Dear Researcher,

We must first and foremost congratulate you on your interest in challenging yourself with the AP Capstone program. The skills that you have and will continue to acquire due to the Capstone program are paramount in your post-high school success. So, to your dedication, we salute you!

Now, down to business. The following summer work has been created after much consideration and discussion with other AP Research colleagues as well as input from this year’s AP Research students who all wished they had started the year with this work already completed. I realize this looks like a lot for the summer, but we know that if you frontload before the year starts you will alleviate some stress later when you also have other classes to contend with. I am NOT about busy work, but there are some concepts and items that you need to establish for yourself prior to starting AP Research. One such concept is that this course is more self-directed than your other high school classes; this should make you realize then that this course is not about your grade but about learning. Consequently, when we recommend you complete work—instead of require it for a grade—you need to be motivated enough to actually do it because it will help you be successful.

These concepts, and others, should be considered while taking long walks on the beach, while sitting in the back of the car on a road trip, while trying to fall asleep at camp, while playing video games, or whatever summer activity enhances your life. Know that you will be asked to dig deep, so please start now. You are NOT required to have written response to the following questions; however, we recommend you to spend some time thinking about them before you start the actual assignment: What is “research”? Who is the audience for published research articles? Why did I choose to take AP Research? How do I think AP Research will be different than AP Seminar? How intrinsically motivated am I to be successful in a self-directed course?

Our second recommendation for the summer is that you read Part I and II of The Craft of Research by Booth, Colomb, and Williams. Simply do a Google search for the title to find a free pdf file for either the 2nd or 3rd edition. If you prefer reading a hard copy book, see if you can check it out of the library. Reading these 100 pages will give you a considerable advantage when you go to complete the required written assignment. It would be even better to read the whole book. There is also a resource packet posted on our website with additional resources; please be sure to seek it out.

Here is the URL: http://course.sdu.edu.cn/G2S/eWebEditor/uploadfile/20140306165625006.pdf

**Required Summer Research Question Work PART I:**

Similar to AP Seminar, the College Board wants you to start your AP Research project with a leading question. The following concepts are things to consider when attempting to build an AP Research leading question. As resources you have been given a separate handout about research questions and the list of research questions from this year’s research projects. However, it is essential that you realize not all research questions are created equal (hint: some of the ones from this year are better than others).

Remember, the discipline, specific topic, and research question you decide to work with must hold your interest for the entire year. Sit and reflect about your true interests for this course prior to settling on a discipline, specific topic, and research question; you must be passionate about your choice. Also, please realize that this is just an initial research question; by the time you actually start the methods-driven study portion of your project, you may have revised your question numerous times, and no one will be able to proceed past this basic assignment without teacher approval for your research question.

The following elements are critical when attempting to build your research question. As you proceed it is essential that you consider these four major concepts in connection to your research project: focus, scope, value, and feasibility. Use the table below as a guide to help you develop a solid initial research question. You are not required to have written answers for the reflection questions, but it is highly recommended that you be able to articulate an answer for each one. If you cannot, perhaps there is a problem with your chosen topic and research question. Additionally, your research must fill a GAP in the body of knowledge in your chosen field.

By the end of the process for PART I you should be ready to start putting your ideas down in black and white. Create a document that includes the following information:

Your name
Date
AP Research Summer Assignment

**Example**

<table>
<thead>
<tr>
<th>Part</th>
<th>Disciplines</th>
<th>Specific Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Psychology</td>
<td>Social Stigma for Mental Disabilities</td>
</tr>
</tbody>
</table>

