**BELIEVE IN OHIO STEM COMMERCIALIZATION PLAN**

**TEMPLATE**

NOTE: DELETE ALL TEXT IN BLUE BEFORE SUBMITTING TO YOUR TEACHER.

**Expectations:**

* **You will use the information from the Action Steps under each Milepost in ProjectBoard to compile your final report.**
* Reportsmust be typed.
* Write in paragraph form.
* Be clear and concise.
* Proofread carefully.
* Please avoid using personal pronouns in the text.
* Do not use cute project titles. Title should reflect the contents of the report.
* Number all pages except for the cover sheet (which is page 1).
* If requested to submit your plan in electronic format for qualifying and state competition, use your last + first name as the file name (e.g. SmithCarol.pdf).
* The electronic version of your plan that you submit must contain the entire report in a **single** Adobe PDF file.

**Format of report**:

* Use the headings (in black) from this template in this order provided in your report.
* The written report shall not exceed **12 single-spaced, typewritten pages**.
* Reports may be single or 1.5-spaced.
* Type all pages "flush left” with 1” margins. Do not justify paragraphs (i.e. stretch type to left & right margins).
* Font size of **at least 10 points**; preferably 12 points for better legibility except in tables or on graphs, sketches or engineering drawings.
* We recommend 10, 11 or 12 point Times New Roman, Century Schoolbook, Arial, Calibri or Myriad Pro
* Your report must include the section headings below.
* Do not break pages between headings. Section headings (Parts) need not be numbered.
* Type continuously, starting on page 2 immediately (on the same page) following the Executive Summary.

**FORMAT FOR COVER SHEET – INSERT YOUR ACTUAL INFORMATION IN BLACK**

*Type all flush left, ragged right; do not justify. Do not type line instructions.*

*Although the Cover Sheet is the first page, do not type page number on Cover Sheet*

Part 1. Cover Page with Elevator Pitch

* Line 1 Type your full name (if team, type name of each team member separated by a comma)
* Line 2 Type your current grade level (if team, type grade of each person as above with commas)
* Lines 3-4 Type your project title (i.e. Plan name) in *Italics*
* Line 5 Judging category (Either Commercialization Plan or Business Plan)
* Leave Line 6 blank
* Lines 7-9 Type Elevator Pitch here (add additional lines as needed, maximum of 3 sentences)

An elevator pitch is a short, engaging statement that describes your idea sufficiently to interest a potential investor or collaborator in it. It’s called that because it can be said during an elevator ride.

The following is an example for someone competing as an **individual**:

Part 1. Cover Sheet with Elevator Pitch

Ms. Carol A. Smith

11

*Prosthesis Safety Device*

STEM Business Plan

Elevator pitch: Prosthesis Safety Device provides audio and visual signals to an amputee when a residual limb is correctly locked in its socket. The device works with traditional prostheses for upper and lower extremities. As a result, the patient will be aware if the prosthesis is properly applied and safe to use.

The following is an example for a group competing as a **team**:

Part 1. Cover Sheet with Elevator Pitch

Ms. Carol A. Smith, Mr. Conner H. Jones, Ms. Sally R. Brown

11, 12, 10

*Prosthesis Safety Device*

STEM Business Plan

Elevator pitch: Prosthesis Safety Device provides audio and visual signals to an amputee when a residual limb is correctly locked in its socket. The device works with traditional prostheses for upper and lower extremities. As a result, the patient will be aware if the prosthesis is properly applied and safe to use.

Part 2. Executive Summary:

**Length = ½ page or less**

**This part includes your discussion at Milepost 10 in ProjectBoard.**

* Copy and paste your executive summary here.
* Ask several other people who know nothing about your project to read your Executive Summary to see if they understand it. If they don’t, we suggest that you re-write it until your plan’s message is easily understood.

Part 3. Problem Summary and Proposed Solution:

**Length =½ page**

This part includes a discussion of all Action Steps from Mileposts 1 and 2 in ProjectBoard. Use your Action Step information to:

* Write a short summary (a couple of sentences) that describes your Problem Statement/ Pain Point/ Market Opportunity (Milepost 1)
* Write a short summary that describes your proposed solution (Milepost 2).

Part 4. Summarize the STEM Concepts and Principles Underlying the Overall Plan:

If your proposed solution is based on several STEM concepts, focus on 1-3 key concepts.

