

Development of Product Proposal and Calendar/Timeline

What is the Product?

My final product idea is to create a comparative analysis in which I will be comparing several common anesthetics with each other as well as with older anesthetics. Then using the information I gathered from my research and comparison, I will create my own anesthetic by using combinations of different drugs I researched. I will probably not be able to physically create this drug, so the description of the chemicals I would use will be added to my final paper.

What is the Product Proposal?

I will be creating a comparative analysis using older and more modern anesthetics. I will also be creating my own anesthetic using combinations of different drugs I researched. The purpose of my final product is to learn more about the anesthetics I would potentially be using in the field, as well as to challenge myself to create a theoretically improved anesthetic using all of the knowledge I gained throughout the school year. For the materials I will be using, I will be utilizing studies done on individual drugs as well as comparative studies between different ones. I will then use the knowledge I gain from those studies to conduct my own comparative research on a variety of different drug combinations. I expect to see that the more modern anesthetic will perform better than the more outdated ones, but that there will still be some similarities in their chemical properties and function.

Product Proposal

- ***Introduction and Statement of Purpose***

I will be creating a comparative analysis in which I will be comparing modern anesthetics with older ones. Some aspects I plan on comparing between them at the moment are their effectiveness in respect to their targeted function, the amount of brain damage they have caused in past cases, the toxicity they release in the brain, how easy they are to counter with neutral medications after an operation, and the amount of dosage needed for similar effects. I will also be creating my own anesthetic using combinations of different drugs I researched. This hypothetical anesthetic I create will be made using the knowledge and understanding I gained throughout the school year. I believe this product will help my understanding of anesthesia greatly and make me better equipped to understand what chemicals exactly I would be working with in the field. This knowledge will also be extremely valuable since improving current medicine will also be important.

- ***Review of Skills and Research*** (might need two paragraphs)

The research topics that will be instrumental in the creation of my product are studies that focus on different anesthetics drug combinations. I will also be using some studies that compare some of the more common ones to each other

in order to gain a better understanding of how I will compare different anesthetics and their combinations using knowledge on individual anesthetics themselves. Studies that discuss the necessary functions and properties doctors look for when testing anesthetics will also be important to my research.

One skill that I have learned during my first semester in the ISM program that will benefit me greatly when conducting this research now is the ability to assess complex medical studies. Over the past few months, I have learned a lot of information about anesthetics that will help me greatly now. The basic knowledge I already have about the different categories of anesthesia, the properties that make general anesthesia different from local and regional anesthesia, and how anesthesia can affect the brain is all crucial knowledge that I can use as a foundation for my final product research. That being said, a skill that I will have to learn is how to properly compare medications. Drugs have a lot of complex variables to assess, so I hope that by reading a few comparisons done by professionals, I will learn what properties are especially important to focus on when comparing two drugs or drug combinations.

- ***Methodology***

- **Participants:**

- I don't plan on using any participants.

- **Materials:**

- I will be using studies over individual anesthetics, individual drugs used in anesthetics, different combinations of drugs that make up an anesthetic, and comparative studies on different anesthetics and drug combinations.

- **Description of Process and Procedures:**

- I will first be reading a few articles that go over what doctors look for when testing how good or bad an anesthetic is. Then using this information I will begin looking at studies over different common anesthetics used today, as well as studies over older anesthetics no longer commonly used. I will then look deeper into the drugs that these anesthetics are made up of. Then I will finally assess studies comparing different anesthetics, drug combinations, and individual drug components. I will then use this information to compare the different anesthetics and drugs I researched. Finally, I will create my own anesthetic using optimal combinations of the drugs I researched.

- ***Utilization of Higher-Level Thinking Skills***

This final product idea is quite complex and will require me to exercise multiple higher level thinking skills. First off, I will be evaluating multiple different anesthetics and analyzing several studies comparing them to each other. Then I will also be making/creating my own anesthetic combination using all of the information I have learned.

- ***Conclusions***

I believe this product will greatly help my understanding of anesthesia. It will also make me better equipped to understand what kind of chemicals I would be potentially working with in the field. For my results, I am expecting to see that the modern anesthetics will perform better than the more outdated ones, but that there will still be some similarities in their chemical properties and function. As for application to the real world, it is important for medicine to keep evolving and improving, so I believe I am researching a valuable topic for researchers. Especially since many doctors and professions in medicine use anesthesia, this kind of research is capable of having a large impact on many lives.

III. Development of Product Calendar/Timeline

Week 1 Jan. 18-24	-complete and turn in product proposal and calendar draft (due 22nd) -complete research assessment (due 22nd) -log hours on product log
Week 2 Jan. 25-31	-assess multiple articles over what doctors look for when testing an anesthetic -begin conducting research on different anesthetics(modern) -complete mentorship speech(due 1st) -complete and turn in research assessment (due 29th) -log hours on product log
Week 3 (Feb. 1-7)	-complete and turn in product proposal and calendar final (due 8th) -continue research on different anesthetics(older) -complete and turn in research assessment (due 5th) -log hours on product log
Week 4 (Feb. 8-14)	-conduct research focusing on individual drugs that make up the anesthetics -complete and turn in research assessment (due 12th) -log hours on product log
Week 5 (Feb. 15-21)	-continue research focusing on individual drugs that make up the anesthetics -complete and turn in research assessment (due 19th) -log hours on product log (must have at least 6 hours logged)
Week 6 (Feb. 22-28)	-assess studies comparing different anesthetics, drug combinations, and individual drug components -complete and turn in research assessment (due 26th) -log hours on product log
Week 7 (Mar. 1-7)	-continue to assess studies comparing different anesthetics, drug combinations, and individual drug components -complete and turn in research assessment (due 5th) -log hours on product log
Week 8	Spring Break:)

(Mar. 8-14)	-synthesize new anesthetic using all of the cumulative information -log hours on product log
Week 9 (Mar. 15-21)	-continue working on new anesthetic -work on final product paper
Week 10 (Mar. 22-28)	-work on final product paper -log hours on product log (must have at least 14 hours logged)
Week 11 (Apr. 29-4)	-complete final product -first round of revising
Week 12 (Apr. 5-11)	-final round of revising -submission