**PART I**

Your Discipline
Your Specific Topic
Your Research Question
<table>
<thead>
<tr>
<th>Concept</th>
<th>Description</th>
<th>Reflection Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td>Disciplines: Lens or section of focus</td>
<td>1. What discipline would you enjoy working in during your research?</td>
</tr>
<tr>
<td></td>
<td>- Art</td>
<td>2. What specific topic are you interested in examining?</td>
</tr>
<tr>
<td></td>
<td>- History</td>
<td>3. Why are you interested in this particular topic?</td>
</tr>
<tr>
<td></td>
<td>- Humanities</td>
<td>4. What can you add to the body of knowledge that already exist on the topic?</td>
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<tr>
<td></td>
<td>- Hard Sciences</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Social Sciences</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Mathematics</td>
<td></td>
</tr>
<tr>
<td>Research Discipline &amp; Topic</td>
<td>Topic: Specific interest within a discipline that creates</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>the basics of your research question</td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope: Depth &amp; Size of Your Research Project</td>
<td>Depth: The level of detail</td>
<td>1. What specific things will you study? People? Animals?</td>
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<tr>
<td></td>
<td>Breadth: The number of topics discussed (i.e., all people, teenagers, infants, etc.)</td>
<td>Concepts? Theories?</td>
</tr>
<tr>
<td></td>
<td>Context: The specific setting of your research (i.e., a lab, a classroom, a sound booth, etc.)</td>
<td>2. How can you limit the scope of your research question to make your project more feasible?</td>
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<tr>
<td></td>
<td>Variables: The items/people/situations/issues/concepts being studied and/or manipulated (i.e., blood pressure &amp; music selection; IQ, personality type, &amp; instructional method)</td>
<td>3. How and/or where will you work with these variables?</td>
</tr>
<tr>
<td>Value: Contribution to the Body of Knowledge</td>
<td>The value or significance of your research is determined by how your contribution enhances what is already known about the topic. You are required to fill a gap in the body of knowledge (BoK) by either adding to the current conversation of the discipline or using multiple discipline conversations to create a new understanding. You are not merely compiling or rehashing information; you are bringing something new to the table.</td>
<td>1. How will your research change the way we currently see the topic? How will it fill a gap?</td>
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<td></td>
<td></td>
<td>2. What can you add to the body of knowledge that already exists on the topic?</td>
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<td></td>
<td>3. How will your research benefit society or your discipline?</td>
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<td></td>
<td></td>
<td>4. Will you create a new piece of art, music, dance, or theatre as part of your project?</td>
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<tr>
<td></td>
<td></td>
<td>5. Will you design and create a new device or product as part of your project?</td>
</tr>
<tr>
<td>Feasibility: Possibility of Research</td>
<td><strong>Time, money, and resources</strong> will play a major role in determining your ability to complete your research project. This may include a research lab, special software, access to secondary data, art supplies, special equipment, etc.</td>
<td>1. What method will you need to use to answer your research question? How will you generate new data with your method?</td>
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<td></td>
<td>You will be required to design a research method to answer your question. Once you have developed a research methods, you will actually only have about 2 to 3 months to complete the methods-driven research study portion of your research project.</td>
<td>How will you analyze that data?</td>
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<td></td>
<td>The time leading up to it will be filled with learning the basics of scholarly research, conducting a review of the literature to become an expert on your topic, and designing your research methods (i.e., quantitative vs. qualitative, mixed methods, correlational, action research, phenomenological, experimental, etc.).</td>
<td>2. What will you need, physically and/or monetarily, to complete your research project?</td>
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<td></td>
<td></td>
<td>3. How long will the methods-driven research study portion of your research project take?</td>
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<td></td>
<td></td>
<td>4. Do you have access to the things you need for your research? (Refer back to scope as you address this.)</td>
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<td></td>
<td></td>
<td>5. Who can help you with your research? Who might be potential expert advisers?</td>
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</tbody>
</table>
Required Summer Research Question Work PART II:
After you have completed the initial reflection and thinking required in PART I and created the brief written portion for PART I, you are ready to complete the written work for PART II on the same document.

Explain the focus, scope, value, and feasibility of your research question. Write a detailed paragraph for each (for a total of 4 paragraphs) and include a subheading above each paragraph that identifies which element you are addressing (i.e., focus, scope, value, feasibility). The reflection questions included in the above table should help you with each explanation. In a 5th detailed paragraph under the subheading “Potential Challenges & Problems,” address this question: What challenges or problems do you anticipate as you proceed with this project?

Required Summer Research Question Work PART III:
Now it is time to start gathering sources and building an understanding of the body of knowledge and how scholarly research works. Use the research skills you gained in AP Seminar to gather 10 sources that will help support you in this process. Use the table below to help you understand the 2 types of sources you will be using this year: Anchor Sources and Mentor Sources. You are required to find 7 to 8 Anchor Sources and 2 to 3 Mentor Sources for a total of 10 sources.

