives about the best place and height to hang the "hotel" -- but it did not have any specific construction specifications. I was looking for building plans as well as more specific information about the domestic habits of Martins - how many live together, how many chicks hatch at once, etc.

Remember, your sources should be listed alphabetically by author's last name.

The Conclusion

The typed conclusion should be, minimally, a well-developed, one paragraph synopsis explaining what you have learned and what inferences you have drawn; the inferences and learning experiences should link your research and your product development. NOTE: The conclusions and learning experiences should also be presented in the presentation portion of the Capstone Experience.

- **The portfolio is due to your mentor one week prior to panel presentation.**
- **The portfolio should include a typed title page (see format below).**

**Your Name
Grade 12, Your High School
Senior Project Capstone Title
Mentor's Name
Date Submitted
Date of Panel**

Note: Student(s) will not be allowed to present to their panel without typed Proposal, Research Synopsis, and Conclusion.

(See Portfolio Evaluation form -- Appendix C.)

About the Presentation . . .

The presentation is your opportunity to share your product and knowledge with two adult panelists – your mentor and another faculty member of your choice. By pre-arrangement, a non-faculty expert-in-the-field may take the place of the second faculty member. Your 8-10 minute presentation will be scheduled weeks in advance, and you are responsible for making sure your panelists are present. You must bring your product and your portfolio to the presentation.

In your presentation, you will summarize what you learned from your research, demonstrate your knowledge of the subject, and explain how you applied that knowledge to create the product. You have the option of using PowerPoint slides, notecards, or other prompts to help you with your speech, but it should be apparent that you know your topic and can comfortably discuss it with others. A brief question and answer period will follow.

On the day of your panel, you will be expected to look professional and be well-groomed. Clothing need not be formal, but should be conservative and appropriate for the occasion. Be sure to study Appendix D. Presentation Evaluation that the panelists will use to score your presentation. It is highly recommended that you practice giving your speech in front of a trusted adult before the actual panel convenes. *The presentation score counts equally with the other two components of the Capstone Experience.*

(See Presentation Evaluation form -- Appendix D.)

Arriving at your final Capstone grade (PASS/FAIL)

Each part of your Capstone project will receive a percentage score, as follow:

The presentation:	0 - 100%	<i>(the average of the 2 panelists' scores)</i>
The product:	0 - 100%	<i>(the average of the 2 panelists' scores)</i>
The portfolio:	_____	<i>(the average of the 2 panelists' scores)</i>

TOTAL ÷ 3 = Student's final percentage score

****A Capstone Project final grade of 65% or higher will receive a PASSING grade on the transcript.***

STUDENT CHECKLIST

Appendix A.

Capstone Experience

Part A.

_____ Complete your proposal and submit it to your mentor. This may be done via hard copy or email, depending upon your mentor's preference. Once the mentor has approved your proposal, you will advance to Part B. **Note: You will not advance to the next step until your mentor has approved your proposal.**

Part B:

_____ Begin working on your **product**. **Note: It is expected that a minimum of 15 hours will be necessary for completion of the product.**

Part B:

_____ Begin assembling your **portfolio** which will include the following:

- Proposal
- Investigative Research Synopsis
- Project Conclusion – cannot be completed until the product and investigation are completed.
- Choose the 5 criteria by which your product should be evaluated (see **Product Evaluation**) and submit to your mentor. (The mentor will also have input into which criteria are used.)

_____ Submit portfolio to mentor.

Note: You will not advance to the next step until your mentor has approved your portfolio and your panel meeting has been scheduled.

Part D:

_____ Begin constructing and perfecting the **speech for your presentation:**

Content: Organizing and structuring your speech:

- Attention getter
- Introduction, body, conclusion
- Clear explanation of supporting steps, details, reasons
- Visual Aid(s)

Speaking and Delivery: Practice, Practice, Practice!

- Practice your presentation in front of an audience (family, friends, teachers) several times. Be sure you know your information so well that you can *confidently* deliver your speech and answer panelists' questions.
- Be aware of vocalized pauses (um, uh, etc.) which distract from the quality of your presentation.
- Be aware of your pace – rehearse until you are not speaking too quickly or too slowly.
- Select appropriate attire for your presentation.

Congratulations on completing your preparations. Now enjoy sharing your product and knowledge with your panel!

PRODUCT EVALUATION

Appendix B.

Capstone Experience

Student Name: _____ **Mentor Name:** _____

Date: _____ **Title/Description of Capstone Experience:** _____

Write selected criteria below:

Check appropriate box below :

	Does Not Satisfy Criterion	Meets Criterion	Exceeds Criterion	SCORE
				Score Range 0-20%
1				(0-20%)
2				(0-20%)
3				(0-20%)
4				(0-20%)
5				(0-20%)
TOTAL SCORE (100% Possible)				

***Student and mentor select the five most appropriate criteria from the list below. Fill in 1 - 5 (above).**

Product is **original**. (idea, poem, dance, music, invention)

Product shows **evidence of problem-solving**.

Product is **carefully prepared and thorough**.

Product required **extensive time and effort**.

Product is **cross-disciplinary**.

Product is **highly academic / technical**.

Product was a **challenge to the student's knowledge and experience base**.

Product shows **depth of understanding**.

Product shows **evidence of cooperation/collaboration**.