**Length = 1 - 2 pages**

This part includes a discussion of all Action Steps from Milepost 3 in ProjectBoard. Use your graphic organizers and Action Step information to:

* Write a description of why (background) these STEM concepts are important to your proposed solution and how (application) they are used in developing your solution.
* Make sure to cite your information as you write your paragraphs.

Be sure to address the following Action Steps from Milepost 3:

* **Describe** how this information has not been previously applied in the way you propose and how it provides strong evidence for the success of your solution.
* **Explain** any additional scientific research or development that may be required to create your solution.

Part 5. Commercialization Assessment of the Overall Plan:

**Length = 2 pages**

This part includes a discussion of all Action Steps from Mileposts 1 & 2 and 4 – 8 in ProjectBoard. Use your Action Step information to:

* Write a short summary under each of the headings below.

Problem, pain point or market opportunity: Milepost 1

Proposed solution: Milepost 2

Target customers and intended users: Milepost 4

Competitors: Milepost 5

Customer value proposition & competitive advantage: Milepost 6

Principal revenue streams expected: Milepost 7

Principal startup and operating costs expected to be incurred: Milepost 8

* Use the Operational Costs Worksheet for Milepost 8 to guide your discussion.

Part 6. Science and Technology Proof of Concept:

**Total Length = 4-5 pages**

This section is similar to a research paper. It should provide an in-depth explanation of the STEM concepts used to help you develop and support your product/service and provide evidence that your plan will be able to become a reality. This is called a proof of concept to determine the feasibility of your idea. This part should be the core of your Commercialization Plan.

Review and assessment of the scientific literature:

* This part includes your summary from the **first** Action Step of Milepost 9A in ProjectBoard.
* Make sure to cite your information as you write your paragraphs.

Inquiry or design-based discussion:

**This part should take 2-3 pages of the total length of this section.**

* This part includes your information from the **second** Action Step of Milepost 9A in ProjectBoard.
* Make sure to cite your information as you write your paragraphs.
* This part should also include your summary (last bullet point in Milepost 9A) of why your product or service is commercially feasible.

Data tables, graphs, charts, sketches, engineering drawings or photos of prototypes or models, and cited references:

* Present data in tables (labeled as Table 1, Table 2, Table 3, with legends and captions) and/or graphs, but do not repeat data from a table in a graph or vice versa. Use only one or the other. You may have tables and graphs if the data are not the same.
* You may include concept sketches, measured drawings, renderings or photographs of models or prototypes. Identify as Figure 1, Figure 2 or Figure 3, etc. with captions.
* You must give credit to the sources of illustrations unless you create them.
* Avoid using copyright or trademark/service marked illustrations for which you do not have permission. If permission is granted, indicate Copyright © and owner and date, or trademark/ service owner and date.

Part 7. Acknowledgements:

Identify and thank those who helped you and describe what they did.

Part 8. References Cited:

* Provide both In-Text citations as well as a list of cited references at the end of your Plan.
* Do not use the term Bibliography.
* Use either MLA or APA citation formatting, the formatting should be consistent for the entire paper.
* There should be a 1:1 concordance between your in-text references at the end of your plan.
* In your references cited, arrange entries alphabetically by the last name of the first author.
* All web references must cite the accessed date and include a fully retrievable URL. Here is an example of how to cite a web reference that you might access online through search engines such as<http://scholar.google.com/>:

[Daniel](http://pubs.acs.org/action/doSearch?ContribStored=Daniel%2C+M), M-C & [Didier, A](http://pubs.acs.org/action/doSearch?ContribStored=Astruc%2C+D). 2003. Gold Nanoparticles:  Assembly, Supramolecular Chemistry, Quantum-Size-Related Properties, and Applications toward Biology, Catalysis, and Nanotechnology. *Chem. Rev.*, 2004, 104 (1): 293–346. Accessed 01 Dec 2019:

<http://faculty.washington.edu/markeh/MSE599/Daniel_Chem_Review_2004.pdf>

* This is how an entry would appear if you actually had a physical copy of the publication:

[Daniel](http://pubs.acs.org/action/doSearch?ContribStored=Daniel%2C+M), M-C & [Didier, A.](http://pubs.acs.org/action/doSearch?ContribStored=Astruc%2C+D) 2003. Gold Nanoparticles:  Assembly, Supramolecular Chemistry, Quantum-Size-Related Properties, and Applications toward Biology, Catalysis, and Nanotechnology. *Chem. Rev.*, 2004, 104 (1): 293–346.