<table>
<thead>
<tr>
<th>Type Of Source</th>
<th>Explanation</th>
<th># Required</th>
</tr>
</thead>
</table>
| Anchor Sources | These are sources:  
  - in your discipline  
  - about your specific topic  
  - that are most often scholarly, peer-reviewed articles  
  - that address differing perspectives on your topic  
  - that include contrasting views about your topic  
  - that include information you may include in your literature review  
  - that teach you about your specific topic  
  - that help you become an expert on your specific topic  
  - that help you improve your ethos  
  - that help you identify the gap in the research  
  - that help you understand the significance of your research question  
  - that ANCHOR your understanding of the body of knowledge in your discipline | 6 to 7 |
| Mentor Sources | These sources:  
  - may or may not be in your discipline  
  - may or may not be about your specific topic  
  - are most often scholarly, peer-reviewed articles  
  - may include similar variables as your research project  
  - include a research design or method similar to what you might use to answer your question  
  - include similar data analysis methods  
  - teach you how to conduct a research study  
  - teach you about a particular element of the research process  
  - help you improve your ethos  
  - do NOT necessarily help you identify the gap in the research  
  - do NOT necessarily help you learn about your specific topic  
  - act as a MENTOR to you as a researcher | 2 to 3 |

Required for each of the 10 sources:
- Bibliographic information in either MLA or APA documentation style (use the one most common in your discipline)
- A detailed paragraph that summarizes the sources in your own words
- Identify what type of source it is (i.e. Anchor or Mentor) and address why the source is valuable to your success; this should be completed in one or three sentences at the end of the paragraph that complete the appropriate statement for the source:
  - “This ANCHOR SOURCE is valuable to my research project because . . .”
  - “This MENTOR SOURCE is valuable to my research project because . . .”
NOTE FOR STUDENTS COMPLETING SCIENCE FAIR PROJECTS:
If you are continuing a project from a previous year, the College Board requires that your project—and ultimately, your paper and presentation—for AP Research be new; in other words, there must be a new research question and research method/design to generate new data. You are NOT allowed to merely rehash what you have already done or use the same data you have already generated or use the same paper you have already written. Additionally, any project that complies by ISEF rules is allowed as long as it can get IRB/IACUC approval. The College Board is not going to restrict your research as long as you follow the rules established by the university & ISEF; this includes projects involving working in a lab at UL, cell cultures, recombinant DNA, or any sort of chemical. Additionally, collaborative projects are NOT allowed.

NOTE ABOUT EXPERT ADVISERS AND MENTORS:
We highly recommend that every student in AP Research locate an expert adviser or mentor, even if you are not working in a lab at U of L. This can be a difficult process, so we have included some resource materials about the do’s and don’ts of contacting professors and other potential mentors. We will eventually address this in class, but some of you may want to get a head start. We do NOT recommend that you actually contact them over the summer before school starts unless you have a contact that will make the introduction for you. However, compiling a list of potential mentors and drafting email communications over the summer would help you feel more confident about asking professors for assistance. If you have the messages written when we start school, you can set up a conference with your AP Research teacher to read over your messages and give you some feedback before you actually send them.

If anyone wants to work in a lab at U of L, the optimal time to search for one is August; this is when the graduate student rotation opens up lab spots. Sometimes professors are willing to take on students in their labs only if the student has some pre-existing connection to the university; therefore, you may want to contact your MST teachers or senior MST students to ask for advice or connections.

You may email me during the summer if you have questions, but I do not check my school email regularly.

alesia.williams@jefferson.kyschools.us

Other resources you may find helpful:
1. Practical Research: Planning and Design by P.D. Leedy and J.E. Ormrod
3. The Bedford Researcher by Mike Palmquist
4. USC’s Library Guides at http://libguides.usc.edu/

DUE ON THE 1ST DAY OF CLASS

Remember:
Research is a recursive process.
This is only one small step in that quest.

Adapted from an assignment originally created by Emily Lott.
from the AP Research Course and Exam Description Book