Other Criterion not listed above: _____

Signature of Mentor or second panelist: _____ **Date:** _____

Each panelist completes a rubric for product, presentation, and portfolio.

PORTFOLIO EVALUATION

Appendix C.

Capstone Experience

Student Name: _____ Mentor Name: _____				
Date: _____ Title/Description of Capstone Experience: _____				
<i>Please check:</i>				
Proposal present? _____ Resarch Synopsis Present? _____ Conclusion present? _____				
<i>NOTE: If all three components (above) are not present, the student will not be allow to present.</i>				
below				
	Does Not Satisfy Criterion	Meets Criterion	Exceeds Criterion	SCORE
I. Proposal	0-2	3-4	5	Score Range 0-30%
A. Format: typed, 12-pt. font, double spaced)				
B. Proposal answers WHO, WHAT, WHEN, WHERE, WHY/HOW				
C. Evidence that student carefully thought through the process				
D. Proposal can be read and understood easily				
E. Submitted on time				
F. Free of most spelling/grammatical errors				
II. Research Synopsis	0-3	4-7	8-10	Score Range 0-50%
A. Format: typed, 12-pt. font, double spaced				
B. Minimum of five (5) appropriate sources				
C. Correct use of MLA or APA style				
D. Satisfactory summaries of each source				
E. Satisfactory assessments of each source				
III. CONCLUSION	0-2	3-4	5	Score Range 0-20%
A. Format: typed, 12-pt. font, double spaced				
B. Clear one paragraph (min.) summary of learning beyond general knowledge of topic				
C. Clear, easy to read				
D. Free of most spelling/grammatical errors				
TOTAL SCORE (100% Possible)				
Signature of Mentor or Second Panelist: _____ Date of Panel: _____				
<i>Each panelist completes a rubric for product, presentation, and portfolio.</i>				
Sample MLA Annotation (See MLA 2009 Formatting and Style Guide/ 7th Edition)				
Craft, Amanda. You're Never Too Young to Invest. New York: Henry Holt and Company, 1995. Print.				
Sample APA Annotation (see APA Formating and Style Guide)				
Craft, Amanda (1995). You're never too young to invest. New York: Henry Holt and Company, 1995.				

PRESENTATION EVALUATION

Appendix D.

Capstone Experience

Student Name: _____ Mentor Name: _____				
Date: _____ Title/Description of Capstone Experience: _____				
Check the appropriate box below				
	Does Not Satisfy Criterion	Meets Criterion	Exceeds Criterion	SCORE
I. VOICE AND LANGUAGE				Score Range 0-25%
A. Speaks clearly & distinctly throughout				
B. Vocalized pauses (um, er, etc.) are not distracting				
C. Speaks confidently, neither too fast nor too slow				
D. Uses language appropriate for topic				
II. DELIVERY				Score Range 0-25%
A. Maintains eye contact with the audience				
B. Face & body language convey enthusiasm, interest				
C. Dress and appearance appropriate for topic				
D. Listens to questions and responds appropriately				
III. CONTENT				Score Range 0-25%
A. Main ideas supported with details/logic				
B. Information exceeds general knowledge				
C. Speaker explains how Capstone was a personal "learning stretch"				
D. Visual aids support not distract or substitute for presentation				
IV. ORGANIZATION				Score Range 0-25%
A. Presentation begins with effective introduction including attention-getter				
B. Main ideas arranged logically				
C. Presentation is coherent with appropriate transitions				
D. Conclusion effectively "wraps" up the speech				
TOTAL SCORE (100% Possible)				
Signature of mentor or second panelist: _____ Date of Panel: _____				
<i>Each panelist completes a rubric for product, presentation, and portfolio.</i>				

PRESENTATION EVALUATION

Appendix E.

Career and Technical Education CTE Completer Project

As part of the graduation requirements for Mercer County Schools, all students must complete either a **Capstone Project** at their home school or a **Career and Technical Education Completer Project**. The CTE Completer Project is a required evaluation for career and technical education program completers. Students in all career and technical programs, with the exception of cosmetology, will have the opportunity to meet the graduation requirement upon completion of that program.

The CTE Completer Project is a performance assessment. Performance assessments are designed to judge students' abilities to apply specific knowledge and research skills in a "hands-on" platform. Performance assessments often require the student to manipulate specialized equipment to solve a problem or make an analysis. Rich performance assessments should reveal a variety of problem solving approaches, thus providing insight into a student's level of conceptual and procedural knowledge.

As is the industry standard, each assessment has been reviewed by West Virginia administrators, teachers, staff members of the West Virginia Department of Education and by West Virginia citizens. Additionally, each assessment has been examined and re-examined for bias, content, rigor, complexity, and alignment to the West Virginia Content Standards and Objectives (CSOs) and Performance Descriptors as well as industry scenarios (providing real-world examples).

--West Virginia Department of Education

Allowances and Requirements for CTE Completors

1. The CTE Completer Project will take the place of all Capstone Project requirements *excluding the senior research paper*. The research paper will be completed at the home school in the English 12 classroom and will be graded separately from the CTE Completer Project.
2. The senior research paper may be done on any topic that the teacher and student agree upon. CTE students are encouraged but not required to relate the paper to their career and technical concentration.
3. The Student Services Facilitator, Jarry Brown, will be compiling the CTE Completer Project grades and sending them to the senior project contacts at the home schools to be entered into WVEIS.