

AP Capstone Lesson

U2L2 Lesson Plan Background				
Course: AP Seminar		Date:		
		Unit Title: Performance Task #1: Team Project & Presentation (20% of AP score)		
Objective				
Skills/Content: <i>By the end of today's lesson, what will students know and be able to do?</i> SWBAT... <ul style="list-style-type: none">analyze the criteria of strong research questions.		Assessment: <i>How will students demonstrate mastery of the objective?</i> By... <ul style="list-style-type: none">analyzing strengths and weaknesses of research questions in an Exit Ticket.		Criteria for Success: <i>What are the features of an ideal product?</i> That includes... <ul style="list-style-type: none">arguableresearchableappropriate in scopemeaningfullending itself to a solution
Week 1 Snapshot				
Monday	Tuesday	Wednesday	Thursday	Friday
U2L1 SWBAT understand the criteria of PT1 and develop team norms.	U2L2 SWBAT analyze the criteria of strong research questions.	U2L3 SWBAT brainstorm and develop potential PT1 research questions.	U2L4 SWBAT finalize their team's PT1 research question and assign lenses to team members.	IA #1 ANALYSIS DAY

Pre-Work	Pre-Work
	<i>What set up or materials are needed for this lesson?</i> <ul style="list-style-type: none"> Lesson PowerPoint Copies <ul style="list-style-type: none"> Student handout PW – IRR Sample Analysis #2 Seating should be arranged by teams (ideally facing one another in pods)
Opening Sequence	Start to Class
	<ul style="list-style-type: none"> Do Now (4) <ul style="list-style-type: none"> Students write down the 3-4 topics they are most interested in researching for PT1. Turn & talk → share out "You will have the next 3 class periods to finalize your research question. Why so much time? Because the process is deceptively difficult and much harder than you might think. Just as we started the year thinking about how to write a question 'as clean as a bone,' we are going to spend a significant amount of time perfecting your team research questions." Objective & Agenda (1) <ul style="list-style-type: none"> Cold call students to read the objective & agenda. Review any key dates or announcements from the Unit 2 calendar.

	Research Questions
<p>Research Questions</p> <p>(40 min., 50 of 57)</p>	<ul style="list-style-type: none"> • Criteria of Research Questions (15) <ul style="list-style-type: none"> ○ “One of the most exciting parts of AP Seminar is the ability to pursue your own academic interests. PT1 is the time in which there are truly no limits—it is up to you and your teammates.” <ul style="list-style-type: none"> ▪ Cold call students to read out sample research questions from the slides to note the breadth and variety of topics represented: <ul style="list-style-type: none"> • Should embryonic stem cells be used in scientific research? • How has China’s One-Child Policy changed its society and culture? • Should the U.S. increase the amount of government funding to NASA? • To what extent has owning a cell phone had a negative impact on the lives of teenagers in the United States? ○ “That said, developing a strong research question can also be one of the most daunting and frustrating tasks (just ask any AP Research student!). And with good reason, because the question can make or break the quality of your overall product. So we’re going to spend the next 3 days working together to workshop the strongest questions we can possibly come up with. It’ll be a whole class effort.” ○ Review criteria of a strong research question as students take notes on student handout: <ul style="list-style-type: none"> ▪ <u>Criteria #1:</u> Research questions are arguable and require an evidence-based judgment to be made (not just description or a personal rant). This includes avoiding loaded language and embedded assumptions. <ul style="list-style-type: none"> • <u>Exemplar:</u> What is the best way to increase ridership of public transportation? • <u>Non-exemplar:</u> What is the link between gun violence and mental illness? How has the ineffectiveness and racism of the Trump administration affected communities of color? <ul style="list-style-type: none"> ○ Ineffectiveness and racism are “loaded” and already indicate the bias/perspective of the writer. ▪ <u>Criteria #2:</u> Research questions are researchable with our given resources <ul style="list-style-type: none"> • <u>Exemplar:</u> How effective is solitary confinement as a means of rehabilitation of prisoners? • <u>Non-exemplar:</u> Are black holes expanding in the universe? <ul style="list-style-type: none"> ○ You would need advanced physics knowledge! ▪ <u>Criteria #3:</u> Research questions are of appropriate scope, complex enough to merit deep research but manageable and specific enough to complete in a few weeks <ul style="list-style-type: none"> • <u>Exemplar:</u> Should high schools begin at a later time to accommodate for student rest and sleep? • <u>Non-exemplar:</u> What role does war play in international politics? How have negative stereotypes against African-Americans impacted American society? ▪ <u>Criteria #4:</u> Research questions are meaningful, with real-world significance <ul style="list-style-type: none"> • <u>Exemplar:</u> Is the European Union a necessary organization for the cultural identity and financial security of Europe? • <u>Non-exemplar:</u> Which brand of cereal do freshmen most prefer for breakfast?

- Criteria #5: In AP Seminar, research questions are most successful when they **lend themselves to solutions**, as the Team Presentation focuses heavily on presenting and defending solutions. In that sense, “should” or “to what extent” questions are excellent stems to use. Again, this is in the context of our AP Seminar class; there are plenty of other valuable types of research questions that aren’t directly solution-oriented!

- Exemplar: **Should the U.S. increase the amount of government funding to NASA?**
- Non-exemplar: Will human beings make it to Mars by 2030?

Evaluating Questions (15)

- In pairs, students evaluate the sample research questions in their handout to determine whether they are strong or not. If not, students re-write it into a stronger question. Students have 7 minutes.
- Based on Academic Monitoring, target review to 3-4 highest leverage examples for 8 minutes.

Sample Research Question	Is this a strong research question? Why or why not?	If weak research question, brainstorm a stronger question here.
1. What is behind the increased popularity of women’s sports?	No – too broad to be manageable	To what extent has Title IX increased opportunities for women athletes in American colleges and universities?
2. Should the U.S. dissolve the North American Free Trade Agreement?	Yes – specific, narrow in scope	
3. What masks are used in Navajo dances?	No – not arguable (just description)	Should controversial Native American mascots, like the Washington Redskins, be illegal?
4. What different attitudes do people around the world have to the relationship between parents and children?	No – not manageable, far too broad	Should corporal punishment be used in schools as a form of discipline?
5. Should students receive financial rewards for achieving good grades?	Yes	

Mastered	Not Mastered	Common Errors
If >75% → Exemplar or Almost There • 50-70% → Comparative • <50% Break It Down		

- **Narrowing Questions (10)**

- “One of the greatest challenges of drafting a research question is making it specific enough to be manageable. You cannot simply ask “What role was war play in international politics?” as we saw as an earlier example. You could research and write that book for the rest of your life and you wouldn’t come close to finishing. This is why true academics and professors specialize in minutiae, to become true deep experts on sub-topics such as: the role of women in the War of 1812, the impact of war on the environment, the evolution of gun technology.”
- “One way to narrow our initial topics is to use an inverted pyramid that has the very basic 5 W’s—who, what when, where, and why.”
- Model on the board as students write notes on handout:
 - Initial question: How do eating disorders affect teens?
 - Topic: Eating disorders
 - Who: Female teenagers
 - What: Anorexia
 - When: Today
 - Where: U.S.
 - Why: impact on academic achievement
 - Revised question: How does anorexia in female teenagers in the U.S. impact academic achievement?
- In pairs, students complete inverted triangle on sample topic of **video games** for 2 minutes. Based on trends observed while circulating and monitoring student work, show call a sample and review for 2 minutes.
- Individually, students complete inverted triangle on sample topic of **education** for 2 minutes. Based on trends observed while circulating and monitoring student work, show call a sample and review for 2 minutes.

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Closing

(7 min.,
57 of 57)

End of Class

- **Exit Ticket (5)**
 - Teacher collects for a classwork grade.

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	Sample Research Question	Is this a strong research question? Why or why not?	If weak research question, brainstorm a stronger question here.
	1. What are the advantages and disadvantages of nuclear power stations?	No – not arguable (just description)	Should the United States invest more heavily in nuclear power to reduce its carbon emissions?
	2. Should the giant panda be protected from extinction by the Chinese government?	Yes	
	3. How has prejudice affected autistic people?	No – not researchable or manageable, too broad	To what extent have popular portrayals of autistic people in movies and TV affected social acceptance of autism?
	<ul style="list-style-type: none"> • Pack up, Clean up & Dismissal (2) <ul style="list-style-type: none"> ○ Briefly preview homework directions with students. 		
Prepwork	Prepwork		
	What prepwork will students complete to reinforce the skills from the lesson? <ul style="list-style-type: none"> • IRR analysis #2 (police body cameras, high sample) 		
Reference	Reference		
	Teachers are encouraged to read Teach Like a Champion: 49 Techniques that Put Students on the Path to College by Doug Lemov, and Uncommon Schools publication, to better understand the methods of teaching employed in this lesson.		